Royal Australasian College of Surgeons

National Climate and Health Strategy Consultation

July 2023

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Introduction

Thank you for the opportunity to provide comment to this consultation. As the leading advocate for surgical standards, professionalism in surgery and surgical education in Australia and New Zealand, the Royal Australasian College of Surgeons (RACS) is committed to taking informed and principled positions.

RACS the efforts of the Australian Government in developing the consultation paper and we thank you for the opportunity to participate in the process. The effects of climate change are already impacting on the health of individuals across the world. Counter-intuitively, the health sector itself represents a significant source of pollution and is a major contributor to national carbon emissions world-wide. In Australia it is estimated that health care in contributes to seven per cent of the entire country's carbon emissions, with around half of this contribution coming from hospitals alone.

Environmental sustainability is one of RACS' key advocacy priorities. Due to being one of the most resource-intensive areas of the hospital, strategies which target the operating theatre have the potential to have the highest impact within the health-care industry. RACS is committed to working with the Government and the Unit to ensure that the strategy initiatives which reduce the impact that surgical practice has on the environment, while also ensuring patient safety or quality of care is not compromised.

We have provided responses below to some of the key areas highlighted throughout the discussion paper. Please note that while we have answered the majority of questions, there are some that lie outside of our areas of expertise. However, many members of RACS are also members of Doctors of the Environment Australia (DEA) and have actively contributed to DEA's submission. Recognising this, we would like to endorse the submission made by DEA, particularly for those questions we have chosen not to answer.

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Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
RACS agrees that targets should apply to Scope 1, Scope 2 and Scope 3 emissions. We understand the complexities with developing and enforcing Scope 3 targets, but given the significant proportion of these types of emissions it is crucial that accountability for them is enforced as part of the strategy. The leadership role played by the UK National Health Service (NHS) provides the most successful example incorporating Scope 3 targets into a net-zero emissions plan. The plan acknowledges that the NHS's supply chain is a major source of emissions and outlines a framework for evaluating the carbon footprint of their supply chain and working with suppliers to reduce emissions. We would like to see a similar approach taken in the Australian strategy.

What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
RACS supports a strong focus of First Nations voices and policies in this Strategy and co-design of the necessary governance structures. We do not seek to represent the views of First Nations people and encourage meaningful engagement with their communities.

What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
RACS supports a strong focus of First Nations voices and policies in this Strategy and co-design of the necessary governance structures. We do not seek to represent the views of First Nations people and encourage meaningful engagement with their communities.

Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
RACS does not directly report our emissions as an organisation, however we would be willing to do so and we strongly support targets and transparency across the health sector.

in 2022 RACS became the first medical College in Australia to sign up to the newly developed Green College Guidelines development by the Australia Medical Association (AMA) and Doctors for the Environment Australia (DEA). As part of our commitment to the Green College Guidelines, RACS also committed to emissions reduction targets of 80 per cent by 2030 and net zero emissions by 2040. This approach is supported by other peak bodies and organisations within the health sector. As highlighted earlier, RACS was one of ten medical College that endorsed the comprehensive report commissioned by the Royal Australasian College of Physicians. The report recommended that Australia commit to net zero healthcare by 2040.

RACS appreciates that the strategy's goal of net zero by 2050 is consistent with the broader Government targets across all portfolios. However, given the widespread support for more ambitious reductions across the medical community, we believe that there is scope to achieve these targets much sooner, and that this ambition should be reflected in the framework.

What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
RACS agrees with all the focus areas for emissions reduction. We recommend an additional category is added that encompasses education and awareness for health sector workers.

To date there has been little response at the university level to prepare medical graduates to practice environmentally sustainable healthcare. A recent study from the Medical Journal of Australia highlighted an example of the formation of a Working Group on Climate Change and Health. The Working Group have identified five broad areas of learning to guide the development of curriculum resources. These areas include understanding the evidence for climate change and its impact on health, the impact of climate change on the health system, the environmental impact of the health sector, and creating change through

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practice, advocacy, and leadership. The working group also identified 'modest changes' to the Australian Medical Council (AMC) graduate outcomes statement to reflect a greater focus on environmental sustainability. The working group recommended that these changes be adopted by the AMC and become part of the Standards for Assessment and Accreditation of Primary Medical Programs.

RACS believes such an approach will allow Trainees to commence their surgical educational and training with an existing level of awareness of more sustainable practices. This approach has strong support from the RACS Training Association (RACSTA), as well as the RACS Younger Fellows Group. Both these bodies have identified greater awareness and education on more environmentally sustainable practices as one of their key priorities.

As a provider of surgical education and training, RACS acknowledges that medical Colleges also have an important role to play in this space. Further information is provided in response to question 17.

Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?
RACS strongly supports sustainable, green and healthy hospital design and construction. A particularly important action will be the transition of hospitals and health care facilities to 100 percent renewable energy supply. This was highlighted by a 2020 study, which included the observation:

In 2019, only 14 percent of electricity generation in Queensland was from renewable sources, rising to 23.9 percent in Victoria; in contrast, 95.6 percent of electricity generation in Tasmania was from renewable (hydro) sources. Thus, a hospital in Tasmania that was identical in every other respect to a counterpart in Queensland would record Scope 2 emissions that were six times lower simply by the good fortune of its location.

The above observation demonstrates the significant reduction in emissions that can be achieved simply by a change in energy supply. A key role of the strategy will be to facilitate and support the transition to renewable energy across all Australian health facilities and hospitals. RACS recently responded to a consultation released by the Western Australian Government on the state's new climate and health framework. As part of our response, we commended the WA Government for committing to 100 per cent renewable energy by 2030, and we believe that all states and territories should work towards this target.

In addition to the source of energy used, hospitals and health facilities can reduce their carbon footprint by investing in energy-efficient equipment and practices, such as LED lighting and low-power electronics. The final framework must also place a responsibility of health services to ensure that their facilities are adequately maintained to minimise the impact on the environment – such as through leaking nitrous oxide supply pipes and energy inefficiency.

The consultation paper states:

The built environment consists of all the human-made aspects of people's surroundings, including hospitals, facilities, roads and other connecting transit systems.

While RACS acknowledges the importance of sensible design in the broader built environment, including roads and transit systems, our expertise lie primarily in the hospital and health facility setting. In this context, the College would like to emphasise the importance of ensuring the strategy has a strong focus on collaboration with both health professionals and non-health professionals. This includes architects, urban planners, and policy makers.

Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?
RACS views our expertise in this area as advocating for surgical policies that have the added benefit of lowering emissions from transport. In recent years RACS has advocated strongly telehealth services as a way of providing more equitable and accessible health services, particularly to patients living in rural and

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remote areas. By utilising telehealth services where appropriate, surgeons and other medical professionals can remotely provide consultations, post-operative follow ups and even perform certain procedures. Notably, the environmental benefits of telehealth have the potential to be significant. By minimising patient travel and also the need for surgeons to commute between clinics, sensible and targeted telehealth policies will play a significant role in the strategy's stated aim of reducing travel associated healthcare emissions.

RACS has previously undertaken numerous advocacy activities relating to telehealth. These include:
Two separate surveys seeking the views of both surgeons and patients regarding their telehealth experiences. The survey, which was conducted during the early stages of the Covid-19 pandemic, found that 87.8 per cent of Fellows would consider using telehealth once social distancing restrictions are eased, and 93.9 per cent of patients said they were satisfied with the quality of their telehealth consultation.

Additionally the College conducted a rapid review of telehealth services in Australia, provided numerous submissions to the Federal Government, including our 2022 election statement, and our response to a consultation on revised telehealth guidelines. RACS requests that the recommendations provided in these previous advocacy activities are also taken into consideration as part of this consultation.

Furthermore, Patient and visitor travel to and from healthcare facilities needs to be included in the Strategy. Robust accounting of all emissions is necessary and modes and habits of patient and visitor travel, in particular, can influence the emissions from different models of care, such as telehealth. NHS England (8% of NHS emissions) and some Australian healthcare organisations have measured these emissions, so we do not accept that these emissions should not be measured, reported and reduced through policies included in this strategy.

Policies that promote active transport and corresponding infrastructure for access to healthcare, including affordable public transport options, must be prioritised and outlined in the Strategy. This would include facilitating collaboration between state and territory governments, local government and health services to improve active and public transport access, infrastructure and incentives for patients, staff and visitors at existing and new facilities.

Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?
Data from the UK's National Health Service shows that goods and services procured are responsible for 65-70% of the carbon footprint of hospitals. As such our industry partners are an integral part of our efforts to reduce carbon the carbon footprint of healthcare delivery.

Transparency in the procurement process is essential to identify areas for improvement and implement sustainable practices effectively. RACS has previously reached out to industry partners, urging greater transparency. While we acknowledge the complex nature of global supply chains which makes oversight challenging, to date we have found the information provided to be largely inadequate, and we have continued to encourage greater investment in mechanisms that provide a clearer understanding of their supply chains. In parallel with industry investment, government regulations and policies play a critical role in driving sustainable practices and ensuring transparency. RACS recommends that the Strategy requires suppliers to engage in transparent reporting, which includes disclosing the carbon emissions and environmental footprint of their supply chains. These reporting requirements should be mandated and supported by standardised frameworks that define clear guidelines and metrics for environmental data to be consistently reported.

To further incentivise more sustainable practices, the strategy may also consider that Government provides financial incentives, and give preference in procurement processes to those who demonstrate a commitment to transparency and sustainability. By leading by example and prioritising responsible suppliers within their own procurement processes, governments can create a market demand for transparency and encourage industry partners to adopt sustainable practices.

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Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

RACS' position paper on the environmental impact of surgical practice recommends implementing initiatives underpinned by the five Rs:

- Rethink
- Reduce
- Recycle
- Reuse
- Research

Each of these initiatives are Australian health context and are critical in reducing solid waste.

Rethink

The national strategy is a prime example of rethinking the way we approach healthcare, by recognising the important leadership role that government must play in reducing carbon emissions and promoting environmental sustainability.

RACS and other professional bodies also have an important role to play in this area. From a surgical perspective, many initiatives that aim to reduce the environmental impact of surgical practice will require small changes to how staff perform their roles and how surgical departments operate.

It is essential to emphasise to those within the health sector and the broader community that these changes are not just symbolic gestures but vital steps towards creating a more sustainable and healthy future. The social, logistical, and institutional barriers to implementing these initiatives may be significant, but they are not insurmountable. It will require a rethinking of how health care is provided at the departmental, institutional, and national levels.

RACS is encouraged that many other states and territories have also begun or will shortly commence developing similar frameworks. This shared goal and responsibility presents an opportunity for ongoing collaboration and promotion of key initiatives, but also a risk of duplication and fragmentation. While RACS appreciates the importance of each state and territory having their own framework, it is important that within each jurisdiction there is an acknowledgement of the shared national ambition and responsibilities, and the benefits of collaboration.

Reduce

The central concept of initiatives which aim to reduce health sector waste is to avoid using resources which are not needed to ensure patient or staff safety. This can include reducing electrical expenditure by powering down devices when idle, reformulating operating room kits to reduce overage, and embracing and supporting programs such as *Choosing Wisely* which is aimed at eliminating unnecessary and low value care. Many studies, such as a 2016 study into the use of steam sterilisers at a Melbourne hospital, highlight not only the environmental savings that can be made from reducing resources but also the significant financial savings.

Recycle

Proper waste segregation also plays a large role in reducing resource use. Compared with normal solid waste, biohazard or regulated medical waste requires high energy processing, and is estimated to cost up to eight times that of normal solid waste. The improper segregation of waste can increase the amount that undergoes high energy processing, with some studies suggesting that up to 92 per cent of a hospital's biohazard waste may be nonhazardous.

Surgical procedures produce large volumes of plastic waste in addition to cardboard and paper, much of which can be easily recycled. To improve this situation, RACS recommends that the

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government works with the health sector to implement better recycling and segregation practices by investing in more efficient waste management systems, increasing staff education and awareness, and partnering with waste management companies.

Reuse

From a surgical perspective most waste in the operating theatre comes from single-use surgical supplies and instruments, most commonly textiles (e.g. personal protective equipment (PPE), drapes and operating table sheets), sterile and non-sterile packaging, and various consumables and perioperative equipment including surgical scissors, plastic suction bottles, packs etc. Single use, disposable products, may be preferred over re-usable alternatives for sterilisation, infection control, or cost purposes. However, single use items and their packaging contribute to a considerable proportion of operating room waste and have a significant carbon footprint over their life cycle, from manufacture through to disposal.

Compared by their up-front cost, reusable products are an expensive alternative to disposable products. However, when the whole life-cycle of these products are compared, including supply chain and waste disposal costs, reusable items are typically not only more environmentally friendly, but have a cost benefit over disposable items.

This is the case even after accounting for sterilisation and laundering. As Australia shifts to a cleaner energy mix, with 100 per cent renewable energy sources, the comparative sustainability of reusable items only increases.

Research

Ongoing, evidence-based research into the environmental impact of surgical practice and healthcare is needed, both to measure the effects that the provision of health care has on the environment, and to further develop technologies and practices to mitigate this impact. Research into the environmental impact of particular procedures, life cycle analyses and cost comparisons of materials, and the on-going development of devices which can maintain quality of care while minimising the environmental impact of the operating theatre are also needed.

As an example, the COVID-19 pandemic has exacerbated the use of single-use disposables in healthcare, as many hospitals and clinics have opted for disposable equipment and PPE to minimise the risk of infection. While the use of disposable items can be necessary in certain circumstances, it is important to note that in many cases, reusable items are just as effective in terms of sterilisation and infection control. A role of the unit could be to facilitate and/or advocate for education and training in this area, as well as further research.

Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

As highlighted in our response to question 13, RACS is a strong supporter of the Choosing Wisely program. According to the Choosing Wisely website the aim of the goal of this initiative is to:

Promote a national dialogue on unnecessary tests, treatments and procedures, and support people to choose health care that is:

- *supported by evidence*
- *not duplicative of other tests or procedures already received*
- *free from harm*
- *truly necessary*

These stated goals closely align with the goals put forward in the discussion paper. At the end of 2022 RACS was informed that NPSMedicineWise the organisation previously responsible for administering the Choosing Wisely program had had their funding ceased, and that responsibility for Choosing Wisely had transferred to the Australian Commission on Safety and Quality in

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Health Care (ACSQHC). Prior to the change in administration RACS regularly received updates, resources and information, and regularly participated in Choosing Wisely representative panel meetings. While RACS does not have a formal position on a preferred provider, we note that since responsibility for Choosing Wisely has changed hands, there has been no communication or engagement with member organisations. While we appreciate that there will be a transition phase, we believe that the development of the strategy represents an important opportunity to recalibrate and to identify the obvious synergies that exist between Choosing Wisely and the national strategy.

What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

In response to question 3 we highlighted the successful manner in which the NHS has incorporated Scope 1, 2 and 3 emissions into their net-zero emissions plans. While we believe the Australian Government should adopt the same ambition, we appreciate the complexities of both systems, their many differences, and that the strategies used in the UK are not all easily translatable to the Australian system. Most obviously this includes the fact that the federal government plays more of a funding role for the hospital system and does not directly control procurement and supply chains. Despite this, the government does have influence and leverage as a major funding source to state and territory governments, and to private providers. The strategy should therefore include bold and ambitious plans to work with state and territory governments, private hospitals and private companies to ensure greater transparency and to reduce the carbon footprint of supply chains.

What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Greater workplace education and awareness

In response to question eight, we highlighted the need for changes to the education systems to equip doctors with the necessary skills to practice environmentally sustainable health care.

RACS also believes there is an urgent need to provide greater awareness and training to the existing workforce. A 2021 multinational study conducted by the Lancet Commission found that an overwhelming majority of health professionals were concerned by the threat posed to human health posed by climate change. However, many felt unable or unsure of how to implement more environmental practices into their work environments. The study's conclusion states:

Despite the high rates of concern expressed by survey participants about the health threats of climate change, more than four in ten participants felt insufficient knowledge about the topic was an impediment to engaging with the public on the issue. This is consistent with the findings of other studies. Given the magnitude of the problem, and the large number of health professionals who feel their lack of knowledge poses a barrier to engagement, efforts to offer such education—in medical, nursing, and other health professional curricula and through continuing education—should be accelerated, and research should be done to investigate efficient and effective ways of providing such education, especially in light of the time constraints being identified as the greatest barrier to engagement.

At a local level, a 2022 survey distributed to RACS Fellows found that approximately 79 per cent of respondents either often or almost always made personal choices outside of their work to reduce their carbon footprint. This suggests that surgeons would also implement more sustainable practices at work if greater education and more evidence-based guidelines were provided.

RACS recommends that an action for the first 12-24 months of the national strategy be to encourage/compel dedicated environmental sustainability staff to be employed within health care organisations. We believe Anecdotally, surgeons have reported feedback to RACS, such as a lack of guidance or understanding of waste segregation practices within hospitals. By having a dedicated staff member available, hospitals could offer greater education to staff on waste segregation and treatment, as well as clearer labelling and coding to enable more efficient and accurate sorting of waste.

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RACS acknowledges that the responsibility to provide greater education and awareness to health care workers is a shared responsibility, and the College has a role to play over the next 12-24 months also. In recent times we have developed dedicated environmental webpage on the RACS website, and we have previously undertaken a number of initiatives, including hosting webinars for our members to promote more sustainable practices. RACS is also part of an international Green Surgery Oversight Committee. Representatives include several college groups across England and Scotland, and representatives from the USA and Canada. The project aims to produce an evidence-based guide and then produce an implementation plan with the intention of disseminating to organisations and health workers. It is expected that the report will be produced within the next 3-6 months.

In addition to the international collaboration, RACS has also commissioned our own research division to complete a research project which will review the evidence base to ensure that the College's position paper remains contemporary, and where appropriate include practical tips for members on how they can incorporate more sustainable practices in their work. Once available the College will post these resources on our website, and we would be happy to share these links with the Department of Health and the proposed National Sustainable Health Unit.

What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

In 2020 the Royal Commission into natural disasters issued a warning that Australia must be prepared for the grave consequences of climate change. It outlined that these include more frequent and intense natural disasters such as devastating fire conditions, heavy precipitation resulting in floods, and fewer but more violent cyclones.

Further testimony from the CSIRO to the Royal Commission highlighted that even in the best case scenario (of net negative emissions) it will take a significant amount of time for the climate to revert to preindustrial or recent baseline levels. Their testimony emphasised the importance of Australia adapting to future climate change, regardless of the trajectory of emissions.

RACS provided a response to this Royal Commission, highlighting the leading role that surgeons play leading roles in treating the health impacts of disasters such as the black summer bushfires, as well as major floods which have subsequently occurred across Australia. In the immediate aftermath of such disasters, specialty trained Trauma surgeons (orthopaedic, paediatric and general) are key in the treatment of major injuries caused by disaster related trauma. Our trainees are often the first point of contact between patient and surgical service for initial triage, assessment and management.

Additionally, frontline health workers are subject to extraordinary physical, psychological and professional demands during emergency responses to natural disasters and other mass casualty events. A case study of the 2019–20 bushfires across Australia, found that rural and remote health practitioners in areas affected by bushfire reported experiencing the same traumas and challenges as their patients. Many were unable to take a break to look after their own wellbeing. Furthermore, natural disasters can severely damage healthcare facilities, disrupt supply chains, and overwhelm healthcare systems.

The World Health Organization defines a climate resilient health system as one that is capable to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress, to bring sustained improvements in population health, despite uncertainty. This includes designing hospitals and clinics to withstand disasters, establishing backup power systems, and ensuring the availability of essential medical supplies and equipment. By appropriately preparing and protecting the healthcare system, communities can better respond to and recover from natural disasters.

Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan?

RACS supports the proposal to develop a National Climate Risk Assessment and a National Adaptation Plan. It is critical that the methodology is underpinned by:

- High quality data collections, analysis and projections

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- Wide ranging stakeholder engagement, including clinicians, community organisations, vulnerable populations, etc.
- Ensuring that the scope and the objectives of the above projects clearly align with the scope and the objectives outlined in the National Health and Climate Strategy

As highlighted above in 2020 RACS provided a response to the Royal Commission into natural disaster arrangements. The final report from the Commission Chair was released in October 2020. RACS believes that the recommendations of this report, including those yet to be implemented, provide a strong basis to draw upon.

From an international perspective, the World Health Organization has previously provided guidance to countries on how they can conduct vulnerability and adaptation assessments.

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Submission to the National Health and Climate Strategy Consultation paper

July 2023

For further information or questions about this submission please contact:

Katie Maskiell
Head of Child Rights Policy and Advocacy
UNICEF Australia
e: kmaskiell@unicef.org.au
m: +61 417 091 806

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Summary of Recommendations

General advice on the consultation paper from a child rights lens:

1. Commit to addressing the impacts of the climate crisis on children in the future by including intergenerational equity as a principle in the National Health and Climate Strategy
2. Prioritize population health over greening the health system by elevating 'Adaptation' and a 'Health in All Policies' approach as primary objectives within the National Health and Climate Strategy.
3. Elevate children's voices and priorities by ensuring that children, young people, and relevant academic experts have opportunities to meaningfully engage in the development, implementation and governance of the National Health and Climate Strategy.

Child-sensitive adaptation:

4. Protect children by providing guidance to local, regional, and State and Territory authorities on child-sensitive adaptation in emergency response and recovery policies and procedures within the National Health and Climate Strategy.
5. Develop a plan to address the impending 'eco-anxiety' crisis in the face of the worsening impacts of climate change in Australia.
6. Strengthen children's psychosocial resilience in the face of the climate crisis by incorporating practical Climate Change Education (CCE) into ECEC, school, and tertiary education settings
7. Maximize the effectiveness of adaptation in the National Health and Climate Strategy by employing risk-informed approaches, context-specific policy interventions, and ensuring Australia's overarching National Adaptation Plan (NAP) is child-sensitive.

A child-sensitive Health in All Policies (HiAP) approach:

8. Prevent additional harm to children by designing climate mitigation policy across sectors is sensitive to the health needs of children and young people.
9. Embed children's climate-related health needs in all economic, and social policy design, addressing child-critical social services, social protection, built environment planning, and whole-of-government policymaking processes.

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Introduction

UNICEF Australia commends the Australian Government for undertaking to develop *a National Health and Climate Strategy* (henceforth 'the Strategy') and welcomes the opportunity to provide feedback to the Strategy Consultation Paper (henceforth 'the consultation paper').

The climate crisis is the defining global challenge of our time. Atmospheric concentrations of carbon dioxide (CO2) are higher now than at any time in the last two million years, and global warming has happened at a rate that is unprecedented in at least the last two thousand years.[1] Australia's climate has warmed by over 1 degree Celsius in the last century, with warming occurring in all months and both day and night-time average temperatures increasing.[2] The impacts of warming at this level are already highly disruptive and damaging to lives and livelihoods across the globe, particularly for children and young people who are uniquely vulnerable. Regardless of how rapidly the world decarbonizes, current emissions levels mean that some climate impacts are certain and irreversible.

This is therefore a once in a generation opportunity to ensure that Australia adequately addresses the current and future health impacts of climate change on people, the health system, and economic and social systems more generally. The National Health and Climate Strategy must be as ambitious, coherent, inclusive, and effective as possible.

UNICEF Australia's overarching view is that the *National Health and Climate Strategy* should actively and explicitly address the health risks and impacts of climate change on children and young people[3] and include responses, policies, and practices that specifically address these risks and impacts. The voices and perspectives of children and young people should also be meaningfully included in the development of the strategy, its governance, and its implementation. The following sections explain why this perspective is fundamentally important to an effective strategy.

UNICEF's lens - the climate crisis is a child rights crisis

The climate crisis threatens children's rights under the Convention of the Rights of the Child (CRC). Climate change threatens children's rights to survival and development (Article 6), to health (Article 24), to an adequate standard of living (Article 27), to education (Article 28), and to recreation and play (Article 31). Indeed, the Climate Change Risk Index (CCRI), released by UNICEF in 2021,[4] notes that virtually all rights may be affected by the climate crisis, potentially impacting the effective implementation of the Convention of the Rights of the Child (CRC) itself.[5]

Climate change affects access to food, drinking water and sanitation; affects physical and mental health; and worsens situations of chronic poverty, forced displacement, violence, and exploitation. Climate change also disrupts the key social service systems that children rely on, affecting access to early childhood care, education, healthcare, and secure livelihoods, which in turn affects long term health outcomes. Climate change is a risk multiplier, intersecting with other economic, social, and

[1] Climate Council, "Climate Change 2021: The Physical Science Basis", August 2023, <Microsoft Word - IPCC-6AR-WGI Explainer_updated.docx (climatecouncil.org.au)>

[2] Bureau of Meteorology (BoM) and Commonwealth Scientific and Industrial Research Organisation (CSIRO), State of the Climate 2022, Australian Government, 2022.

[3] Note: 'children' includes anyone between the ages of 0 and 17, whereas 'young people' includes anyone between the ages of 18 and 25. The term 'children' is used on its on in particular parts of this submission, especially with regards to 'children's rights' in line with the Convention on the Rights of the Child (CRC). The rights of young people are equally important, although technically not included in the Convention's remit. Among other variables, the health impacts of climate will vary by children and young people of different ages, and the Strategy should account for unique impacts on infants, younger children, teenagers, and young adults.

[4] UNICEF, "The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index (CCRI)", 2021 <The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index - UNICEF DATA>

[5] Ibid., Pg. 111.

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political crises to produce a range of cascading impacts on children and young people, affecting almost every dimension of their lives. Figure 1 highlights this web of intersections and impacts.[6]

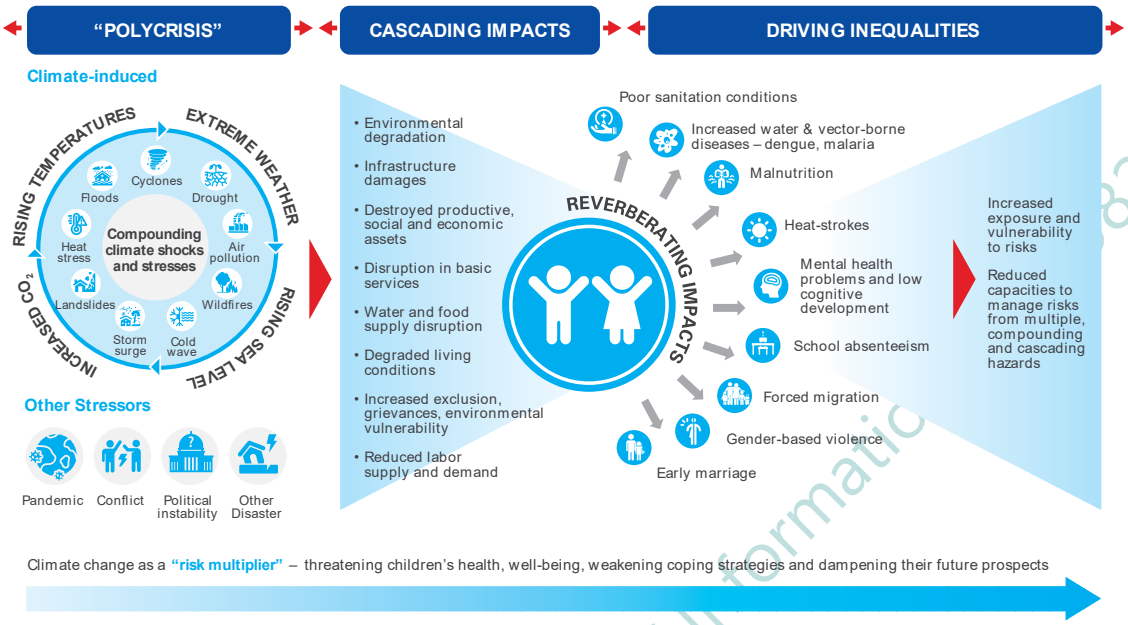


Figure 1: Climate change impacts on children Source: UNICEF EAPRO

The main reason that children and young people should be explicitly considered in the Strategy is that children are inherently more exposed and vulnerable than adults to the negative health outcomes of climate change outlined in the consultation paper.[7] This is because they are at the early stage of physiological and cognitive development and are therefore less equipped to deal with climate-related shocks and stresses.[8] For example:

- Children are more likely to be physically or psychologically harmed in a natural hazard than adults because their organs, muscles and brains are less developed;[9]
- Children are more vulnerable to temperature extremes, and the effects of shocks such as heatwaves than adults, as they are less able regulate body temperature;[10]
- Children are more likely to experience severe symptoms from vector-borne diseases and respiratory illnesses such as asthma;[11] More than 88% of diseases attributable to climate change occur in children younger than 5 years of age,[12] and multiple surveys show that 'eco-anxiety' predominantly affects children and young people.[13]

Climate change affects some children more than others. Children and families with lower incomes, lower levels of education and employment, and with poorer access to specialist health services in rural

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[6] UNICEF East Asia Pacific Regional Office (EAPRO), "Over The Tipping Point: How multiple, overlapping climate and environmental shocks and hazards on children in the East Asia and Pacific region are eroding their coping strategies, exacerbating inequality, and forever changing their futures", June 2023, <Over the tipping point_report.pdf (unicef.org)>, Pg. 23.

[7] Department of Health and Aged Care, "National Health and Climate Strategy Consultation Paper," June 2023, Pg. 24.

[8] UNICEF EAPRO, Tipping Point, Pg. 20.

[9] Center for Disease Control (CDC), "How are children different from adults?", < How are Children Different from Adults? | CDC>

[10] Ibid.

[11] Ibid.

[12] UNICEF EAPRO, Over The Tipping Point, Pg. 20

[13] UNICEF Office of Innocenti, "Report Card 17: Places and spaces – Environments and children's wellbeing", 2022, <RC17-EN-Places-and-Spaces-Environments-and-childrens-well-being-Report-Card-17.pdf (kc-usercontent.com)>, Pg 58.

and remote areas have fewer resources at hand. They lose more when facing climate shocks, hazards and stresses and face a longer and more complex road to recovery. Similarly, children who have experienced individualised or systemic persecution, deprivation, or neglect face significant additional challenges that place them at a disadvantage when it comes to coping or responding to climate change. Figure 2 highlights how climate change can exacerbate inequalities between children of different economic status.[14]

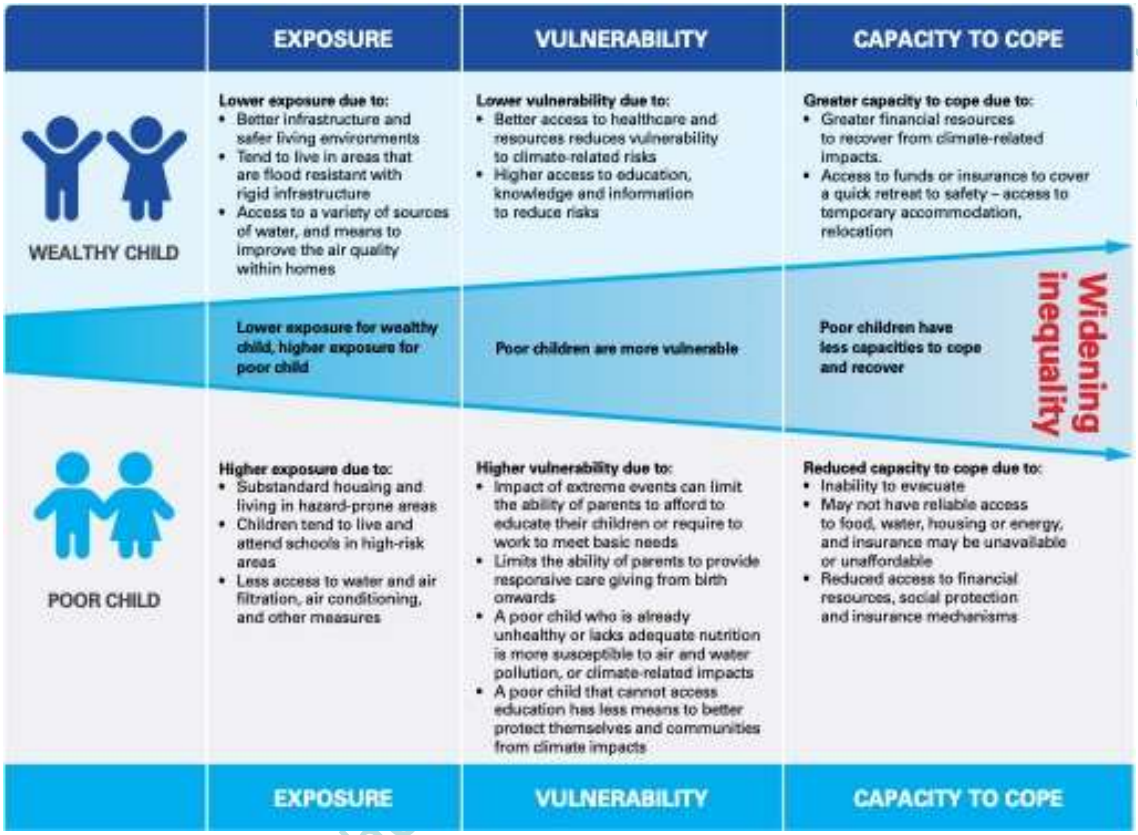


Figure 2: Climate change exacerbates pre-existing inequalities; Source: UNICEF EAPRO

Children and young people in Australia are both highly exposed and uniquely vulnerable to the impacts of climate change. In the summer of 2019-2020 alone, two in five children and young people were personally affected by bushfires; three in ten children were personally impacted by drought; almost 25% were personally impacted by floods.[15] Given current greenhouse gas emissions trajectories, exposure to sudden and slow-onset climate disasters will grow. A 2022 UNICEF research report has found that, under current emissions trajectories, every child in Australia could be subject to more than 4.5 heatwaves a year, and up to 2.2 million Australian children could be living in areas where heatwaves will last longer than 4.7 days.[16]

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[14] UNICEF EAPRO, Over The Tipping Point, Pg. 24.
[15] UNICEF Australia and Royal Far West, "After the Disaster: Recovery for Australia's Children," < UNICEF Australia Publications> Pg. 12.
[16] UNICEF, The Coldest Year of the Rest of their Lives: Protecting Children from the Escalating Impacts of Heatwaves, <UNICEF-coldest-year-heatwaves-and-children-EN.pdf>, Pg. 34-44.

General advice on the consultation paper from a child rights lens

Intergenerational equity as a principle

Children and young people are least responsible for climate change and are most affected by its impacts now and into the future. This is both an ethical issue and a reality with practical consequences for the futures of individuals, communities, and states. How we act to minimize the impacts of climate change on children's health and wellbeing today will help determine the future our children and grandchildren inherit, and will also have significant consequences for social, economic, and political outcomes in the long run.

Enshrining and embedding the principle of intergenerational equity in climate policy is key a focus of child and youth climate advocates. The principle is included in the UN Committee on the Rights of the Child's *General Comment 26 on Children's rights and the environment with a special focus on climate change,* to be launched at the UN General Assembly in September 2023.[17]

Accordingly, intergenerational equity should be a key principle underpinning all new climate change laws, strategies, policies, and investments in Australia, including this Strategy. Including this principle in the Strategy should give rise to objectives, goals, and actions that plan for short, medium, *and* long-term impacts, including by considering the implications of climate change that may not manifest for decades.[18]

Recommendation 1: Include intergenerational equity as a principle in the National Health and Climate Strategy

Vision, purpose, and a hierarchy of objectives

The Strategy should contain an underlying vision statement from which its purpose, objectives, goals, and actions should flow. UNICEF Australia supports the call for a vision encompassing a climate resilient community and a net zero healthcare system, in that order.

The purpose of Strategy as described in the consultation paper is to "protect the health and wellbeing of Australians from the impacts of climate change."[19] This purpose necessitates that the Strategy prioritizes a whole-of-government approach to addressing the health impacts of climate change on the population now and into the future, and systemically builds community resilience in response to these impacts.

In this regard, UNICEF Australia welcomes the inclusion of the standalone 'Health in All Policies (HiAP) and 'Adaptation' objectives in the consultation paper and supports their prioritization. From UNICEF Australia's perspective, both objectives should explicitly address the unique needs of children and young people. This submission will address child-sensitive adaptation and HiAP approaches in more detail in following sections.

Whereas mitigating health sector emissions and measuring them are both important to Australia's net zero future and should remain key elements of this Strategy, the most significant contribution this Strategy can make is to outline the ways in which people in Australia can be protected and prepared for the health impacts of a climate-affected world.

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[17] United Nations Committee on the Rights of the Children, "General Comment 26: Children's Rights and the Environment with a special focus on Climate Change," < Global Community Second Consultation | General Comment No. 26 on Children's Rights and the Environment (childrightsenvironment.org)>
[18] Draft General Comment 26, Pg. 4
[19] National Health and Climate Strategy Consultation, Pg. 4

Recommendation 2: Prioritize 'Adaptation' and a 'Health in All Policies' approach as primary objectives within the National Health and Climate Strategy.

Co-design, and participation

UNICEF Australia welcomes the commitment to ensuring that First Nations knowledge and experience is central to decision-making on climate and health policy. This commitment should be reflected in the co-design of the Strategy itself. The Government should prioritize the advice of First Nations elders and community leaders on the most culturally appropriate and effective ways to co-design the Strategy, incorporating ways to seek input from First Nations children and young people.

More broadly, the design and implementation of the Strategy should be as inclusive as possible. It should be informed by the perspectives of a diverse representation of the Australian population, including a diverse cohort of children, young people, and youth-led organizations.

In parallel, the Strategy should be informed by the perspectives of the widest array of experts possible, including experts in child rights, pediatric medicine, youth work, and child-focused disaster response and recovery. The Government should work with expert organizations such as UNICEF Australia to organize meaningful consultations with children, young people, and relevant experts.

Governance and implementation

UNICEF Australia supports the creation of key governance mechanisms outlined in the consultation paper, namely:

- A National Committee on Health and Climate Change led by the Commonwealth Ministers for Health and the Department of Health and Aged. The Committee would be comprised of experts in relevant areas of health, climate science and policy, Commonwealth and State and Territory ministers for climate change, environment, health, and energy, and be responsible for the Government's overseeing the design of the Strategy, setting policy priorities within the Strategy's remit, and providing final approval of key policies and programs.
- An independent, cross-sectoral, representative Board to advise the relevant Government Ministers on the Strategy and its implementation and produce an overarching annual report on implementation progress. Such a Board should include at least one child or youth advocate, and at least one organizational representative specializing in the health impacts of climate change on children and young people.
- The creation of an interdepartmental committee on climate change and health to progress action on specific thematic areas of the Strategy. In the absence of a Federal Minister for Children and a department will exclusive responsibility for children's issues, the committee should include departmental representatives working on policy areas at the intersection of climate change and health impacts on children, including early childhood education and care (ECEC), child protection, social services, physical and mental health, education, skills and employment. The committee should also include representatives from the Federal Government's Office Of Youth.

Recommendation 3: Ensure that children, young people, and relevant academic experts have opportunities to meaningfully engage in the development, implementation and governance of the National Health and Climate Strategy

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Goals, targets, timeframes and measurement

The Strategy should identify specific goals, and targets under each objective, and include short, medium, and long-term timeframes to evaluate progress beyond electoral cycles. The Strategy should go beyond measuring health system greenhouse gas emissions, and include detailed metrics related to adaptation, and HiAP.

Terminology

The Strategy should include a glossary of definitions so that the community can understand the intention and parameters of objectives, goals, targets, and measurement. Terms such as health system, mitigation, and adaptation should be clearly defined in the broadest and most inclusive terms possible, in line with the One Health guiding principle and a HiAP approach.

Child-sensitive adaptation

UNICEF Australia welcomes the inclusion of 'Adaptation' as a proposed objective in the consultation paper. This standalone focus acknowledges the fact that climate change is affecting people in Australia today and that there is urgent need to address a range of negative health outcomes associated with climate change in the present.

This objective must include consideration and coverage of child-sensitive adaptation. In 2022, UNICEF developed four criteria for determining child-sensitivity in climate policies, which can be applied to adaptation planning, and the health sector.[20] These criteria are:

- **Holistic and multisectoral:** addresses specific risks and vulnerabilities of children and young people by including commitments in child-critical sectors such as WASH, nutrition, and healthcare.
- **References:** includes explicit and meaningful references to children and young people, including those who are disadvantaged and marginalized.
- **Rights-based:** considers children and young people as rights holders and includes meaningful references to children's rights or intergenerational equity.
- **Inclusive:** identifies inclusiveness and the recognition of children and young people as important stakeholders for climate action.

Child-sensitive emergency response, and recovery

UNICEF Australia welcomes mention of "robust plans and procedures for preparedness, response, and recovery in relation to climate-related disasters and extreme weather events" in the consultation paper.[21] These plans and procedures should be child-sensitive across each phase of the emergency.

In the emergency response phase, this includes a focus on early intervention mechanisms to identify and address emerging physical and mental health issues that can cascade into serious illnesses over time, and in turn affect life trajectories and outcomes well into adulthood. These mechanisms can include:

- Provision of appropriate child and youth-friendly spaces in all evacuation and relief centers or online so that children and young people can share feelings and experiences, build peer-to-peer connections, and obtain referrals to specialist health or psychosocial services. Child-friendly spaces should be managed by skilled, specialist agencies, ideally with links to Primary

[20] Making Climate and Environment Policies for and with Children and Young People | UNICEF
[21] National Health and Climate Strategy Consultation paper, Pg. 26

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Health Networks (PHN), and local youth services. Child-friendly spaces in these settings act as early intervention points and can be useful in helping triage, manage, or prevent long-term physical and mental health issues early.[22]

- Enabling emergency response agencies such as the State Emergency Services (SES), the police, and the Australian Defence Force (ADF) to consider and respond to the specific needs of children and young people in their approaches and practices. This can be accomplished via the designation of Children's Safety Focal Points for State Emergency Management Committees (SEMCs) and lead agencies who can be responsible for collating information from personnel on the ground, identifying complex, emerging children's health issues, coordinating with community leaders and specialist agencies, and making referrals as required. Governments should also resource agencies to adequately resource and train the Focal Points and frontline personnel on how to engage with children and young people in emergency response contexts. A well resourced and structured child protection response of this nature can also triage, address, or prevent long-term adverse health and wellbeing outcomes.

In the recovery and resilience-building phases of an emergency, Federal and State and Territory Governments should prioritise interventions that will improve the long-term health and wellbeing of children and their families affected by disasters as a priority. These include:

- Embedding child and youth-focussed health needs assessments into recovery and resilience-building planning. UNICEF Australia employed a version of its global emergency needs assessment methodology in the aftermath of the 2022 Northern NSW and Southeast Queensland floods, helping to identify the short and long-term psychosocial, and physical health needs of children and young people affected in those communities.[23] The assessment has formed the basis for multiple tailored health interventions in the aftermath of the floods in the region.
- Existing services and service gaps should be identified across the key health domains of need and wellbeing for children and young people, and funding should be available for long-term interventions (5-10 years) tailored to the needs of specific communities, and ideally, in collaboration with local community services. Initiatives such as Royal Far West's Community Recovery Program, providing multi-disciplinary wraparound healthcare model of supporting children, parents, care givers and communities, is a key example of the kind of intervention that could be funded, assessed, and expanded,[24] especially in hazard-prone communities. Governments should be prepared to significantly scale-up investments in these initiatives across the country as the frequency and intensity of climate-related shocks, and hazards.

Climate-related emergencies go beyond sudden onset shocks and hazards, encompassing heatwaves, droughts, and other slow onset hazards. Heatwaves have had particularly significant impacts on Australian populations in recent times. Heatwaves kill more Australians than any other natural hazard, including bushfires, storms, tropical cyclones and floods combined.[25] Heatwaves also result in increases in call-cause mortality rates, emergency department presentations, and ambulance callouts.[26]

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[22] Mary O'Kane and Michael Fuller, "2022 NSW Flood Inquiry," <2022 NSW Flood Inquiry | NSW Government> Pg. 208.
[23] UNICEF Australia, "2022 Flood Response and Recovery Needs Assessment," <UNICEF Australia Publications>
[24] Curtin et al, "Royal Far West Bushfire Recovery Program Evaluation, <Royal Far West Bushfire Recovery Program evaluation — Charles Sturt University Research Output (csu.edu.au)>
[25] Adapt NSW, "Climate change impacts on heatwaves", <Climate change impacts on heatwaves | AdaptNSW>
[26] Lesley Hughes, "Climate change and the health impacts of extreme heat," Climate Council <The Silent Killer: Climate Change and the Health Impacts of Extreme Heat | Climate Council>

UNICEF's most recent technical note on protection children from heat stress recommends a range of adaptation measures,[27] including:

- Knowing the facts about vulnerability and impact of exposure for pregnant women, infants, and children;
- Introducing a B.E.A.T the Heat risk communication framework across community settings relevant to children, including ECEC centres and primary schools;
- Adapting emergency room processes and procedures for diagnosis and case management flows;
- Promoting multisectoral national heat stress response plans and action plans at local or state levels;

Embedding child-sensitivity in climate-related emergency response and recovery planning requires consultation, knowledge sharing and investment at the local, regional and State and Territory governance levels where response and recovery plans, coordination, training, and resourcing is determined.

Recommendation 4: Include specific guidance to local, regional, and State and Territory authorities on child-sensitive adaptation in climate-related emergency response and recovery policies and procedures, including slow-onset hazards such as heatwaves within the National Health and Climate Strategy.

Adapting the mental health support to respond to children's needs in the climate crisis

UNICEF Australia welcomes references to mental and psychosocial health, including climate anxiety, PTSD, and reduced opportunities for First Nations communities to access and connect with country, as key negative health impacts of climate change in the consultation paper.[28] That said, consideration of mental health is conspicuously absent in the discussion on what needs to be done to adapt the health system.

Climate change affects the mental health of children and young people in several ways, each requiring specific attention. Here we seek to highlight 'eco-anxiety' which affects significant numbers of children and young people in Australia. Eco-anxiety is a term used to describe heightened mental, emotional, and somatic distress in response to dangerous changes in the climate system.[29] Eco-anxiety is a response to the helplessness and despair felt in the face of an inevitably existential crisis, creating feelings of stress, worry and frustration about the effects of climate change, and the inadequacy of our collective response to the crisis.[30]

The Strategy should consider the impacts of climate change on the mental health of children and young people, but also include specific guidance to address eco-anxiety. Important investments include commissioning research to understand the scale and impacts of eco-anxiety on children and young people; identifying and funding best practice programs aimed at children and young people and their parents/carers; embedding eco-anxiety within workforce professional development and training in the psychological sciences and social work; and supporting climate change education programs in early childhood education and care (ECEC) centres and schools.

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[27] UNICEF, "Protecting children from heat stress: A technical note," <Protecting-children-from-heat-stress-A-technical-note-2023.pdf (unicef.org)>
[28] National Health and Climate Change Strategy Consultation paper, Pg. 25.
[29] Maria Ojala, "Eco-Anxiety", *RSA Journal,* 164:4 (5576), 2018-2019;
[30] Headspace, "Supporting young people experiencing anxiety about climate change," <Supporting young people experiencing anxiety about climate change | headspace>

Recommendation 5: Develop a plan to address eco-anxiety in Australia, incorporating a review to understand the extent of the issue, existing research and interventions, and community views on how to effectively address the issue.

Education and skills

Effective climate change education (CCE) is both an important antidote to eco-anxiety and a necessary investment in strengthening the long-term resilience of children and young people in the climate crisis. Practical investments in age-appropriate climate change education (CCE), both within ECEC centres, schools and in extracurricular settings. Teaching green skills, emotional and psychosocial resilience-building activities, and basic emergency preparedness skills can significantly reduce the impact a climate shock or hazard has on a child. Effective CCE also teaches children and young people about the science, impacts, governance, and ideal responses to the climate crisis. CCE as a wholes enables children and young people to be part of the solution, influence household and community behaviour and potentially drive action at scale.

Effective CCE goes beyond the ECEC or school setting. Universities and vocational education institutions have an important role to play in ensuring that young people are both climate literate and have the skills to take up jobs of the future. The National Job and Skills Summit produced important proposals in the latter regard, including to accelerate the delivery of additional fee-free TAFE places, to task Job and Skills Australia with commissioning a workforce capacity study on the clean energy workforce, and to implement cross-jurisdictional energy transition workforce planning.[31] Such a long-term approach to climate literacy, and skills training with have direct and indirect health benefits over time.

Recommendation 6: Provide guidance on how to embed Climate Change Education (CCE) within ECEC, school, and tertiary education settings, as a key tool in building children's resilience to the mental health impacts of climate change.

Risk and Adaptation planning

UNICEF Australia welcomes focus on climate risk assessment and adaptation planning in the consultation paper.[32] Adaptation policy cannot be successful without a coherent understanding of climate risks and planning needs at national, regional, and local levels. Including children and young people in risk assessment and adaptation planning is crucial and can be done in several ways.

- ***The Children's Climate Risk Index (CCRI):*** The Federal Government's investment in a National Climate Risk Assessment (NCRA) is an important strengthening climate adaptation and resilience in Australia. In order to integrate child-sensitivity into the forthcoming NCRA, the Department could either incorporate elements of the Children's Climate Risk Index (CCRI) into its assessment or create a standalone national CCRI. For background, in 2021, UNICEF developed a global CCRI. It provided the first comprehensive overview of children's exposure and vulnerability to the impacts of climate change, and ranked countries based on children's exposure to climate and environmental shocks such as floods and heatwaves, as well as their vulnerability to those shocks, based on baseline resilience and access to essential services.[33] In 2021, UNICEF and USAID's Bureau for Humanitarian Assistance (BHA) launched a partnership to develop a CCRI-Disaster Risk Model (CCRI-DRM).[34] The CCRI-DRM builds on the

[31] Commonwealth Department of Treasury, "Job and Skills Summit Outcomes" <Jobs and Skills Summit September 2022 – Outcomes (treasury.gov.au)> Pgs. 2 – 13.
[32] National Health and Climate Consultation paper, Pg. 27.
[33] UNICEF CCRI 2021.
[34] UNICEF, "Children's Climate Risk Index-Disaster Risk Model (CCRI-DRM) subnational assessment initiative, <The CLAC PACK (unicef.org)>

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framework and method of the global CCRI to build country-specific subnational risk assessment models and an interactive geospatial platform to depict exposure and vulnerability to multiple hazards, shocks, and stresses. Measurement of vulnerability also incorporates economic, political, and social characteristics that reflect readiness to withstand the impacts of these hazards, shocks, and stresses.[35]

- ***A place-based approach to risk and adaptation planning:*** The Federal Government has identified addressing entrenched place-based disadvantage as a policy priority. This commitment is reflected federal budget allocations to the Stronger Places, Stronger People initiative, a place-based Outcomes Fund, and a whole-of-government Framework to Address Community Disadvantage. The Strategy should outline a plan to integrate the health impacts of climate change into frameworks, measurements, and assessments of place-based entrenched disadvantage in Australia, to enable tailored, effective long-run adaptation plans and investments in these communities.

- ***A child-sensitive National Adaptation Plan (NAP):*** UNICEF Australia welcomes the Federal Government's commitment to a new NAP. The NAP should systematically consider the health impacts of climate change on children and young people and include detailed guidance on how to address children's needs within health system resilience-building, and in the areas outlined above, in line with UNICEF's criteria for child sensitive analysis.

Recommendation 7: Maximize the effectiveness of child-sensitive adaptation in the National Health and Climate Strategy by employing risk-informed approaches, context-specific policy interventions, and ensuring Australia's overarching National Adaptation Plan (NAP) considers children's health needs.

A child-sensitive Health in All Policies (HiAP) approach

UNICEF Australia welcomes the inclusion of a standalone HiAP Proposed Objective in the consultation paper, noting that it should be prioritized in the Strategy, as a means of protecting the community from the health impacts of climate change. The Strategy should integrate child-sensitivity within the HiAP objective. There are two dimensions to this.

Designing climate mitigation policy to account for children's health outcomes

The mitigation of carbon emissions within the health sector and beyond is an existential imperative. It also has population health benefits, including for children and young people. Employing a health lens in climate mitigation policy could have significant impacts on its design.

To provide a short example of how a child-sensitive health lens can alter mitigation policy design, let's consider air pollution in the UK. A 2018 UNICEF UK study on the impacts of air pollution on children made several startling health-related findings, including that one in three infants, and 4.5 million children under eighteen are growing up in areas of the UK with unsafe levels of particulate matter.[36] The study also found that the health effects from PM2.5 exposure cost the National Health Service (NHS) and social care services over 40 million pounds each year.[37] The study concluded that the Government had not yet prioritized interventions to protect children's health; that national efforts to

[35] Ibid.
[36] UNICEF UK, "A Breath of Toxic Air: UK Children in Danger," <Microsoft Word - A breath of toxic air - Unicef UK research paper - June 2018.docx>
[37] Ibid.

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tackle air pollution had focused on lowering vehicle emissions to reach legal limits rather reverse or alleviate the negative health impacts of air pollution on children.[38]

The study highlighted that adopting a children's health lens to air pollution policy actually required higher ambition, and a wider array of policies to be considered successful, including creating clean air zones, and child-friendly urban areas promoting walking cycling and public transport.[39]

In order to successfully embed a HiAP approach in climate mitigation policy, the Government should:

- Quantify the economic costs of climate change under current emissions reduction scenarios coupled with modelling of the economic savings associated with the health benefits of emissions reductions across sectors at different levels of ambition; This would give us a collective understanding of just how valuable a child sensitive HiAP approach to mitigation policy is to Australia's economic present and future.
- Prioritize research and help build institutional capacity with the Department of Climate Change, Energy, Environment, and Water (DCCEEW) to identify, develop and test the feasibility and effectiveness of emissions reduction policies that benefit health outcomes, including those for children and young people.
- Ensure that Australia's NDC considers climate-health risks and opportunities for health co-benefits from climate mitigation policies, including for children and young people.

Recommendation 8: Provide guidance on a multisectoral plan to ensure that climate mitigation policy is sensitive to the health needs of children and young people.

Accounting for children's climate-related health needs in economic and social policy

We know that climate change impacts the wider social determinants of health, including ECEC, education, and housing. These impacts will worsen as climate-related shocks and hazards become more frequent and intense in coming years and decades. A systemic approach to protecting children from the negative health impacts of the climate crisis in the long run requires a whole-of-government, multi-sectoral commitment to addressing children's needs within economic and social policy, particularly in areas relevant to the social determinants of children's health. There are four kinds of interventions that should be prioritized in this regard:

- Ensuring minimum disruption to accessing child-critical social services such as ECEC, education, mental health and WASH in climate-related emergencies today and into the future.
    - This would include, for example, exploring design, planning, and investment into temporary education model that can be rolled out in emergency contexts to minimize lost learning during and after climate-related shocks and hazards.
- Ensuring child-sensitive social protection systems and policies are adequate to account for more frequent and severe climate-related hazards, shocks, and stresses in the future.
    - This would include, for example, a comprehensive national review of income support and Medicare system in line with projected need under varied future emissions scenarios and their predicted impacts on determinants of health such as housing, livelihoods, physical and mental health, and child protection.
- Providing guidance for industry, State and Territory (S & T), and local government authorities to incorporate children's climate-related health needs into built environment planning,

[38] Ibid.
[39] Ibid.

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including construction and building codes, urban planning and design of public places, transport policy, housing, food security and agricultural policy.
    - This would include, for example, research and investment into refurbishing public playgrounds to ensure maximum resistance to heatwaves and the heat sink effect in urban areas.
- Incorporating children's climate resilience into whole-of-government policymaking processes including the Early Years Strategy, the Investment Dialogue for Children, and the Measuring What Matters Framework.
    - The Measuring What Matters Statement includes building climate resilience as an objective and recognizes the forthcoming National Climate Risk Assessment and the National Adaptation Plan as key instruments for measuring and assessing progress on climate resilience.[40] This is a positive example of a whole-of-government activity to strengthen resilience, however, it's effectiveness from a child-sensitivity lens will depend on the extent to which children's health needs are considered.

UNICEF Australia welcomes acknowledgement of 'One Health' in conjunction with HiAP approach. Identifying and documenting the overlaps between One Health and HiAP will clarify policy areas related to environment, biodiversity, animal health and more that should be included in a HiAP approach to this strategy. The proposed establishment of an Australian Center for Disease Control (ACDC) in line with the One Health guiding principle is welcome. However, in the context of climate impacts on population health, the One Health principle must not be limited to preventing and responding to pathogens and disease outbreaks.

Recommendation 9: Provide guidance on a process and plan for multisectoral approach to incorporating children's climate-related health needs in economic, and social policy design, addressing child-critical social services, social protection, built environment planning, and whole-of-government policymaking processes.

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[40] Australian Government, "Measuring What Matters: Australia's First Wellbeing Framework," <Measuring What Matters (treasury.gov.au)> Pg. 53

RACGP

RACGP Submission to the Department of Health and Aged Care

National Health and Climate Strategy

1. About the RACGP

The Royal Australian College of General Practitioners (RACGP) is the voice of general practitioners (GPs) in our growing cities and throughout rural and remote Australia. We are Australia's largest professional general practice organisation representing more than 45,000 urban and rural general practitioner (GP) members. For more than 60 years, we've supported the backbone of Australia's health system by setting the standards for education and practice and advocating for better health and wellbeing for all Australians.

The RACGP is an active advocate for action on climate change and recognises climate change as a key public health issue. We have a clear position statement on the impact of climate change on human health, and we regularly support key campaigns for political action in this space. Much of the RACGP's work in this space has been driven by the RACGP Climate and Environmental Medicine Specific Interest group, which has around 1400 members.

In partnership with the National Aboriginal Community Controlled Health Organisation (NACCHO) the RACGP is also developing a topic on the health impacts of climate change for the fourth edition of the *National guide to preventive healthcare for Aboriginal and Torres Strait Islander people*, due for publication in 2024.

The RACGP's Environmental sustainability in general practice resource supports Australian GPs and their practice teams to reduce their environmental footprint. The resource can be used by practices in all corners of Australia to become more environmentally sustainable as well as to identify, reduce and manage the adverse health effects of climate change. This includes actions on reducing energy consumption, prescribing decisions and advocating on behalf of patients for effective climate change policy and action.

The RACGP thanks the Department of Health and Aged Care for the opportunity to provide feedback on this draft National Health and Climate Strategy. The College is fully supportive of the development of such a strategy and is in support of the objectives and principles which form the basis of the document.

The RACGP has provided feedback on the four proposed objectives of the strategy. Our key message is that primary care, and general practice specifically, needs to be more fully included within the strategy.

2. Key recommendations

Measuring emissions

- Include data from general practice and primary care in the measuring, monitoring and reporting of emissions, without requiring practices to undertake burdensome reporting.
- Include all three scopes of emissions within the strategy, as well as those emissions which fall outside these scopes.
- Investigate what data could be gathered from the Medicare Benefits Schedule (MBS) and the Pharmaceutical Benefits Scheme (PBS) to help measure emissions.

Mitigation

- Explore different mitigation priorities for different parts of the health sector.
- Focus on are medicines, waste, and prevention and optimising models of care as the key mitigation areas in general practice.
- Develop resources which provide information to prescribers on the environmental impact of different drug treatments, alongside information on their effectiveness and costs.
- Develop guidance for clinicians in all parts of the health system on reducing patient harms by avoiding interventions which are of low value. Similar to the RACGP's *First do no harm* guidance.
- Explore opportunities to reduce the environmental impact of clinical waste, and e-waste.
- Explore opportunities to reduce plastic waste in healthcare.
- Increase support for general practice to deliver patient-centred preventive care, with associated increase in funding for general practice.
- Focus on evidence-based prevention activities with comprehensive evaluation, to ensure policies have the intended effect and vulnerable populations are not left behind.
- Include social prescribing in the National Health and Climate Strategy.
- Ensure all patients can take advantage of telehealth consults with their usual GP, including making Medicare rebates for longer telehealth phone consultations a permanent fixture and re-introducing Medicare rebates for phone consultations for mental health items and GP chronic disease management plans.

Adaptation

- Develop a national heath vulnerability and adaptation assessment to help identify which impacts, risks, and vulnerabilities should be prioritised for adaptation action.
- Use the assessment to build an action plan which is nationally consistent, and adaptive to local contexts and needs.
- Ensure the National Health and Climate Strategy is informed by Australia's recent experiences of natural disasters, and fully considers Australia's approach to disaster management.

Health in all policies

- Include recommendations for a Health in All Policies approach within the National Health and Climate Strategy, and ensure the Strategy is implemented across the whole of government.

Strategy approach

- Ensure the Strategy takes a national approach while also being tailored to meet local needs and contexts.

Objective 1: Measuring health system greenhouse gas emissions

Australian research from 2018[1] estimates that health care contributes 7% of Australia's total carbon emissions, and that general practice accounts for 4% of the health sector's total, excluding emissions from pharmaceuticals. Despite the small, estimated volume of emissions produce by general practice, the RACGP recognises that GPs play a key role in identifying, reducing and managing the adverse health effects of climate change.

The above research uses economic models, and assumed carbon costs, with little data available about the actual onsite emissions from the Australian healthcare sector. Additional research needs to be conducted to build a fuller picture of the actual emissions being produced.

While Australia is at the beginning of producing a strategy, we can learn from other countries who have already been through this process. The NHS strategy 'delivering a net zero national health service' provides some helpful guidance, including the inclusion of general practice in a holistic strategy, and an approach which covers all three of the stated

scopes of emissions, plus emissions from patients and visitor travel, and medicines used in the home, which fall outside of these scopes.

Within this measuring work, we should ensure that health sector emissions relating to IT infrastructure are included – for example large data services.

In terms of currently available datasets, the Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) could be a helpful starting point to further understand sources of carbon and high impact mitigation strategies across the health sector.

PHNs may also be in a position to support both the measuring and reduction of carbon emissions in primary care. They would be able to act locally within the context of their region to provide appropriate support to local health services.

The RACGP recommends the Department of Health and Aged Care:

- Include data from general practice and primary care in the measuring, monitoring and reporting of emissions, without requiring practices to undertake burdensome reporting.
- Include all three scopes of emissions within the strategy, as well as those emissions which fall outside these scopes.
- Investigate what data could be gathered from the MBS and PBS to help measure emissions.

Objective 2: Mitigation

The areas of focus for mitigation strategies will look different in primary care and secondary care. It would be helpful for the strategy to acknowledge different areas of focus for different parts of the healthcare system. Different parts of the system will also need different supports and enablers to help implement these mitigation strategies.

The strategy may want to consider opportunities to incentivize uptake of mitigation strategies, for example grants or other funding opportunities for solar panels, battery systems, environmental architecture, creation of resources for healthcare professionals etc.

For general practice we would recommend that the biggest areas of focus should be:

- Medicines
- Waste
- Prevention and optimising models of care.

More information on each of these areas is included below.

Medicines

We know that medications make up a significant proportion (19%) of Australia's healthcare carbon footprint[1]. This is due to the extraction of the required raw materials, the manufacture process, packaging, shipping, and disposal of the medicine. Ecological effects of pharmaceutical pollution are documented in waterways, aquatic species, and food-chains.

Additionally, estimates of general practice's carbon footprint in the UK suggest that between 65% and 90% of it is associated with pharmaceutical prescribing[2]. So, focusing on medicines would be a high impact option.

In order to address the impact of medicines, information needs to be made available to prescribers on the environmental impact of those medicines, alongside information on the effectiveness and cost, so that clinicians can make a holistic assessment of the benefits and harms when making a decision to recommend drug treatment. While delivering safe and high-quality care remains a primary consideration, there are many instances when a range of equivalent treatment options are available. Considering the environmental impact of investigation and treatment decisions has been included

in the Australian Medical Council's recent update of the National Framework for Prevocational (PGY1 and PGY2) Medical Training[3]. To achieve this national data and guidance is required. Research in this area needs to be carried out and communicated, and prescribers need to be enabled to use this information. The PBS could have a role in this, with the environmental impact of different medicines factored into whether a medicine is listed on the PBS or not.

Resources which would previously have been helpful to guide prescribers in this way – NPS MedicineWise, and its initiative Choosing Wisely – are unfortunately no longer producing new content following the funding cut announced in March 2022. The National Commission for Safety and Quality in Health Care should be directed to develop these resources to help guide prescriber decisions.

The RACGP is supporting reduction in waste in medicines through publication of the RACGP Handbook of non-drug interventions (HANDI) and the publication of First Do No Harm – a guide to choosing wisely in general practice.

Waste

Low value healthcare

With every healthcare intervention having some financial and environmental cost attached to it, supporting clinicians to reduce low-value interventions not only improves patient care, it also improves environmental sustainability. The RACGP has produced guidance to help GPs reduce patient harms and avoid low-value care, and has published a position statement on Too much medicine. Similar guidance could be produced for other parts of the health sector, potentially by the National Commission for Safety and Quality in Health Care.

Disposing of clinical waste

Clinical waste, which has the potential to cause disease, (eg discarded sharps, or human tissue), must be disposed of according to State and Territory legislation, in ways that reduce the risk of infection. That means undergoing treatment, such as incineration, chemical disinfection, or autoclaving, before being put in landfill.

Ongoing research and review are needed to ensure the most appropriate treatment methods are used so that the waste is safe, while minimising the environmental impact as far as possible.

Reducing plastic waste

There is also an opportunity to reduce plastic waste in healthcare. Plastics are made from fossil fuels, can leak toxic products into the air and waterways, depending on how they're disposed of, and have been linked with severe adverse health outcomes[4]. Several opportunities could be explored:

- While single-use plastics have been very useful in terms of infection control, there are now alternatives available which, while still new, should be researched for their potential use in the Australian healthcare context. Funding could also be given to explore more viable alternatives.
- Single-use products (such as bandages) which come packaged in plastic, could be replaced with products which come in paper or biodegradable packaging, or for products that come in larger packs.
- Medicines usually come packages either in blister packs, or plastic jars. Suppliers could be incentivised to choose alternatives, such as biomass plastic made from natural substances such as sugarcane and aluminium manufactured using renewable energy, or glass jars[5]. Pharmacists could be enabled to buy in bulk and dispense pills in biodegradable containers.

E-waste

Attention should also be given to reducing digital waste in the healthcare sector – both from an environmental perspective, and also to prevent potential privacy breaches. At a practice level the RACGP provides guidance on reducing e-waste in the *Greening up: Environmental sustainability in general practice* factsheet.

Recycling metals contained in electronic goods may reduce the need for mining virgin materials. However, many of these valuable resources are lost every day through low e-waste collection rates and inadequate recycling or low-efficiency end processing for electronic equipment[6].

At State and National levels more guidance, support, and infrastructure are needed to enable greater recycling and resource recovery of e-waste. This could include regulations for manufacturers that make resource-recovery at the end of the product's lifecycle, easier.

Prevention and optimising models of care

The RACGP sees a focus on prevention, and on optimising models of care, as key to driving long-term change in the reduced carbon footprint of Australia's health system. This approach would help drive patient-centred care which is also better value for money, than the current system. Australia would not be alone in taking this approach – the strategy produced by NHS England[2] takes a very similar view, focusing on preventive medicine, and community-based healthcare, as well as measures to improve integration of primary and secondary care.

Prevention

Australia's healthcare system needs to adapt as our climate changes and the needs of the population evolve. All patients must be supported to easily access their GP when they need to. Patients should be encouraged to talk to their GP, not only when they are sick, but also about how to stay healthy. When patients see their GP for preventive care and early treatment, they will be more likely to stay active in the community for longer, building and maintaining happy and healthy families, workplaces and communities. By having an established relationship with a practice and a nominated GP, patients can receive seamless, integrated and continuous care, where their needs are understood and prioritised.

For Aboriginal and Torres Strait Islander adults, belonging, connection and access to Country and protection of the environment are important for wellbeing[7].

Evidence-based preventive care and high-quality acute and chronic disease management provided through general practice will:

- help people to live healthier lives and age well in the community.
- reduce disease complications and prevalence of preventable hospital presentations and admissions.
- reduce healthcare expenditure for government.
- reduce future out-of-pocket costs for patients.
- address health disparities and inequities experienced by some population groups.
- increase the overall economic productivity of society.
- reduce carbon emissions through reduced use of a high-carbon hospital system.

Preventive healthcare in general practice includes the prevention of illness, the early detection of specific disease, and the promotion and maintenance of health. Preventive care provided by GPs is critical in addressing the health disparities faced by disadvantaged and vulnerable population groups. Early access to health promotion and appropriate preventive care assists patients to stay more active in their community. This reduces the length of hospital stays and re-admission rates, and targets health resources to patients who will benefit most.

GPs and their teams already provide preventive care to their patients. However, there is opportunity for patients to be further supported to access preventive care routinely through their general practice. This is acknowledged in the National preventive health strategy 2021 – 2030[8] which includes the following policy goal to be achieved by 2030:

- The inherent preventive health capabilities of primary health care professionals, including GPs, allied health, pharmacists, and nurses, are better supported and integrated within health services.

The RACGP has published the Red Book: Guidelines for preventive activities in general practice (9th edition), which takes an evidence-based approach to limit screening and case finding activities to those with sound evidence backing.

This reduces overuse of pathology testing, diagnostic imaging and preventive pharmaceutical treatments with associated environmental impacts. The Red Book sets the agenda for all preventive activities by GPs and brings together best-practice guidelines and evidence tailored to Australian context, and is looked on worldwide as a valuable resource. The tenth edition of this flagship publication is close to completion.

Support of general practice

The RACGP's *Vision for general practice and sustainable healthcare systems*, published in 2019, outlines a model of care that aims to address many of Australia's longstanding healthcare challenges. That document focuses on creating a healthcare system which can adapt to a population which is ageing, with complex, chronic conditions becoming more prevalent. The Vision identifies how better use and support of general practice will bring about significant savings for the wider system by reducing the need for expensive secondary care. One of the key benefits of fully implementing the Vision is reduced reliance on acute treatments, and costly, carbon-intensive, secondary care, and greater focus on preventive, low-carbon, and community-based care. Ultimately, the modernised healthcare system described in the Vision will benefit patients, providers, funders and the environment. In this way, its successful implementation is a key step in reducing the carbon footprint of the healthcare sector.

Australian investment in preventive health care is low compared to other developed economies. While estimates of Australian spending vary, they are all much less than the preventive health expenditure of Canada and the UK, which is more than 5% of their health budgets[9,10]. Our changing population necessitates greater investment in preventive healthcare, with a focus on person-centred and comprehensive care. Primary care, specifically general practice, has a key role to play in coordinating care across the healthcare system, noting the importance of strengthening relationships between healthcare practitioners across different areas of care provision.

This funding gap is addressed in the National health prevention strategy 2021 - 2030, where one of the aims of the strategy is that "prevention is valued and viewed as a worthwhile and important venture – funding is rebalanced towards prevention"[8]. The full benefits of the Vision will not be realised without adequate investment in prevention and effective support for general practice. Additional commentary on prevention in the Australian healthcare system is included in the RACGP's submission on the national preventive health strategy consultation paper.

Quality improvement and innovation within primary care are dependent upon ongoing research and evaluation. Effective investment, resource allocation, planning and service delivery should be guided by research relevant to general practice. Evidence-based practice will support the broader objectives of the Vision, which in turn will contribute to reducing the environmental footprint of the healthcare system.

Ensure preventive activities benefit vulnerable communities

Children, people aged over 65 years, and people with underlying health conditions are particularly vulnerable to climate-related extreme events through direct biophysical effects and loss of health infrastructure and disruption to care services. Before a disaster occurs, GPs can initiate discussions and motivate patients to prepare emergency plans based on local climate threats and personal circumstances[11].

Australia's prevention action has achieved important outcomes, such as reducing smoking, and implementing screening. Regular exercise and healthy diets are also important objectives of preventative health strategies that can reduce the population health burden of chronic disease and reduce healthcare expenditure and emissions. Many preventative strategies that improve population health, also reduce emissions, and improve resilience to climate-related health risks. These are known as health co-benefits[12].

However, some preventative health interventions may disproportionately improve the health of those who are already healthy, while having less or no impact on disadvantaged communities, particularly Aboriginal and Torres Strait Islander peoples. A useful example is to look at the evaluations of anti-smoking programs in Aboriginal communities, which demonstrate very high levels of knowledge about the dangers of smoking, whilst still having high smoking prevalence.

See for example the Tackling Indigenous Smoking Program Final Evaluation Report[13]. This demonstrates the flawed assumption that knowledge leads to behaviour change in the absence of structural change.

Many current prevention activities are focused on narrow conceptualisations of health and emphasise individual responsibility for behaviour and individual health outcomes. Broader conceptualisations of health, including communities and environment, are fundamental to all prevention activities.

In the current climate emergency, Aboriginal and Torres Strait Islander communities are disproportionately exposed to rising seas and extreme weather, unjustly compounding existing health and wellbeing inequities[14]. GPs and other primary healthcare professionals have a key role to play in preventing adverse health outcomes from climate change and extreme weather events and advocating for patient access to appropriate resources. Consideration of the patient's context is needed, and may include their location's potential climate hazards, demographics and disease profile, access to financial and social resources including adequate housing, and access to cooling, power and refrigeration[15].

Current prevention activities should be strengthened through effective evaluation that learns from and builds on current programs. Consideration should be given to the urgency of outcomes in health equity, and ensuring communities are not left behind. A clear understanding of the strengths and limitations of the primary healthcare system to support people to have best possible health and wellbeing outcomes, would also support this aim.

Coordinated campaigns that support GP programs and other running programs such as Quitline, are likely to be more effective than media campaigns alone. Preventive activities can be delivered in various ways including the use of apps, interventions through general practice, nurses and other allied health practitioners and regional specific programs as well as government initiatives such as taxation.

Social Prescribing

As stated in the joint RACGP and Consumer Health Forum Social prescribing report, the benefits of social prescribing are wide-ranging and include health, economic, social and productivity gains, with the ultimate benefit being improved health and wellbeing for individuals and communities. We know that social determinants such as access to safe and affordable housing, education, employment, and community connectedness have a significant influence on health. Therefore, linkage with programs and services outside the health system has the potential to improve health outcomes.

Social prescribing should be included as part of the preventive health focus of the National Health and Climate Strategy. This will require funding and implementation support to enable a coordinated and comprehensive approach, including investment in a 'link worker' workforce.

This aligns with the government's National preventive health strategy 2021-2030[11] which includes the following policies which should be in place by 2030:

- Enhanced referral pathways to community services to improve health and wellbeing are embedded in the health system at a local level with a focus on self-care support (e.g. social prescribing).
- Healthcare professionals are trained and supported to provide advice and support to patients to promote physical activity and to engage in social prescribing (connecting patients with community services to improve health and wellbeing).

Reducing health system duplication by improving continuity of care

In addition to their role in providing clinical care, GPs have important roles as patient advocates and stewards of the healthcare system. These additional roles are increasingly important as the complexity of our health system has grown. They also provide huge benefit to patients, health funders and the wider healthcare system and are the reason why all healthcare must be coordinated through a patient's regular GP.

Failure to involve a patient's GP in all aspects of patient care disrupts continuity of care and compromises the provision of high-quality, cost-effective care through:

- fragmentation of care and medical records
- the potential for contradictory clinical advice
- unclear lines of responsibility – particularly for preventive healthcare such as cancer screening or vaccination programs
- duplication of patient services (eg pathology and diagnostic imaging)
- misdiagnoses or delayed diagnoses
- inappropriate or delayed treatment.

Each of these issues could contribute to a more duplicative and less environmentally sustainable healthcare system.

Telehealth

Telehealth has become a critical part of Australia's healthcare system. It helps facilitate a person's access to their usual GP, meaning patients can more easily receive high-quality, personalised health services when and where it suits them. It also allows helps reduce the emissions associated with patient travel, and so having telehealth as one of the options available to patients increases access to healthcare, while reducing carbon emissions.

Recent measures to support the continued provision of telehealth are welcomed. These include:

- The decision made in June 2022, to exempt patients from the 12-month rule for telehealth in areas affected by natural disasters, was a welcome support for those communities.

- In the May 2023 Federal budget the government announced funding to enable access to longer telehealth consultations from 1 November 2023 for patients registered with their GP through MyMedicare.

The RACGP has long been calling for government to ensure all patients can take full advantage of telehealth consults with their usual GP. This includes making Medicare rebates for longer telehealth phone consultations a permanent fixture so that all patients can get the care they need when they need it. The RACGP is also calling on the Government to re-introduce Medicare rebates for phone consultations for mental health items and GP chronic disease management plans.

More information on the RACGP's recommendations around expanding telehealth services can be found in this submission to the Australian National Audit Office.

The RACGP recommends the Department of Health and Aged Care:

- Explore different mitigation priorities for different parts of the health sector.
- Focus on are medicines, waste, and prevention and optimising models of care as the key mitigation areas in general practice.
- Develop resources which provide information to prescribers on the environmental impact of different drug treatments, alongside information on their effectiveness and costs.
- Develop guidance for clinicians in all parts of the health system on reducing patients harms by avoiding interventions which are of low value. Similar to the RACGP's First do no harm guidance.
- Explore opportunities to reduce the environmental impact of clinical waste, and e-waste.
- Explore opportunities to reduce plastic waste in healthcare.
- Increase support for general practice to deliver patient-centred preventive care, with associated increase in funding for general practice.
- Focus on evidence-based prevention activities with comprehensive evaluation, to ensure policies have the intended effect and vulnerable populations are not left behind.
- Include social prescribing in the National Health and Climate Strategy
- Ensure all patients can take advantage of telehealth consults with their usual GP, including making Medicare rebates for longer telehealth phone consultations a permanent fixture and re-introducing Medicare rebates for phone consultations for mental health items and GP chronic disease management plans.

Objective 3: Adaptation

The consultation paper stresses the importance of building a climate-resilient health system, outlines the negative health effects from climate-related disasters and extreme weather events, and notes the importance of emergency preparedness.

The RACGP agrees that Australia should develop a national health vulnerability and adaptation assessment which would help identify which impacts, risks, and vulnerabilities should be prioritised for adaptation action. The methodology for this should be informed by the World Health Organisation's (WHO) guidance *Protecting Health from Climate Change – Vulnerability and Adaptation Assessment.*

This assessment and action plan should take a national approach while also considering local contexts and needs. Remote communities will be impacted differently than those living in metropolitan centres. Likewise, children, older people, and populations already experiencing marginalisation and inequities, including those living in deprived communities and First Nations people, will be disproportionately impacted. A vulnerability and adaptation assessment should also consider all parts of the healthcare system, including primary care, and general practice. It will be important for this assessment to be reviewed and updated regularly, as climate impacts change over time, and for this to be based on updated risk-assessment modelling to health infrastructure.

One of the most important things the strategy can do, is to be informed by recent experiences in Australia such as the bushfires in 2019-20, and the flooding in 2021 and 2022. The 2020 Royal Commission into National Natural Disaster Arrangements explored some of these issues and there are important learnings which need to be considered. Actions need to be taken based on these experiences which build our resilience against future climate events.

The RACGP submission to the Royal Commission highlighted key issues including:

- The importance of including GP representation on disaster management and recovery planning committees.
- The need for communication between federal and state/territory bodies to ensure consistent messaging.
- A requirement for jurisdictions to have working disaster response plans, including scenario planning, that are exercised, and reviewed and updated every 12 months, and that include GPs.
- Development of a standardised national framework for the engagement of GP teams in support of isolated communities during disasters.
- Funding to allow general practices to fully engage in the planning, management, and recovery phases of natural disasters, e.g. attending planning meetings, gaining required skills, developing disaster management plans, coordinating mental healthcare during and following a disaster, supporting business continuity (providing power backup), enabling GPs to travel to work in affected areas etc.
- GP involvement in decisions around how best to distribute ad-hoc resources during emergencies and disasters to ensure responses fit with local needs, patient demographics, and geography of the affected community.
- Provision of necessary consumables and standardised equipment to general practices during disasters.
- Support for the provision of longer-term mental health services and additional services to communities in need through use of technology and established locum services.
- Exemptions for GPs in affected areas if co-claiming/using MBS items in excess of their peers.
- Increased funding for research into GP responses to previous disasters and emergencies to assist in planning for future disasters and health emergencies.

The RACGP strongly urges standard involvement of GPs in disaster and emergency response plans to ensure there is a clear, consistent, and planned primary care response in the event of future emergencies and disasters. This will ensure the best healthcare is available to support the health and wellbeing of affected communities.

The RACGP supports the development of the Australian Centre for Disease Control, to improve Australia's response and preparedness for public health emergencies and hopes it will address many of the issues raised in the Royal Commission. We would recommend that the National Health and Climate Strategy also consider disaster management as part of its remit.

The RACGP recommends the Department of Health and Aged Care:

- Develop a national heath vulnerability and adaptation assessment to help identify which impacts, risks, and vulnerabilities should be prioritised for adaptation action.
- Use the assessment to build an action plan which is nationally consistent, and adaptive to local contexts and needs.
- Ensure the National Health and Climate Strategy is informed by Australia's recent experiences of natural disasters, and fully considers Australia's approach to disaster management.

Objective 4: Health in all policies

Health in All Policies is an approach to public policy across sectors that systematically takes into account the health implications of decisions, and avoids harmful health impacts in order to improve population health and health equity. As mentioned above, we know that social determinants such as access to safe and affordable housing, education, employment, and community connectedness have a significant influence on health. Taking a Health in All Policies approach means considering overall health and health equity when developing policies in areas including transport, housing, urban planning, education etc[16].

Critically, it also means considering the health implications from energy policy decisions. The World Health Organisation, United Nations Secretary General, and International Energy Agency have all highlighted that in order to ensure a safe, healthy and liveable future, there can be no further expansion of fossil fuel (coal, oil and gas) resources. Climate change is a health emergency. We are already seeing the significant health impacts in the form of more frequent and severe extreme weather events, and expansion of vector borne diseases, such as Japanese encephalitis, into new territories. The impacts of climate change and health consequences are accelerating. In order to safeguard the health of current and future generations, it is essential that we move away from fossil fuels and progress the transition to clean energy[17,18].

The RACGP strongly supports all levels of Australian government to fund and implement a Health in All Policies approach. This approach should be supported by health impact assessments, and up-to-date risk assessment modelling.

The RACGP recommends the Department of Health and Aged Care:

- Include recommendations for a Health in All Policies approach within the National Health and Climate Strategy, and ensure the Strategy is implemented across the whole of government.

General comments

As indicated in the document the approach taken by the strategy needs to have a national approach, while also having the ability to be tailored to meet local needs.

Special thought needs to be put into the way emissions reduction are achieved in rural and remote areas, and the impact of climate change on these communities. This demographic already experience adversity in access and health equity due to the relationship between the social determinants of health and location. People living in rural and remote areas have higher rates of chronic disease and multimorbidity, and an overall lower life expectancy[19]. This contributes to the cumulative risk that the rural population faces as they are also particularly prone to the health-related impacts of climate change[20]. Due to their geographies, these communities are at risk of experiencing extremities in weather and climate induced events and have reduced access to health and social services that are able to provide wrap-around support. Strong primary healthcare systems are needed to reduce healthcare inequities.

The specific needs and perspectives of Aboriginal and Torres Strait islander people also need to be considered. This should include the specific spiritual and cultural harms caused by climate change, and the knowledge that these communities have about how to live in and protect country from climate change, which is healthy for body, mind, spirit

and climate. Really respecting First Nations connection to Country and enabling and learning from their cultural practices is protective of the environment and part of our Closing the Gap responsibilities.

The strategy should also be informed by the work being done by the Senate committee on the extent and nature of poverty in Australia. The RACGP submission to this inquiry includes detail of the impact of poverty on individuals in relation to health outcomes. This group are also particularly vulnerable to the impacts of climate change due to the higher likelihood of having insecure housing.

When making recommendations it's important to consider how these will be implemented across all communities. For example, the recommendation to support social prescribing as it will enhance referral pathways to community services to improve health and wellbeing, is a good one. However, work also needs to be done to ensure that appropriate community services are available in all communities, not just more affluent communities, or more metropolitan communities.

The RACGP recommends the Department of Health and Aged Care:

- Ensure the Strategy takes a national approach while also being tailored to meet local needs and contexts.

Conclusion

The RACGP strongly supports the development of a National Health and Climate Strategy as an essential policy to address the escalating population health impacts of climate change. We recommend that primary care generally, and general practice specifically, is more fully considered in the strategy, as there is a key role for general practice in supporting the strategy aims. In order for the strategy to fulfill its purpose, it is essential that it is implemented across the whole of government.

Thank you again for the opportunity to provide feedback on the consultation paper for the Strategy. The RACGP looks forward to continuing to contribute to the development of the National Health and Climate Strategy. For any enquiries regarding this submission, please contact Gillian Elliott, Manager, RACGP Specific Interests, on 07 3456 8906 or gillian.elliott@racgp.org.au.

References

[1] Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. Lancet, 2018; 2(1): E27 – E35. doi: https://doi.org/10.1016/S2542-5196(17)30180-8

[2] National Health Service. Delivering a 'net zero' national health service. UK: NHS; 2020. Available at: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf

[3] Australian Medical Council. National Framework for Prevocational (PGY1 and PGY2) Medical Training. Australia: AMC, 2022. Available at: https://www.amc.org.au/framework/

[4] Rasheed FN, Walraven G. Cleaning up plastics in healthcare waste: the transformative potential of leadership. BMJ Innovations, 2022; 9 (2): 103–108. Available at: https://innovations.bmj.com/content/9/2/103

[5] Sustainable Packaging News. Sustainable pharmaceutical packaging becomes popular as plastic pollution rises. SPNews, 2022. Available at: https://spnews.com/sustainable-pharma-packaging/ [Accessed 25 July 2023]

[6] Heacock M, Kelly CK, Asante KA, Birnbaum LS, Bergman AL, Brune M, Buka I, Carpenter DO, Chen A, Huo X, Kamel M, Landrigan PJ, Magalini F, Diaz-Barriga F, Neira M, Omar M, Pascale A, Ruchiwarat M, Sly L, Sly PD, Van de Berg P, Suk WA. E-waste and harm to vulernable populations: a growing global problem. Environmental Health Perspectives, 2016; 124 (5): 550-555. Available at: https://ehp.niehs.nih.gov/doi/full/10.1289/ehp.1509699

[7] Garvey G, Anderson K, Gall A, Butler TL, Cunningham J, Whop LJ, et al. What Matters 2 Adults (WM2Adults): Understanding the Foundations of Aboriginal and Torres Strait Islander Wellbeing. International Journal of Environmental Research and Public Health. 2021;18(12):6193. doi: https://doi.org/10.3390%2Fijerph18126193

[8] Australian Government Department of Health. National Preventive Health Strategy 2021 – 2030. Canberra: DoH; 2021. Available at: https://www.health.gov.au/sites/default/files/documents/2021/12/national-preventive-health-strategy-2021-2030_1.pdf

[9] Australian Medical Association. Position Statement – Environmental sustainability in health care – 2019. Canberra: AMA, 20 March 2019. Available at: https://www.ama.com.au/position-statement/environmental-sustainability-health-care-2019 [Accessed 25 July 2023].

[10] Royal Australian College of Physicians. 'Disappointing' – Physicians say preventive healthcare overlooked in budget. Sydney: RACP, 14 March 2021. Available at: https://www.racp.edu.au/news-and-events/media-releases/disappointing-physicians-say-preventive-healthcare-overlooked-in-budget [Accessed 25 July 2023].

[11] Ryan BJ, Franklin RC, Burkle FM, Smith EC, Aitken P, Leggat PA. Determining Key Influences on Patient Ability to Successfully Manage Noncommunicable Disease After Natural Disaster. Prehosp Disaster Med. 2019;34(3):241-50. doi: https://doi.org/10.1017/s1049023x1900431x

[12] Haines A. Health co-benefits of climate action. Lancet, 2017; 1(1): E4 – E5. doi: https://doi.org/10.1016/S2542-5196(17)30003-7

[13] Cultural and Indigenous Research Centre Australia (CIRCA). Tackling Indigenous Smoking Program – final evaluation report. Canberra: Australian Government Department of Health; 2018. Available at: https://www.health.gov.au/sites/default/files/tackling-indigenous-smoking-program-final-evaluation-report-july-2018.pdf

[14] HEAL Network, CRE-STRIDE. Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper. Carlton South, VIC: Lowitja Institute; 2021. Available at: https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[15] Tait PW, Allan S, Katelaris AL. Preventing heat-related disease in general practice. Aust J Gen Pract. 2018;47(12):835-40. doi: 10.31128/AJGP-07-18-4658

[16] World Health Organisation. Promoting health in all policies and intersectoral action capacities. Geneva: WHO, [date unknown]. Available at: https://www.who.int/activities/promoting-health-in-all-policies-and-intersectoral-action-capacities#:~:text=Using%20a%20HiAP%20approach%20aims,overall%20health%20and%20health%20equity. [Accessed 25 July 2023].

[17] World Organisation of Family Doctors. WP on the environment statement to protect health. WONCA, 2023. Available at: https://www.globalfamilydoctor.com/News/WPontheEnvironmentStatementtoProtectHealth-NoFossilFuelProl.aspx [Accessed 25 July 2023].

[18] Atwoli L, Baqui AH, Benfield T, Bosurgi R, Godlee F, Hancocks S, Horton R, Laybourn-Langton L, Monteiro CA, Norman I, Patrick K, Praities N, Rikkert MGMO, Rubin EJ, Sahni P, Smith R, Talley NJ, Turale S, Vazqquez D. Call for emergency action to limit global temperature increases, restore biodiversity, and protect health, BMJ 2021;374:n1734. doi: https://doi.org/10.1136/bmj.n1734

[19] Australian Institute of Health and Welfare. Rural and remote health. Canberra: AIHW, 7 July 2022. Available at: https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health.

[20] National Rural Health Alliance. Position paper: Rural health policy in a changing climate – key issues. Canberra: NRHA, 28 January 2021. Available at: https://apo.org.au/sites/default/files/resource-files/2021-01/apo-nid310687.pdf

31 July 2023

WILDLIFE HEALTH AUSTRALIA COMMENTS ON THE NATIONAL HEALTH AND CLIMATE CHANGE STRATEGY CONSULTATION PAPER

In this submission, we provide a brief overview of the climate change health impacts on wildlife as they relate to human health and provide 10 recommendations for the Department of Health and Aged Care's consideration. We strongly agree that the coordination of initiatives relating to climate change and health across Australia is needed, and agree with the 3 capstone issues *viz*:

- Agree **principles, objectives**, and **key action areas** inform national policymaking.
- Increased **collaboration** between jurisdictions and other key stakeholders including the sharing and adoption of best practice approaches and reducing duplication of effort.
- Regular **monitoring, evaluation and reporting** of progress in delivering the Strategy.

WILDLIFE HEALTH AUSTRALIA'S RECOMMENDATIONS

Wildlife Health Australia has 9 recommendations we explain in more detail below.

1. **One Health** is a system wide approach and must be incorporated in policy across government departments. Health in all policies is identified as Objective 4, we suggest it should become the first, in line with global agreement on One Health as the guiding principle for global planetary health.
2. An **additional principle** should be added that explicitly recognises climate change affects wildlife, and that these affects, in turn, also affect human health.
3. **Capacity building and coordination** should be clearly identified in the list of enablers, if necessary, as separate items, or identified within the existing list.
4. Establish a '**climate health system'** that integrates other sectors as part of the climate health workforce e.g., biosecurity and wildlife health.
5. Ensure the **focus on and integration of First Nations knowledge and leadership** is fully implemented.
6. **Communicate widely** issues of wildlife health, to help prevent the spread of climate sensitive infectious disease.
7. **Reduce greenhouse gas emissions** overall, especially implementing ecosystem-based approaches as part of mitigation.
8. **Adaptation through nature-based solutions** is crucial and risk management planning must take an all-hazards approach that includes wildlife, in emergency prevention, preparedness, response, and recovery in climate related disaster events.
9. **Integrate wildlife health disease surveillance and reporting** as a core dimension in climate health disease surveillance systems, especially where there is potential for spillovers from wildlife to people.

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BACKGROUND- WILDLIFE HEALTH AND CLIMATE CHANGE

Wildlife Health Australia (WHA) define wildlife as managed and unmanaged populations of native and feral animals, including amphibians, reptiles, birds, and mammals. WHA define wildlife health as the physical, behavioural, and social well-being of wildlife at an individual, population and ecosystem level, and the resilience of wildlife to global change.

Wildlife health is important for the social, cultural, economic, and environmental health and wellbeing of people. Strategies to enhance and promote wildlife health have synergistic physical and mental health benefits for people. Wildlife health is determined by the same suite of issues as human health, and this also extends to the effects of climate change. Examples of specific climate change effects on wildlife health include:

- Infectious disease (such as Hendra Virus or insect-borne disease such as Japanese Encephalitis) due to ecological change, host susceptibility and exposure pathways[1],[2].
- Heat stress affects fertility (including changing sex in e.g., reptiles), metabolic systems, reduced productivity (such as a smaller brood size), oxidative stress, and degraded immune function.
- Extreme weather events (e.g. heatwaves, storms, floods, fires) can change and degrade habitat, food and water security and adversely effects the social structure and behaviour of some species. The bushfires of 2019-2020 caused the estimated loss of 3 billion animals, and since then floods and other extreme weather events have led to ongoing risks to ecosystems. [3,4]
- Pests and associated disease - changing food webs and disease pattern cycles can increase insect pests, toxic algae, parasitic diseases and impacts animal health and food safety.
- Other climate change impacts from ocean acidification, exacerbated biodiversity loss, increased pollutants in water systems, increased salination and drought.[5]

Climate change will also impact the health and welfare of pets, animals in sport, farm animals, zoo, and aquarium animals.[6]

DETAILED COMMENTS

Wildlife Health Australia supports the need for a national One Health approach to health and climate change.

PRINCIPLES

WHA agrees overall with the principles. However, given that health of wildlife, and proper functioning of the ecosystems of which wildlife form part, are affected by climate change, and linked to human health., WHA suggests an additional principle should be included for non-human species.

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[1] Vitali, S & Jackson, B 2023 Finding a path through complexity; embedding the science of climate change in the study of animal infectious diseases *in* Stephen, C and Duncan (eds) 2023 Climate Change and Animal Health, CRC Press, Taylor & Francis Group. DOI:10.1201/9781003149774
[2] IPBES. (2020). Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Retrieved from Bonn, Germany: https://ipbes.net/pandemics
[3] Sherwen, S *et al.,* (2023). Chapter 26: Wildlife welfare and the 2019–20 wildfires**.** *Australia's Megafires: Biodiversity Impacts and Lessons from 2019-2020. In:* van Leeuwen S et al (Eds.) (2023). **Australia's Megafires: Biodiversity Impacts and Lessons from 2019-2020.** CSIRO Publishing.
[4] Australian State of Environment Report 2021 section on extreme events: https://soe.dcceew.gov.au/extreme-events/introduction
[5] See Stephen, C & Duncan (*eds*) 2023 Climate Change and Animal Health, CRC Press, Taylor & Francis Group. DOI:10.1201/9781003149774
[6] Vets for Climate Action. 2021. Climate Facts for Vets. Available from https://d3n8a8pro7vhmx.cloudfront.net/vfca/pages/325/attachments/original/1644209261/Climate_Facts_for_Vets_October_2021.pdf?1644209261

ENABLERS

WHA agrees with the list of enablers. We suggest that capacity building and coordination be clearly identified in the list of enablers, if necessary, as separate items, or identified within the existing list.

HEALTH IN ALL POLICIES AND ONE HEALTH

WHA notes that the Consultation Paper commences with an overview of climate change including ecological impacts to people's health and wellbeing and recognition that climate change affects multiple sectors requiring a Health in All Policies (HiAP) framework. WHA is encouraged by the recognition of the One Health approach as an example of how the HiAP can be operationalised under the remit of the Australian Centre for Disease Control (ACDC). Furthermore, the One Health approach should be implemented through a system wide approach, and in the Australian context, considered within the remit of Ministries across all governments, led by the commonwealth.

A good example of the One Health approach in action is the recent national response to the Japanese encephalitis virus. Through WHA networks and strong partnerships, within one month of the first detection of Japanese encephalitis virus in south-eastern Australia, WHA in 2021, in collaboration with the (then) Australian Department of Agriculture, Water and the Environment held a series of national meetings to draw upon the expertise of waterbird experts to ensure surveillance and response activities relating to the current Japanese encephalitis outbreak were well-informed. Resulting data were shared with Communicable Diseases Network Australia (CDNA), Consultative Committee for Emergency Animal Diseases (CCEAD) and National Arbovirus and Malaria Advisory Committee (NAMAC). Information shared through these networks, resulted in a report on the climate driven scenarios of Japanese encephalitis virus spread, helping to plan timely and effective public health strategies and communication.[7]

A CLIMATE HEALTH SYSTEM

Understandably the Consultation Paper has an anthropocentric view of health e.g., focusing on human health sector mitigation. However, given the multiple interrelated and coinciding planetary health effects, a fit-for-purpose 21st century health system must encompass more than the current remit of the human health system. Through an anthropocentric health lens, it makes sense to include health service providers, allied health, aged care, and First Nations Service providers and those in human health policy and research in a more integrated way. But focusing solely on human health ignores the ecological determinants of health and wellbeing and the disciplines, sectors and industries associated with them.

WHA see the National Health and Climate Change Strategy as an opportunity to transition from a human health system solely focusing on human health to a "climate health system" which broadens from not only what we understand is a "health system" but also to who is part of the health workforce.

A climate health system looks beyond human health and integrates other sectors, such as wildlife health system (e.g., animal health service providers, surveillance, epidemiologists, feral animal health management, wildlife rehabilitators, to name only some components of this system) and environment

[7] Purnell, C (2022). The role of waterbirds in Australia's 2022 Japanese Encephalitis outbreak Unpublished – a rapid synthesis. BirdLife Australia, Carlton. https://wildlifehealthaustralia.com.au/Portals/0/Documents/Ongoing Incidents/Role_of_waterbirds_Aus_2022-JEV-outbreak_RapidSsynthesis_BirdLifeAustralia.pdf

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protection, and natural resource management as key dimensions. It follows then that the objectives in the National Health and Climate Change Strategy will apply to these disciplines, sectors, and industries.

ALIGN CLIMATE, HEALTH, AND ENVIRONMENT POLICY AGENDAS

In line with HiAP thinking, the National Health and Climate Change Strategy needs to align the climate change, human health, and biodiversity policy agendas from state and territory to national (e.g. the Nature Positive Plan, National Aboriginal Health Plan 2021-2031, National Biosecurity Strategy 2022-2032 and WHA's strategic vision the WILDPlan) and international perspective (such as the Quadripartite Agreement One Health Joint Plan of Action, the Paris Agreement under the UN Framework Convention on Climate Change and the Kunming-Montreal Global Biodiversity Framework of the UN Convention on Biological Diversity; relevant decisions and plans of the Convention on Endangered Species of wild Flora and Fauna (CITES), and relevant Sustainable Development Goals). The Australian Government's Measuring What Matters Wellbeing Strategy for example has biodiversity indicators. These indicators note that "a loss of *biodiversity threatens the capacity of our environment to sustain and provide clean air, water, medicines and is contributing to the emergence and transmission of disease"* and aligns with biosecurity risks from the changing patterns of infectious climate sensitive disease.

PROMOTE AND PROTECT WILDLIFE HEALTH TO PREVENT THE SPREAD OF CLIMATE SENSITIVE INFECTIOUS DISEASE AND REDUCE GREENHOUSE GAS EMISSIONS BY IMPLEMENTING ECOSYSTEM-BASED OR NATURE-BASED SOLUTIONS AS PART OF MITIGATION AND ADAPTATION

Biodiversity, or biological diversity, is the variety of life on our planet from genes to ecosystem. Climate change is one of several interrelated factors affecting biodiversity and is amplified by other stressors e.g., land use changes, waste and pollution, and urban development. But human survival is dependent on ecosystem services (clean air, water, fibre, food, medicines, and climate control) that form our life support system. Functioning ecosystems act as carbon sinks by absorbing greenhouse gases. As such, conserving, managing, and using sustainably biodiversity on land and water is essential for mitigating greenhouse gas emissions, helping in adaptation strategies to change already "baked into" the biosphere thereby reducing impacts from climate change on human (and wildlife) health. Ecosystem-based/nature-based solutions are as equal, complementary to, and often more cost effective and efficient approaches to the greenhouse gas emissions reduction strategies suggested in the National Health and Climate Change Strategy.

ADAPTATION AND RISK MANAGEMENT- AN ALL-HAZARDS APPROACH TO EMERGENCY PREVENTION, PREPAREDNESS, RESPONSE, AND RECOVERY FROM CLIMATE RELATED DISASTER EVENTS

WHA support a National Climate Risk Assessment and a National Adaptation Plan but suggests the risk assessment and adaptation plan integrate wildlife health risks, meeting and developing skill sets to deal with adaptation, and ensuring Australia has sufficient capacity to implement adaptation strategies. WHA also supports a nationally consistent approach to vulnerability assessment and adaptation planning for Australia's climate health system. Such a national approach must include issuing guidance and associated implementation support tools for states, territories, and local health systems. WHA can support disease risk analysis that aligns with the Australian Institute for Disaster Resilience. Specifically, WHA is designated by the World Organisation for Animal Health (WOAGH, formerly OIE) *Collaborating Centre of Wildlife Health Risk Management* for the Indo-Pacific.

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Following the 2019/2020 bushfires in Eastern Australia, WHA undertook a review to identify gaps in the emergency response for wildlife health. WHA identified the need for the incorporation of wildlife health and welfare response as a standard component of disaster response arrangements and the development of a nationally accredited training program for wildlife responders to operate in the incident response system (e.g., Australasian Inter-Service Incident Management System - AIIMS).

ENHANCE BIOSECURITY AND WILDLIFE HEALTH

Over 60% of the emerging infectious diseases in people are of zoonotic or animal origin. The majority of these (around 70%) originate in wildlife. Climate change is an additional driver of zoonotic disease emergence, especially when coupled with land use change, wildlife trade, and intensified livestock production. This interconnection of multiple drivers is occurring simultaneously and is non-linear.

Given the current and growing importance of wildlife in public health disease risk, there is a clear need for high-level incorporation of wildlife expertise and data into public health strategies. WHA strongly supports the World Health Organization view that to address the emerging zoonotic disease threats to public health requires a strategic approach for predicting, detecting, and controlling these infections through an integrated and interdisciplinary approach between the animal and human health sectors.

WHA is aware that the ACDC plans to embrace a One Health approach that will incorporate wildlife health. To complement this plan, wildlife health and animal health must be recognised as core dimensions in the National Health and Climate Change Strategy.

FIRST NATIONS MITIGATION AND ADAPTATION LEADERSHIP

WHA note that First Nations peoples are included in the National Health and Climate Change Strategy through recognition of co-design, self-determination, cultural safety, and a strengths-based approach. WHA feels this should be an activity described in the objectives in the National Health and Climate Change Strategy. WHA are encouraged to see that there will be synergies with Priority 7 of the National Aboriginal Health Plan 2021-2031, 'Healthy environments, sustainability, and preparedness'. Examples here include the use of cultural burning cultural water management and "Caring for Country" land management practices. A detailed assessment of policy gaps has been provided in the Lowitja Institute Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper[8]. Gaps include participating in assessment of climate change impacts on communities and their consequences and working with communities to develop local adaptation and mitigation plans.

WHA RECOMMENDATIONS

1. **One Health** is a system wide approach and must be incorporated in policy across government departments. Health in all policies is identified as Objective 4, we suggest it should become the first, in line with global agreement on One Health as the guiding principle for global planetary health.
2. An **additional principle** should be added that explicitly recognises climate change affects wildlife, and that these affects, in turn, also affect human health.

[8] HEAL Network & CRE-STRIDE 2021, Climate Change and Aboriginal and Torres Strait Islander Health, Discussion Paper, Lowitja Institute, Melbourne, DOI:10.48455/bthg-aj15

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3. **Capacity building and coordination** should be clearly identified in the list of enablers, if necessary, as separate items, or identified within the existing list.
4. Establish a '**climate health system'** that integrates other sectors as part of the climate health workforce e.g., biosecurity and wildlife health.
5. Ensure the **focus on and integration of First Nations knowledge and leadership** is fully implemented.
6. **Communicate widely** issues of wildlife health, to help prevent the spread of climate sensitive infectious disease.
7. **Reduce greenhouse gas emissions** overall, especially implementing ecosystem-based approaches as part of mitigation.
8. **Adaptation through nature-based solutions** is crucial and risk management planning must take an all-hazards approach that includes wildlife, in emergency prevention, preparedness, response, and recovery in climate related disaster events.
9. **Integrate wildlife health disease surveillance and reporting** as a core dimension in climate health disease surveillance systems, especially where there is potential for spillovers from wildlife to people.

ABOUT WILDLIFE HEALTH AUSTRALIA

Wildlife Health Australia is the national coordinating body for wildlife health in Australia. Our mission is to lead national action on wildlife health to protect and enhance the natural environment, biodiversity, economy and animal and human health through strong partnerships. We work with up to 120 different government and non-government agencies and organisations and play a key consultative role in Australia's animal disease and biosecurity networks. Our membership operates as a network of forty member organisations and over 750 individual members. This includes government agencies (including environment, health, and agriculture portfolios) and non-government partners (including universities, independent researchers, zoos and aquariums, private veterinarians, and rehabilitators).

More information on Wildlife Health Australia is available at: http://www.wildlifehealthaustralia.com.au.

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National Health and Climate Strategy Consultation Submission

Catholic Health Australia (CHA) is the largest non-government grouping of hospitals, aged and community care services in Australia.

CHA members operate in every Australian state including the Australian Capital Territory, and provide approximately 30 per cent of private hospital care and 5 per cent of public hospital care in addition to extensive community and residential aged care.

CHA not-for-profit providers are a dedicated voice for the disadvantaged which advocates for an equitable, compassionate, best practice and secure health system that is person-centred in its delivery of care.

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Anne Kubiak
Policy Manager
Catholic Health Australia

Executive Summary

Catholic Health Australia (CHA) and its member hospitals and aged care facilities welcome the opportunity to make a submission to the National Health and Climate Strategy consultation. As Australia's largest not for profit health and aged care organisation, we advocate on behalf of our members for better environmental outcomes and support the campaign for zero net emissions in the health and aged care sectors by 2040. In keeping with our ethos, we believe there is a clear moral imperative for Catholic organisations to set an example of environmental responsibility and stewardship.

Climate action is a core social justice concern. The environmental and health impacts of climate change disproportionately affect the poor, First Nations Australians, our elders, women and people with chronic disease, and disability.

The Australian Catholic Bishops Conference (ACBC) has recognised this, launching their *Cry for the Earth, Cry for the Poor (2021-2022 Social Justice Statement)* which makes the case for action on climate change as a social justice concern. CHA will align any campaign on climate action by the health sector with the aims of the ACBC's work.

As a social justice champion for Catholic Health and Aged Care, CHA is actively campaigning for action on climate change and notes it requires a systemic response. CHA will support Government to achieve zero net emissions and will also assist its members to work towards a similar target.

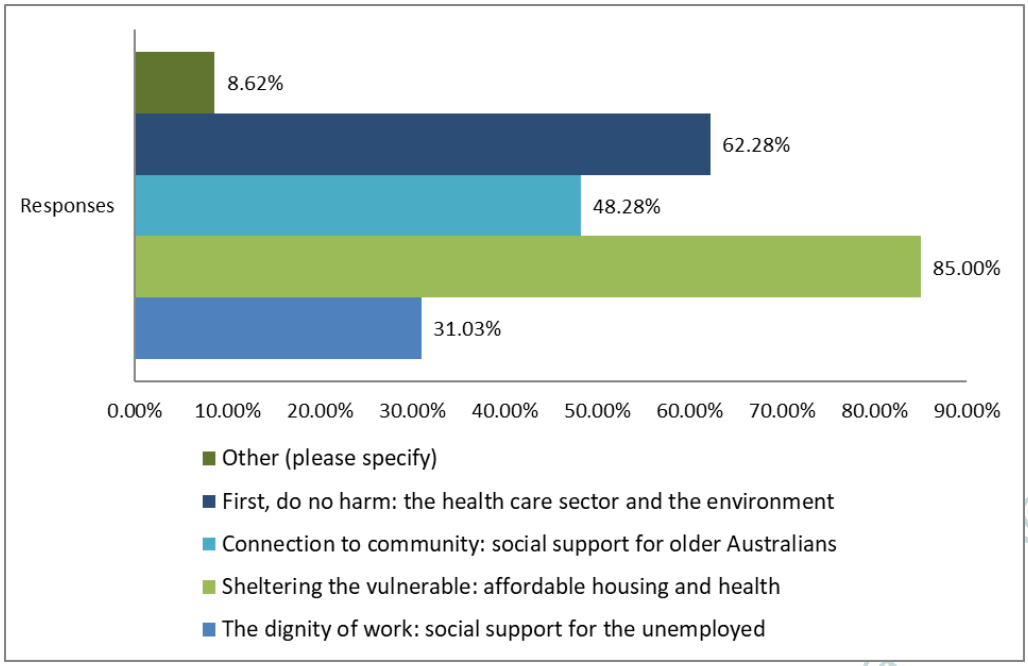
CHA Membership Attitudes and Action

CHA commenced pursuing an integrated social justice agenda in 2021 as a key objective of the Mission Operational Plan approved by the CHA Board in 2020. CHA identified a zero emissions goal for the health sector as the theme of a new social justice thought leadership initiative.

In 2021 CHA conducted a social justice member survey to understand priorities. From the 68 responses received, climate action for the health care sector was a priority for 62% and an indicator of membership concerns for the health sector and environment:

Table 1: Combined response to Social Justice Survey

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CHA is a signatory for the Fifth Plenary Council of Australia. The integral ecology for the sake of our common home Decree, declares that each Catholic parish diocese, eparchy, educational institution or organisation commits to joining the *Laudato Si'* Platform; and either develops its own or participates in an established Laudato Si' Action Plan.

In 2022 CHA the establishment of the *Laudato Si* decarbonisation network with our member hospitals. The *Laudato Si* Working Group draws its name from an encyclical by Pope Francis which highlights the importance of caring for the Earth, including reducing the impact of our practices on climate change. *Laudato Si* is a call to action for Catholics and Catholic Ministries, as we combat the exploitation and lack of care humans have inflicted on our natural, common home.

*Laudato S*i reports to CHA's Board of Directors and its Mission and Identity Committee. Its members are based in locations around Australia, and include:

- Southern Cross Care (QLD)
- Calvary
- Cabrini Hospital, Melbourne
- Mater Health, Brisbane
- Mercy Health, Melbourne
- St Vincent's Health Australia
- St John of God Health Care
- Catholic Health Australia

The membership meets quarterly with an active agenda to reduce and eliminate the risks of climate change on people and the planet.

Towards Net Zero Emissions

The *Laudato Si* Working Group has developed key focus areas and will continue to support its members in developing:

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- Membership commitment on the *Laudato Si* Action Plan related to the seven *Laudato Si* goals including a commitment to reduction of greenhouse gas emissions.

- Membership commitment in surveying member hospitals and aged care groups to ascertain a baseline of commonality and outline initiatives being undertaken. Surveying will assist in determining methodological questions that need common understanding across our membership, and the platforms required to capture and present relevant and useful data.

- Benchmarking and analysis of carbon footprint as a sector, including both health and aged care services.

- Progress reporting every two years that keeps our sector accountable to commitments.

- Working collaboratively with government on policies that result in greater sustainability, and work towards Net Zero greenhouse gas emissions across the Australian health and aged care sectors.

Potential Barriers for Organisational Uptake

CHA has identified several barriers for the Strategy uptake including:

- Identification of support required to expand on *Laudato S*i goals related to Government net zero targets which includes whether government will support resourcing required to implement actions
- Determining how CHA members can establish baseline measurements for current greenhouse gas emissions, ensuring specific indicators, targets and timelines are clear and concise
- Understanding and measurement of Scope 3 indirect emissions and potential overlap across service providers
- Training and education materials required for Members to understand the health impacts of climate change and in meeting decarbonisation goals.
- Identification of resourcing required to support the Commitment.
- How to best measure commitment progress and present findings in a bi-annual report.

CHA Membership Progress

CHA members are maturing on the journey with exemplary work already underway. Many have published climate strategies, made net zero pledges and some have already started measuring all their emissions, with a view towards a more systemic approach.

A few members are investigating waste, travel and transport as part of Scope 3 commitments and engaged heavily in assessing their inventory to identify opportunities. Others are identifying power usage in the aged care sector, and investigating ways to benchmark their energy, water and waste.

The CHA membership aligns with attitudes in the broader community and supports the development of a National Health and Climate Change Strategy. In representing Catholic health and aged care in Australia with approximately 30 percent of private hospital care and 5 percent of public hospital care, with an extensive community and residential aged care

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portfolio, the organisation is an ideal change agent committed to support the health sector in reducing 7% of Australia's CO2 emissions.

In reviewing the Federal Government's National Health and Climate Strategy, and to ensure this strategy is effective and actionable, CHA strongly urges the strategy co-design with all stakeholders, with clear development of:

- A governance model, processes and procedures
- Meaningful accountability for defined goals and objectives
- Clear definition of responsibility for meeting targets and timelines
- A mechanism for listening to the ecology wisdom of Aboriginal and Torres Strait Islander Peoples, and developed in partnership with Aboriginal Catholic Ministry and diocesan justice, ecology and peace bodies where these exist
- A mechanism to support the disadvantaged and vulnerable
- A specific reporting framework
- Adequate funding for implementation

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CHA RESPONSES - THE PROPOSED NATIONAL HEALTH AND CLIMATE STRATEGY

1. *How could these objectives be improved to better support the vision of the Strategy?*

Measurement on health system greenhouse gas emissions is an important factor in decarbonisation, but more emphasis should be placed on the overall vision and explanation of the outcomes sought by the government within this Strategy. The vision and purpose of this strategy is not clearly defined.

CHA supports the development of clear measurements, targets and actions across the sector for uniformity in baseline and in tracking performance over time. These indicators should be embedded in government policy to provide clear pathways to develop implementation plans.

2. *How could the principles improved to better inform the objectives of the strategy?*

CHA supports the draft in principle. More emphasis is required on the urgency of implementation for population and planetary health.

CHA's Code of Ethics supports the provision of health and aged care, and partnering with patients, residents, practitioners, family and carers as a small community united in working for a person's wellbeing. The relationship which unites them is best understood as one of trusting collaboration in a common purpose.

Evidence informed policy making and partnership-based working across all levels of government is required, and CHA supports peak bodies' contributions in education and research to craft and implement a holistic viewpoint. Guidance from Government is sought for prioritising research into all aspects of health and climate change action to underpin evidence-based policy development, and clearly define how the department will collaborate, coordinate and implement the strategy with all stakeholders. CHA welcomes a nationally consistent response to climate change that cuts through "red tape".

First Nations' knowledge and experience is a central component to decision making on climate and health policy at all levels. CHA has long been an advocate for the vulnerable and marginalised and believes that more emphasis needs to be placed on how vulnerable groups are impacted and what outcomes the Government has devised for these groups related to climate change.

Financial constraints and pressure experienced by the aged care sector throughout the Royal Commission and Covid pandemic means that the strategy should come from a place of support provision, encouragement and learning, rather than costly investments through mandated changes. There are different experiences in aged care provision, numerous sectors or facilities in different locations (rural and regional aged care) who are more vulnerable to both climate impacts and government implementation of change. Understanding capacity and impact will be crucial to effective change.

3. *Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?*

All greenhouse gas emissions should be included within this strategy, with a clearer understanding of measuring upstream and downstream Scope 3 emissions and potential overlap with service providers. Some CHA healthcare providers are assessing larger supply chain procurement, to make the biggest headway initially in this process.

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CHA supports the inclusion of patient and visitor transport, that falls outside the traditional definition of scopes 1, 2 and 3 within this strategy.

4. *What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?*

In developing CHA's Reconciliation Action Plan (RAP) our mission is to build an organisational culture that embeds respect across services and workplace to support better understanding of people, culture and connection to land and waterways. CHA identifies Aboriginal and Torres Strait Islander stakeholders and organisations within our local area or sphere of influence and are committed to ensure extensive involvement for addressing climate change within indigenous health outcomes.

CHA supports the strategy to draw upon Aboriginal and Torres Strait Islander policies, knowledges, and practices in order to address the gap. Government should ensure it directly engages and co-designs the strategy with first nations peoples, and views are represented at every stage of consultation and design, that is inclusive to capture indigenous knowledge and perspectives.

5. *What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?*

CHA recognises the need for the health service organisation's governing body, management team, clinicians and broader workforce participate in activities that improve the organisation's delivery of sustainable healthcare.

CHA supports the establishment of our RAP and maintains an effective RAP Working Group. To drive effectiveness, we ensure Aboriginal and Torres Strait Islander representation and reporting related the RAPWG. Many of our members also have their own RAPs and consultation/governance bodies. Some hospitals have invested in personnel to oversee progress and reporting mechanisms as part of their commitment to diversity.

Proposed Objective 1: Measuring health system greenhouse gas emissions

In addition to measuring the emissions, the strategy should also outline actions to measure:

- Health and social benefits of climate change, particularly as it relates to indigenous Australians.
- Health cost comparison with climate change inaction
- Developing a comprehensive baseline measurement of all healthcare systems emissions which includes baseline measurement for aged care services
- Utilising existing calculations for baseline measurements from the National Health Service (NHS) as a point of reference

6. *Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?*

   N/A

7. *What additional data and information is required to support targeted emissions reduction efforts within health and aged care?*

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N/A

Proposed Objective 2: Mitigation

8. *What do you think of the proposed focus areas for emissions reduction? Should anything else be included?*

CHA supports mitigation across all sectors specifically prevention with an aim to reduce health impacts of climate change across all emitters, and, as much as possible, for decarbonisation to mirror work already done and in progress. The strategy should also determine a timeline for each focus area, prioritising, and detailing which aspects of the healthcare system they apply to.

The goal of prevention is described as reducing emissions; however, the goal of prevention is equally to keep people healthy in a changing climate, this requires more emphasis in the strategy.

The cost effectiveness analysis seems to suggest how to prioritise actions, but this may not be practical. There are many funding and practical challenges to undertaking this, without a system of data collection to identify the health burden of climate change, and to identify direct health impacts and in assessing the funding and services that follow.

9. *Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?*

CHA supports green building in principle. The building design for new buildings and retrofitted facilities should align with specific green rating systems. The Green Building Council of Australia's Green Star initiative has an internationally recognised rating system setting the standard for healthy, resilient, positive buildings and places. Green star Healthcare v1 rating tool evaluates the environmental potential of health and aged care facilities and assesses major refurbishments of existing facilities.

NABERS energy rating system measures efficiency of an office building and rates either the base building, tenancy or whole building. An energy rating works by comparing the energy consumption of a building against a set of benchmarks that have been developed using actual data. CHA supports rating systems be designed, categorised and incorporated into legislation, guidelines and standards to ensure new and retrofitted buildings are sustainable.

There is a distinction between retrofitting existing facilities and adopting standards for new buildings. Many will not be able to afford upgrades and could require staggered introductions and/or financial support.

10. *Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?*

CHA supports the health sector as environmentally sustainable and supports building adaptive, climate-resilient health services that addresses travel and transport. Emissions associated with vehicles not owned by the health system, such as employee commuting, and supply chain transportation, largely fall into scope 3 and should be incorporated into this strategy. There needs to be a clear distinction for action areas and targets developed to "identify and make use of policy levers". This is not clear within the strategy. There is a great opportunity to promote and support the use of active travel.

11. Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?

CHA emphasises that healthcare requires leadership, support and collaboration to develop policy that embeds sustainability within goods and services providers including pharmaceuticals, medical equipment, consumables and protective equipment. Externally procured items are the largest contributors of Australian healthcare-related carbon emissions and procurement choice should address recyclable materials, suppliers that use low energy production and discourage the use of unnecessary "single item" use mentality. Practices of incineration, landfill, and low-value recycling need to be replaced by a "circular" mind-set, where everything is designed, procured, and used for as long as possible, at their highest value, only then recycled back into new products or for alternative high-quality uses. Such initiatives are well known across the UK and embedded within a circular economy. Continuous monitoring and widespread government implemented education and awareness training is needed to ensure the correct choices are made and implemented daily.

12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

CHA supports identifying and making use of policy levers to reduce use of the most environmentally harmful anaesthetic gases such as desflurane. One of CHA's member hospitals St Vincent's Sydney, as part of their commitment to sustainability, have pledged to cease using Desflurane which has a significant environmental impact. The decision is in line with NSW Health sustainability goals to lower carbon footprint while prioritising patient safety. CHA supports specific actions and targets for each focus area which should include all therapeutics with medicines and gases a priority and underpinned in legislation and policy guidance to achieve Net Zero targets. A collaborative approach with key stakeholders is required when considering a change in therapeutic models and should include extensive consultation with the TGA as a starting point.

13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

CHA supports more specific actions and targets for each focus area. "Encouraging" and "promoting" language should have a stronger emphasis when developing actions within this strategy.

We support careful consideration in medical supply waste, measuring from entire life cycle of products related to waste. It will be a challenge for healthcare on how we measure this and how do we reduce products. Infection control is a huge issue related to how we can dispose of items and how to reuse some items. Are there existing levers we can pull into procurement and work with suppliers who are sustainable, particularly in addressing the rise of single use items post Covid? If not, they require development.

Additionally, food waste, emissions reduction should be specifically mentioned within this strategy.

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

The strategy should emphasise the need to recognise the determinants of health largely happen outside the health sector. The preventative health angle should put demands on those sectors that cause the most damage to health with specific actions to identify and remedy this.

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CHA supports the strategy to ensure actions are integrated into processes for clinical governance, clinical decision making and supporting models of care, that also addresses low value care.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

CHA advocates for private providers in the strategy and supports embedding environmental, social and governance (ESG) goals and strategic plans within healthcare organisations.

We aim to align with developing government policy, contributing to research and active engagement across our sectors. As a national peak body who represents the views of our health and aged care membership, we advocate for emissions reduction efforts and welcome involvement in decision making.

16. Where should the Strategy prioritise its emissions reduction efforts?

a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?
b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

The cost effectiveness analysis seems to suggest how we may prioritise actions, but this may not be practical. There are many funding and practical challenges in undertaking this. A system of data collection is absent in identifying the health burden of climate change to identify direct health impacts, and the funding/services that follow.

The Department should seek expert advice to determine which areas of emissions reduction should be prioritised. CHA's member hospital St Vincent's Sydney is focussing on procurement and environmentally assessing large volume goods and services providers as one starting point.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

As mentioned above the areas of focus should include prioritising areas with the highest emissions, it can be difficult and complex to mitigate, without affecting quality of care and ensuring health benefits.

Proposed Objective 3: Adaptation

CHA supports the adaptation objective to ensure the health system is resilient and can respond to impacts of climate change.

The strategy needs to address ongoing and effective disaster management at all levels of health and aged care as a coordinated approach to action. Older Australians are specifically susceptible to heat related morbidity and mortality, from degrading air quality, food and water security and extreme weather events.

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Private health and aged care services in rural and regional areas should be declared essential services so they can be offered immediate financial support and resources following climate change disasters and are often overlooked in resourcing.

There is an opportunity to grow virtual health provision, and out of hospital care to treat patients in low carbon environments. Success in these areas is dependent on mitigating disruptors.

As Demand for health services is growing due to population growth and an ageing population, CHA's 'Out of Hospital Care' model aims to support patient wellbeing to reduce the length of their hospital stay in the comfort of their own home. Treatment in a patient's residence for conditions requiring clinical governance, assessment, monitoring or input that would otherwise be delivered in a traditional inpatient hospital bed. Out of hospital care takes the pressure off an already stretched and under resourced health care system, increases patient choice and satisfaction, and has many low carbon advantages.

18. *What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?*

Having a better understanding of health impacts in the Australian context will support more effective goals and targets for adaptation initiatives. A staged approach is essential, with government financial investment required to meet targets.

The strategy must recognise and respond to the wider determinants of health impacted by climate change and how government supports the sector. There are many nuanced different groupings that require different approaches. Vulnerable groups such as the elderly, first nations peoples, people with disabilities and women should be prioritised.

19. *Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:*

    a. *What are the key considerations in developing a methodology?*
    b. *How should their development draw on work already undertaken, for example at the state and territory level, or internationally?*
    c. *What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?*

CHA would support the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan. Development should incorporate understanding from international policy successes, and work alongside existing health based federal, and states and territories policy and guidelines developed and currently in the process of development.

20. *Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?*

CHA supports the Australian government developing a nationally consistent approach to vulnerability assessment and adaptation planning. Consideration should include variances in location and local risk, with detailed guidance for implementation integrated across all jurisdictions.

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21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

CHA would support the development of legally enforceable National Environmental Standards under a collaborative 'One Health' policy approach.

Our organisation supports the development of the Australian Commission in Quality and Safety in Healthcare draft Sustainable Healthcare Module and future implementation within the existing National and Safety and Quality Standards. The framework supports a sustainable health system and acknowledges the need for the health service organisation's governing body, management team, clinicians, and broader workforce participate in activities that improve the organisations delivery of sustainable health care. The Commission recommends in future that all health services be assessed against the Module actions as part of its routine assessment process.

Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

CHA supports a 'Health in All Policies' approach. There needs to be a national consistent whole of government approach that considers existing states and territories regulatory responsibility for the environment, with synergy across all policy jurisdictions. A standalone document is not ideal, instead should embed health and climate considerations across all portfolios at all levels of government. Actions will require resourcing, be bold and actionable and accompanied by an implementation plan.

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

The CHA welcomes the opportunity to collaborate and partner with Government to ensure its CHA membership is represented at all levels of consultation and informs decision making across health and climate strategy development.

The strategy should outline a plan for a national high level multidisciplinary committee including members across National, States and Territories jurisdictions, experts in climate change and health, experts in Aged Care, key membership organisations, peak bodies, and Aboriginal and Torres Strait Islander Groups.

Enablers

1. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
2. For each of these enablers:
   a. What is currently working well?
   b. What actions should the Strategy consider supporting delivery?

CHA supports sustainability within health care be incorporated into training programs and underpins university education. Education and resources would need to demonstrate the relationship between healthcare and the climate crisis as a way of embedding knowledge. Organisations require support, leadership and collaboration when developing resources. The system is already overstretched and over capacity. CHA members are developing

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resourcing and support to engage staffing with expertise in sustainability, resilience, disaster preparedness and response. External support would mean that more organisations could get on board sooner.

Investing in coordinated climate and health research is supported by our organisation to improve the evidence base, overall understanding, identifying risk measures and vulnerabilities to the strengthen resilience and sustainability of the health system. It is agreed that evidence should inform priorities and a scan of current research activities pertaining to health and climate change occurs.

Effective transparent communication is strongly supported by our organisation, with opportunities provided for collaborative decision making and advocacy for the Catholic health and aged care sectors.

CHA supports establishing nationally agreed indicators to monitor key deliverables of the strategy and reporting on progress. CHA member organisations will require clear and concise guidance in relation to monitoring, evaluation and reporting.

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted], Executive Director, Office of the Chief Executive
What is your email address?
[redacted]
What is your organisation?
Monash Health
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☒ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

DRAFT

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
While the Strategy vision is not clearly defined in the Consultation Paper, the Introduction provides a broad overview of the impacts of climate change on human health and articulates a purpose for the Strategy. Outlining the health systems contribution to Australia's greenhouse gas emissions in the Introduction would help contextualise the scale of the health systems environmental impact to a key Strategy audience. The proposed Objectives present a logical approach to understanding and addressing the challenges climate change presents to the health system. The distinction between mitigation and adaptation while recognising the interrelationship between the two is commended. In the Monash Health Strategic Plan 2023 we set a guiding principle to "manage our resources wisely and sustainably to provide value for our community" through priorities to promote environmental sustainability and measuring success through minimising the impact of our services on the environment. The Strategy should advocate for all health system organisations to incorporate health and climate risk principles in their strategic plans. A key focus area of the Strategy should include local advocacy and support for implementation. While this is broadly discussed in the Enablers section of the Consultation Paper, is important environmental sustainability is embedded into healthcare organisations' culture to support top-down leadership with bottom-up support. Current environmental reporting mechanisms focus on account for environmental impact in terms of greenhouse gas emissions. There may be an opportunity within the Strategy to take a proactive approach to measuring climate change impacts at a national scale, rather than retrospective greenhouse gas emissions at a facility or organisation level. Providing transparency on performance and integrating research and innovation to continuously learn and improve are priorities within the Monash Health Strategic Plan 2023, which should be incorporated into development of the Strategy to ensure continuous improvement in mitigation and adaptation to the impacts of climate change on human health. As Victoria's largest public health service, Monash Health recognises that reducing demand on inpatient services by improving population health and diversifying healthcare modalities is one of the most effective ways to minimise our environmental impact and ensure service continuity. This is reflected in the Monash Health Strategic Plan 2023 guiding principle to orientate care towards our community to optimise access, independence and wellbeing. Related priorities of this guiding principle include: • Engage with Aboriginal and Torres Strait Islander people and those most vulnerable or disadvantaged • Expand the delivery of services in community and home settings • Strengthen partnerships with general practitioners and other primary care providers, Primary Health Networks, and community organisation • Engage with health promotion and prevention services to maintain wellness in ways relevant to local communities

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- Support prevention, early detection and intervention programs
- Support people to understand their health needs and know what to do to best manage their health

With this in mind, population health and prevention should be at the forefront of Strategy development.

While climate change impacts are expected to increase service demand, we recognise that diversifying our modes of healthcare delivery will help to ensure readily accessible healthcare in the event of extreme weather events or other climate change impacts. It is important the lessons from COVID-19 are incorporated into the preparation for increased impacts of climate change, including telehealth modalities and innovative healthcare delivery.

2. How could these principles be improved to better inform the objectives of the Strategy?

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In Victoria public health services are already required to meet the following environmental reporting requirements:

- National Greenhouse and Energy Reporting
- National Pollutant Inventory
- Financial Reporting Direction 24: Reporting of environmental data by government entities

In a busy compliance environment, it is essential the Strategy leverages the learnings from these existing frameworks for evidence-based policymaking and partnership-based working across all levels of government to deliver effective measurement, mitigation and adaptation to the impacts of climate change.

Focusing on policymaking and partnerships aligns with the priorities of the following Monash Health Strategic Plan 2023 guiding principles:

- We consistently provide safe, high quality and timely care
- We integrate teaching, research and innovation to continuously learn and improve

It is important any consolidation of environmental reporting minimises compliance burden on health system organisations to ensure organisations have capacity to implement effective mitigation and adaptation actions.

These principles should be prioritised to achieve effective delivery of Objectives 1-3. Secondary to this are the focuses on tackling health inequities, and prioritising population health and prevention, which aligns with the priorities of the Monash Health Strategic Plan 2023 guiding principle to orientate care towards our community to optimise access, independence and wellbeing.

While the Consultation Paper recognises colonisation as key driver of climate change and health inequities, it places First Nations leadership at the forefront of a problem created by the same western colonisation.

Climate change further contributes to the health disparities faced by First Nations communities as it compounds the historical injustices and traumas previously experienced and furthermore disrupts cultural and spiritual connections to Country that are central to health and wellbeing.

Climate change presents an opportunity for First Nations communities to lead climate action planning based on their intimate traditional and historical knowledges of Country. Hence, effective First Nations community engagement is required to develop and implement climate adaptation responses to improve health and social service preparedness and secure environmental health infrastructure.

It is clear from the Consultation Paper there are numerous learnings to be taken from First Nations communities management of the land and sea for millennia, however priority principles to address a problem created by industrialisation over the last two centuries should be primarily focused on addressing the root causes of anthropogenic climate change rather than the First Nations leadership that managed the environment well prior to colonisation. Development of the Strategy should integrate First People's knowledge to reflect their deep connection with Country and holistic approach to health and wellbeing.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

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Monash Health's current environmental reporting requirements include Scope 1, Scope 2 and some Scope 3 emissions (i.e. indirect stationary energy, waste, indirect transport energy, commercial air travel).

Scope 1 emissions from burning natural gas made up about 15% of Monash Health's 2021-22 measured emissions and should be included in the description of Scope 1 emissions sources in the Strategy.

All Scope 1 and Scope 2 emissions should be included in the scope of the Strategy's emissions reduction efforts.

Scope 3 emissions reporting is a growing area of focus for the health system and Monash Health, especially emissions associated with waste disposal. Current methodology used for calculating emissions associated with waste disposal do not differentiate carbon emissions factors between waste streams (i.e. General Waste and Clinical Waste), and the embodied energy in managing clinical waste streams including sharps waste should be an area of focus.

To improve Scope 3 emissions reporting, an information sharing hub could help ensure a best-practice approach to consistent Scope 3 emissions reporting is adopted, leveraging the strengths of Enablers discussed later in the Consultation Paper.

4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

Many health organisations across Australia have Reconciliation Action Plans in place to support the national reconciliation movement. Through implementation of these plans, the health sector aims to strengthen relationships, engage staff and stakeholders in reconciliation and pilot innovative strategies to ensure effective outcomes.

The Lowitja Institute's 2021 discussion paper *Climate Change and Aboriginal and Torres Strait Islander Health* highlights gaps in research and data on climate changes impact on First Nations people and the compounding effect of climate change on historical injustices and disruptions to cultural and spiritual connections to Country. It presents seven principles to facilitate opportunities for redress and empowerment of First Nations people.

Through the Aboriginal Cultural Safety Fixed Grant (Victorian Department of Health), the Aboriginal Health and Engagement team strategically align actions with First Nations polices and initiatives referenced in the Consultation Paper, prioritising key areas related to the *National Agreement on Closing the Gap.*

5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Monash Health acknowledges that the concept of health differs in a First Nations perspective from a generalist Western perspective and that climate change has had and continues to have dramatic impacts on this. Therefore, Monash Health will utilise current governance structures through Strategic Partnership Committees and Aboriginal Working Groups to ensure that First Nations culture, voices and knowledge are embedded into any decision-making frameworks.

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

- National Pollutant Inventory
- Financial Reporting Direction 24: Reporting of environmental data by government entities
- NABERS (National Australian Built Environment Rating System) Energy and Water for Hospitals

In June 2023, the International Sustainability Standards Board issued two Sustainability Disclosure Standards, which could be considered in the development of the Strategy.

7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Facility function (i.e., aged care, emergency department, dialysis) information will be relevant as different facilities require different inputs with an environmental impact to operate. Age of the facility is also a determinant of environmental performance.

Car parking to bicycle parking (or end of trip facility) ratios could be a useful determinant of supporting active travel, depending on geographic location.

Each focus area of the Strategy should include benchmarked performance metrics to drive accountability and action.

Clear and easily available funding mechanism to invest in emission reduction projects and/or supporting governance.

Normalising factors to benchmark performance against other healthcare organisations include:

- Aged Care OBD (Occupied Bed Days) – currently sourced from VAHI by the Victorian Department of Health. Internally, Monash Health use Services Australia data.
- Emergency Department departures
- Full-time equivalent employees (FTE), used for benchmarking voluntary office paper consumption
- Length of Stay (LOS)
- In-patient OBS (Occupied Bed Days)
- Per patient treated (PPT)
- Separations data
- Total area m^2

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
Energy efficiency and emissions is a key strategic goal in the Monash Health Sustainability Strategy 2022-25. Emissions reduction in large metropolitan public health services such as Monash Health should focus on Scope 1 emissions, particularly reducing consumption of natural gas. Proposed large-scale renewable electricity procurement contracts will allow Victorian public health services to purchase renewable electricity via state government contracts. Scope 2 emissions from grid electricity made up about two thirds of Monash Health's total measured greenhouse gas emissions in 2021-22. Other areas of alignment between the Consultation Paper focus areas and the Monash Health Sustainability Strategy 2022-25 strategic goals include: • Built environment and facilities (Buildings and infrastructure) • Travel and transport (Transport and travel) • Supply chain (Procurement) • Waste (Waste management) Monash Health actions in the focus area of Medicines and gases in the Consultation Paper are incorporated in the Energy efficiency and emissions strategic goal of the Monash Health Sustainability Strategy 2022-25, including actions to capture and review data on refrigerants and medical gases with a Global Warming Potential. Monash Health's sustainability strategy goals also includes Organisational culture, a key objective to ensure our mitigation activities incorporate suggestions from frontline staff who witness firsthand the environmental impacts of our organisation. Objectives within the Organisational culture strategic goal include: • Communicate and celebrate sustainability stories and successes across the organisation • Promote and invest in the use of sustainable transport options and travel • Demonstrate leadership and foster collaboration on sustainability matters both internally and externally • Train and engage Monash Health employees and consumers in sustainability • Promote transparency by monitoring, evaluating and regularly reporting on sustainability performance • Pursue continual improvement in sustainability performance The Strategy should recognise the importance of promoting environmental sustainability, a priority of the Monash Health Strategic Plan 2023. Healthcare workers will play a vital role in mitigating the impacts of climate change, and their empowerment to do so should be a key focus area for the Strategy. Different advocacy groups for sustainable healthcare identify different focus areas. For example, the Global Green and Healthy Hospitals framework outlines 10 interconnected goals for the health sector to address. It is important the Strategy development sets a clear framework for the health system to respond to the risks of climate change on human health.

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9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?
• Environmentally Sustainable Design (ESD) guidelines for health system capital works • Advocating for Emissions Reduction Plans for all health system organisations • Water-harvesting and reuse (should be included in the Strategy) • All-electric healthcare facilities to facilitate future renewable energy use • Passive design features to improve energy efficiency • Appropriate building materials, prioritising local sustainable sourcing where possible • Communication methods to increase employee and community engagement with health service environmental impact data (i.e. displays promoting carbon emissions, energy and water use data) • Allowing sufficient space for electric plant and equipment, and facilitating responsible waste disposal (i.e. recycling) • Reducing natural gas consumption • Sustainable landscape planning for healthcare facilities, promoting indigenous and drought tolerant vegetation, optimising green spaces for staff and community, interpretive signage to promote biodiversity messaging, and minimising chemical and water use in maintenance.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
• End-of-trip facilities to facilitate active modes of transport for staff and community • Vehicle fleet optimisation to reduce total number • Accessible public transport connections to promote lower emissions transport • Electric Vehicle fleet and charging stations for staff and visitors • Telehealth modalities where suitable to reduce community and staff travel • Sustainable Travel Plans in healthcare facilities for staff and community • Advocate for remote working where suitable to reduce emissions associated with office occupancy and staff commuting
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
• Develop sustainability criteria to apply when selecting products (e.g. reusable, energy efficiency, higher levels of recycled content, zero plastic, organic product, minimal travel) • Significantly increasing CSSD (Central Sterilising Services Department) capacity and human resourcing to facilitate reuse of medical instruments • Challenge standards which prioritise single-use instruments as being more sterile than reusable • Advocate for bulk buying and reusable packaging in health system supplier agreements • Preference reusable medical instruments over single-use wherever possible

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- Encourage medical product suppliers to manufacture products from recyclable materials as a priority where practical (e.g. avoid non-recyclable mixed plastic resins)
- Advocacy for sustainability training for procurement and clinical staff ordering supplies to preference products with a reduced environmental impact
- Local supplier roadmap to reduce supply chain emissions
- Prioritise local sustainable sourcing as per Victorian Social Procurement Framework, without impacting opportunities to innovate in healthcare
- Implement a circular economy asset management system, as per Department of Treasury and Finance Asset Management Accountability Framework

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

- No current reporting framework for environmental impact of metered dose inhalers. Current Victorian government environmental reporting limited to medical gases (Nitrous oxide and anaesthetic gases Desflurane, Isoflurane and Sevoflurane)
- Advocate for a ban on Desflurane use (significant Global Warming Potential) wherever clinically possible
- Advocate for use of Nitrous Oxide from cylinders, rather than leaky piped systems (where appropriate)

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

- Improved measurement of different waste stream Scope 3 emissions in Australia (i.e. Clinical Waste – treated, Clinical Waste – incinerated, Sharps Waste, Pharmaceutical Waste, General Waste, Co-mingled Recycling, Paper/cardboard, Organics)
- Advocate for regular waste audits in health system organisations to identify opportunities to minimise landfill waste and recycle
- Incorporate detailed waste management planning into the design phase of all new health facilities
- Investment or subsidies for recycling waste streams, especially specialised recycling streams for medical products
- On previously suggested innovative approaches, 2.5.1 (medical equipment reuse & reprocessing) & 2.5.3 (promoting electronic processes to reduce paper consumption), while these align with the waste management hierarchy principle to "avoid waste," these are fundamentally Supply Chain initiatives (equipment reuse requires purchase and processing of reusable equipment, electronic processes avoid paper purchases)

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

- Support the "Choosing Wisely" initiative to avoid unnecessary treatment
- Investment in Environmental Sustainability Officer roles in healthcare organisations to oversee governance, engagement and continuous improvement in climate change mitigation programs
- Advocate for the voluntary Sustainable Healthcare Module of the NSQHS
- Support public health services to deliver preventative health strategies

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- Improve collaboration between primary care providers and acute care providers

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

- Align environmental reporting requirements for private providers in state jurisdictions to existing reporting requirements for public entities
- Ensure policies developed to support the Strategy apply to both public and private entities

16. Where should the Strategy prioritise its emissions reduction efforts?

    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

    b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

a. Apply a model to compare areas of control and emissions intensity, and target significant outcome areas first. Gradually increase emissions area scope to leverage initial success to drive down emissions in more difficult areas to reduce emissions

b. Order of priority for six sources of emissions are; Built environment and facilities, Travel and transport, Waste, Supply chain, Medicines and gases, Prevention and optimising models of care. This not only aligns with high to low emissions intensity in health services, but also with the areas of understanding and previous work. It is difficult to prioritise prevention and optimising models of care as associated emissions are difficult to calculate or isolate from the other emissions sources. Scope 3 emissions (indirect emissions other than Scope 2 emissions) from use and disposal of medical products are more linked to prevention and optimising models of care and are mostly not reported in current applicable reporting frameworks. Strategic objectives related to Prevention and optimising models of care is more closely aligned to Objective 4: Health in all policies.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

- Renewable electricity procurement opportunities
- Advocate for no fossil-fuel use in new healthcare facilities (Canberra Hospital Expansion, Women's and Children's Hospital in Adelaide and proposed Melton Hospital in Victoria demonstrate possibility), with associated funding provided
- Prioritise the replacement of fossil-fuel plant and equipment where practical
- Advocate for the voluntary Sustainable Healthcare Module of the NSQHS
- Expand/align environmental reporting requirements for the health system beyond scope of National Greenhouse and Energy Reporting (NGER) and National Pollutant Inventory (NPI) - refer to Financial Reporting Direction 24 (FRD24) in Victoria
- Implement policy to preference reusable over single use products where possible

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- Note that all initiatives will require investment / funding, either through price increase for existing funding models and/or capital/grant funding arrangements

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?
Monash Health's Enterprise Risk Framework recognises operational risks from inadequate consideration of climate change. Monash Health prioritises the health impacts, risks and vulnerabilities in the Consultation Paper as follows: 1. Heat stress 2. Vector-borne diseases 3. Respiratory illness 4. Mental health issues 5. Food insecurity 6. Injury/mortality Consider development of a model to assess critical climate-related risks and health inequities and prioritise adaptation action accordingly.
19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: a. What are the key considerations in developing a methodology? b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally? c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
Yes. a. Key considerations are ensuring health inequities are addressed and key adaptation actions are prioritised according to risk. b. Assess all current state climate change adaptation plans (i.e. the Victorian *Health and Human Services Climate Change Adaptation Action Plan 2022–2026*) and advocate for a national approach, considering compliance burden placed upon the health system to respond. c. Aged care and other key areas managed at a federal level

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d. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
Yes, as mentioned above ensuring alignment with state and local adaptation planning. Topics covered should include: • Public health risks • Health and social housing infrastructure • Sector capability • Supply chain risks • Technological opportunities • Health inequities • Emergency management capability Victorian *Health and Human Services Climate Change Adaptation Action Plan 2022–2026*
e. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
• Emergency response • Infrastructure resilience • Sector capability • Emerging risk research

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Proposed Objective 4: Health in All Policies

f. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

A key area for development to deliver a Health in All Policies approach is to:

- Build climate change and sustainability language and literacy across all sectors to understand impacts from emissions and other environmental health determinants for health
- Advocate for national standard reporting metrics to apply across the health system
- Evidence-based policy making to support a circular economy for healthcare infrastructure and medical supplies

This includes (from Circular Australia):

- Research is required to solve technical and nontechnical problems to transition to a circular economy.
- New local circular supply chains need industry and government investment to support market demand for circular solutions and helping circular buyers and suppliers to emerge and thrive.
- Industry requires standardised labelling of product components so that sorting, separation and reuse are possible.
- Source separation across sectors, including the construction and fit-out industries, helps maintain the high value of clean waste loads.
- Product stewardship for new products that have been over-ordered in the construction and fit-out sectors enable the tracing, tracking and reuse of these products in other projects, avoiding landfill.
- Products designed for end of life, that is, for easy recycling, reuse and redesign or repair, should become the norm.
- The support of innovation which increases material efficiency in the construction sector (through prefabrication and other means), will reduce costs and secure 21st-century jobs.

g. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Successful examples of collaborative planning include the development of the *Yarra Strategic Plan (Burndap Birrarung burndap umarkoo) 2022–32*, endorsed by eight local councils, seven Victorian state government agencies, six Committees of Management, who collectively committed to delivering the plan in partnership with the Traditional Owners on their Country.

Enablers

h. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

The Enablers discussed in the Consultation Paper align closely with the Organisational culture strategic goal within the Monash Health Sustainability Strategy 2022-25. Monash Health's Sustainability Framework incorporates achievement of these enablers through

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the achievement of specific actions related to building an organisational culture of sustainability. It is important the development of the Strategy ensures achievement of the enablers discussed to progress the objectives of the Strategy.

Enabler 1: Workforce, leadership and training is essential to facilitating progress towards achieving the Strategy vision. At Monash Health, the Sustainability team and the Sustainability Steering Committee oversee governance and implementation of the Monash Health Sustainability Strategy 2022-25. Advocating for organisational Sustainability workforce to deliver top-down change and "Sustainability Champions" at the frontline of healthcare delivery is encouraged to support bottom-up cultural change. Related objectives and actions Monash Health have committed to include:

- Train and engage employees and consumers in sustainability
- Review and update sustainability education resources for staff
- Engage employees in sustainability in clinical program activities
- Incorporate sustainability into Monash Health induction programs

Enabler 2: Research is important for ensuring a continuous improvement and best practice approach is adopted for climate change mitigation and adaptation. This aligns with Monash Health's Strategic Plan 2023 guiding principle to "integrate teaching, research and innovation to continuously learn and improve." Within our Sustainability Framework, research is reflected through our objective to "demonstrate leadership and foster collaboration on sustainability matters both internally and externally," and specific actions to:

- Build connections with key external networks to assist with sustainability initiatives and projects
- Review best practice sustainability initiatives and case studies to determine applicability for Monash Health.

Existing advocacy organisations such as Doctors for the Environment Australia (DEA) and Climate and Health Alliance (CAHA) should be recognised in their previous work recognising the link between health and climate change. The Victorian Department of Health also promote opportunities for embedding sustainable practices within health system organisations.

Enabler 3: Communication and engagement aligns closely with the Monash Health Strategic Plan 2023 priority to "promote environmental sustainability." Within our Sustainability Framework, this further aligns with our strategic objectives to:

- Communicate and celebrate sustainability stories and successes across the organisation
- Promote transparency by monitoring, evaluating and regularly reporting on sustainability performance

Public health services play a key role in demonstrating leadership to our communities, especially lower-socio economic communities who rely on public health services, and this role should be recognised and leveraged in development of the Strategy.

Enabler 4: Collaboration aligns closely with the following Consultation Principles:

- Partnership-based working across all levels of government and beyond
- Evidence-informed policymaking

Collaboration is a cornerstone of the Monash Health Strategic Plan 2023, through our guiding principle priorities to:

- Partner with clinical networks and metropolitan and regional health services to improve access to safe, high quality specialist treatment and care
- Strengthen partnerships with general practitioners and other primary care providers, Primary Health Networks, and community organisations

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As mentioned above, we have also committed to demonstrate leadership and foster collaboration on sustainability matters both internally and externally as part of our Sustainability Framework.

Providing opportunities for all First Nations voices to be heard, acknowledged, and delivered in a way that ensures they have not been weakened through lower representation will be a key component of enabling collaboration. With only 3-4% of the Australian population identifying as Aboriginal and Torres Strait Islander, there is a risk First Nations perspectives may be diminished in the consultation.

Enabler 5: Monitoring and evaluation is a fundamental component of addressing the risks of climate change to human health and is acknowledge as one of the four Objectives outlined in the Consultation Paper. As previously discussed, a consistent approach to monitoring and reporting is required to minimise compliance burden on health system organisation. This would further reinforce a consistent approach to sustainability literacy and allow benchmarking of performance between different areas of the health system.

As a national government approach, there should be clear goals to what needs to be achieved and incentives and/or funding for the health system to achieve these. These incentives and/or funding mechanisms (e.g. grants or increases in activity-based pricing) should underpin all actions required to achieve sustainable healthcare including (but not limited to) sustainability projects (minor & operational), large capital projects, and resourcing for governance / management.

i. For each of these enablers:
    a. What is currently working well?
    b. What actions should the Strategy consider to support delivery?

Enabler 1: Workforce, leadership and training

a. In Victoria, environmental reporting requirements from Department of Treasury and Finance and Department of Health environmental requirements have necessitated public health services to dedicate human resources to meet relevant environmental requirements. In most cases this includes dedicated environmental sustainability staff. Engineering teams in public health services also generally work to meet reporting requirements of Federal legislation such as the National Greenhouse and Energy Reporting Act and the National Environment Protection Measures. Advocacy groups such as CAHA and DEA provide information and resources to support sustainability actions on the ground. Monash University offer a dedicated unit to Climate change and public health, which examines the health impacts of climate change and its relevance on practices of public health
b. While larger health services generally self-fund dedicated staff to assist with meeting environmental requirements and progressing sustainability initiatives, there is no funding available to appoint these staff or local sustainability portfolios in health service work areas. The strategy could consider funding for dedicated sustainability staff within health system organisations, and advocate for local sustainability portfolios through mechanisms such as the National Safety and Quality Health Service's voluntary Sustainable Healthcare module. Funding these roles in health system organisations would ensure coverage across all health system organisations, regardless of size, to enact the actions within the Strategy. Advocating for research institutions to incorporate health and climate change as core units of study within tertiary education would help to propagate health and climate change thinking within future generations of clinical staff.

Enabler 2: Research

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a. As discussed above, Monash Health's research partners are focusing on the impacts of climate change on public health. For example, the Burnet Institute's research on Embedding telehealth for sustainable health services linking Oceania. Monash Health have recently been invited to participate in a Monash University study to gauge healthcare workers beliefs and attitudes towards climate change. Climate change and its impact on public health is a growing area of study.
b. As mentioned in the Consultation Paper, it is important the support of this research is coordinated and assessed to inform policy decisions. The health system will require support to ensure the opportunities arising from health and climate change research can be realised in complex organisations often stretched to meet the immediate demands of delivering public healthcare.

Enabler 3: Communication and engagement

a. Numerous groups operate within Australia and globally to promote health system impacts of climate change. Some examples include the World Health Organisation, Global Green and Healthy Hospitals, the Climate and Health Alliance, Doctors for the Environment Australia, the Victorian Department of Health and even clinician lead sustainability interest groups on social media. Beyond this, Monash Health develop annual sustainability communications plans to promote sustainability outcomes. A recent internal sustainability story was one our staff engaged with most during the week it was published, demonstrating the clear interest healthcare workers have in achieving environmental sustainability in our operations.
b. The Strategy presents an opportunity to coordinate a nationwide "community of practice" for sustainable healthcare. This could recognise best practice approaches across all focus areas of health and climate change.

Enabler 4: Collaboration

a. In Victoria, sustainability colleagues in health service organisations meet quarterly as part of the informal Victorian Green Health Round Table (VGHRT) group. From the VGHRT meetings, it is clear there are common ongoing challenges health service organisations face and regular emerging areas of focus. This is also apparent in the agendas of different annual sustainability forums, such as CAHA's Greening the Healthcare Sector and the Australian Nursing and Midwifery Foundation's Health and Environmental Sustainability Conference.
b. While it is clear health service providers faces similar challenges, a coordinated and best practice approach to addressing these challenges is required. This would help set clear expectations for all parts of the health system to work together to address climate change risks in the health system.

Enabler 5: Monitoring and evaluation

a. New government environmental reporting requirements in Victoria significantly expanded and aligned reporting for all government entities. This is a welcome change, as it sets consistent expectations for environmental reporting across government entities. The recent changes build on previous Department of Health environmental reporting requirements, demonstrating transparency and driving accountability for activities with an environmental impact.
b. As mentioned above in response to the Measurement objective, it is important environmental reporting requirements are consistent across the health system to allow all health system parts to be held to the same level of accountability, promote an inclusive and supportive dialogue about environmental successes and challenges, and set clear expectations for both health service providers and suppliers in environmental reporting.

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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28 July 2023

Dear Department of Health,

The Australia Council for the Arts (soon to be Creative Australia), the Australian Government's arts investment, development and advisory body, welcomes the Department of Health's National Health and Climate Strategy to protect the health and wellbeing of Australians from the impacts of climate change.

We recognise that the terms of this consultation are limited to the functioning of the health system, for example the need to reduce the health system's greenhouse gas emissions and the resilience of the system against increasingly extreme weather events.

However, we also note that the health and aged care sectors are under significant pressure, and complementary approaches will be required to support this system to adapt to and address the increasing stressors of extreme weather events.

While the strategy highlights the need to work across all policy areas to lessen the impact of climate change on the social and cultural determinants of health and wellbeing, there is no mention of the significant role arts and culture can play in this work.

There is strong and growing evidence for the vital role that arts and creativity can play in promoting positive outcomes for mental health and wellbeing. We know that arts and cultural interventions address the social determinants of health, facilitate human flourishing across the life span, and are the foundation for Aboriginal and Torres Strait Islander health and wellbeing.[1] We also know that arts and creativity can reach beyond traditional health services, facilitating engagement with and connections for people with diverse lived experiences. Examples of beneficial arts participation are wide-ranging, including attendance at arts or cultural events, participation in cultural production, and more specialised practices of art therapy.

The Australia Council is leading work aimed to progress arts approaches to health and wellbeing in government policy.[2] The Australian Government's National Cultural Policy, *Revive*, drives action to expand access to arts services in both clinical and non-clinical settings to improve mental health and enhance community wellbeing.[3] *Revive* also seeks to harness culture's impact on Australia's resilience and wellbeing by providing a pathway for arts and culture to contribute to whole-of-government outcomes.

Arts and culture are already playing an important role in developing community resilience to climate change and to addressing the trauma caused by extreme weather events. The contributions of arts and culture will be increasingly important as the disruptions of climate change continue to impact our social and physical worlds, and as our health system is put under increasing pressure.

The Australia Council is keen to ensure that the value of arts and creativity is considered within the strategy's process, and hope that this letter will be accepted as a submission. In reviewing this submission, we hope the Department will recognise the arts as a key area within the Strategy that can assist in addressing the health and wellbeing impacts of climate change.

We would welcome an opportunity to meet with members of the Department involved in the consultation process, and to convene a workshop with creative practitioners working in disaster contexts to feed into the process.

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[1] Salmon M, Doery K, Dance P, Chapman J, Gilbert R, Williams R and Lovett R 2019, *Links Between Aboriginal and Torres Strait Islander Culture and Wellbeing: What the evidence says*, Mayi Kuwayu. Commonwealth of Australia, Department of Health 2017, *My Life My Lead – Opportunities for strengthening approaches to the social determinants and cultural determinants of Indigenous health: Report on the national consultations*.
[2] See Australia Council 2022, *Connected Lives: Creative solutions to the mental health crisis*.
[3] Australian Government 2023, *Revive: a place for every story, a story for every place – Australia's cultural policy for the next five years*.

Australia Council for the Arts
Level 5, 60 Union St Pyrmont NSW 2009
PO Box 576 Pyrmont NSW 2009 Australia
Toll Free 1800 226 912 **NRS** 1800 555 677
australiacouncil.gov.au

Evidence and supporting materials

The mental health crisis and strain on the health system

- According to the 2021 census, more than 8 million people have a long-term health condition, including almost 1 in 12 people who have a diagnosed mental illness.[4]
- Some 65% of those with mental health concerns do not seek help and over 50% of those who die by suicide have not made contact with a mental healthcare provider.[5]
- There is a particular need in regional and remote Australia for mental health services. While the prevalence of mental ill-health in regional and remote communities is reported to be the same as in major cities, there is much less access to mental health services and rates of self-harm and suicide are higher in those areas.[6]
- The Assistant Minister for Health and Aged Care Ged Kearney MP acknowledged the strain to the health system when releasing the National Health and Climate Strategy: 'Our health and aged care sectors are already stretched and under pressure.[7]
- Australia's mental health system is under particular pressure,[8] and this is only likely to increase along with increased extreme weather events.[9]
- Recent research conducted by the Climate Council indicated that 80% of Australians had experienced a disaster in the past five years. Of those, half said they'd experienced a mental health issue as a result.[10]

The need to develop new approaches to address mental health

- There is an urgent need to develop new approaches to address mental health in Australia.
    - The Productivity Commission's 2020 Mental Health Inquiry report identified a disproportionate emphasis on clinical services, and lack of attention to the underlying determinants of mental health – including the important role played by family, kinship groups and carers, and providers of social support.[11] The report recommended mental health reform to support a people-centred mental health system that can meet changing community need, particularly in a time of crisis.
- In addition, it is necessary to develop mental health and wellbeing approaches that support disaster preparedness, build resilience and address trauma caused by climate-related disasters.
- However, when it comes to the major official inquiries into flood and fire in Australia since 2019, there is almost no attention to the role that arts and culture play in preparing for such extreme events.[12]

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[4] Cunningham M and Dansie M 2022, 'Mental Health Issues Top Chronic Illness List, New Census Data Shows', *Sydney Morning Herald*, 27 June.
[5] Black Dog Institute, *Under the Radar Project*. NSW Mental Health Commission 2014, *Living Well: A strategic plan for mental health in NSW*, NSW Mental Health Commission.
[6] National Rural Health Alliance 2021, Mental Health in Rural and Remote Australia, Fact Sheet, 23 July 2021.
[7] The Hon Ged Kearney MP and Senator the Hon Jenny McAllister 2023, *'Australia's first National Health and Climate Strategy kicks off' [Media Release]*', 10 March.
[8] Lefebvre M 2023, *Under Pressure: Australia's Mental Health Emergency*, The McKell Institute.
[9] Walinski A, Sander J, Gerlinger G, Clemens V, Meyer-Lindenberg A, Heinz A 2023, 'The Effects of Climate Change on Mental Health', *Deutsches Ärzteblatt International,120*:8.
[10] Climate Council 2023, *Climate Trauma: The growing toll of climate change on the mental health of Australians*.
[11] Productivity Commission 2022, *Mental Health Inquiry Report*.
[12] Cunningham S and Del Favero D 2023, 'Culture and Climate: A dangerous gap in policy and practice', *Australian Academy of the Humanities*. Conclusion drawn from close analysis of the key reports for fire in Victoria and the ACT, floods and fire in NSW, and the Royal Commission into National Natural Disaster Arrangements.

Arts approaches are a complementary solution to addressing the mental health impacts of climate change

- Arts approaches to health and wellbeing play an important role in addressing the social determinants of health. Arts and culture play a powerful role in reaching people, and in providing a sense of connection within and across communities. They provide the tools to renegotiate our sense of self and purpose in times of crisis and change.
- Research shows that simply taking part in a creative endeavour can help to reduce your feelings of anxiety or depression.[13] Research has also found that people need at least two hours per week of arts engagement for good mental wellbeing.[14]
- The arts are playing an important role in advancing a culturally embedded, 'whole of community' approach to health. Operating in non-clinical domains, artists are engaging communities that have low rates of 'help seeking', and communities that are marginalised, regional and/or remote.
    - For example, The Big Anxiety Research Centre at NSW recently conducted a series of creative workshops and events to address issues of mental health and suicide in Warwick, QLD. The program brought together people wanting to share thoughts, feelings, grief or anger, and used methods of creative expression to strengthen participants' sense of confidence and agency. The program convened a variety of community perspectives on local mental health, and had a high rate of Aboriginal and Torres Strait Islander participants.[15]
- Arts and culture are also already playing an important role in developing community resilience to climate change and to addressing the trauma caused by extreme weather events.
    - Creative Recovery Network plays a central role in embedding culture, creativity and the arts in Australia's disaster management systems.
        - Creative Recovery projects have been found to leave lasting understanding of mental health and wellbeing practices and resources. Recent research has shown these projects 'have a striking impact on an individual's enduring confidence and sense of self-worth, whilst developing lasting pride in local tradition and culture.'[16]
        - Overall, the research highlights that creative recovery approaches have the capacity to mitigate disaster impacts and the disempowerment that results from the stresses and strains of natural disasters, through its unique ability to build long-lasting community resilience, wellbeing and local capacity for disaster preparedness, response and recovery.'[17]
    - The Centre for Reworlding is supporting future generations to mitigate against the impacts from climate change.
        - The Centre for Reworlding's programs including Creative Resilience Lab help foster creative and agile thinking in climate emergency-related disaster preparedness, response and recovery in communities.[18]
- These arts approaches to building climate resilience and preparedness and addressing climate-related trauma are the kind of upstream, non-clinical responses that will be critical to supporting the health sector. This work will be particularly impactful as extreme weather events put pressure our sense of identity and on the dependability of our existing systems.

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[13] Stahl A 2018, 'Here's How Creativity Actually Improves Your Health', *Forbes*, 25 July.
[14] Davies C, Knuiman M, Rosenberg M 2016, 'The Art of Being Mentally Healthy: A study to quantify the relationship between recreational arts engagement and mental well-being in the general population', *BMC Public Health* 16:15.
[15] The Big Anxiety Research Centre, Community Long Table on Mental Health and Suicide – Warwick QLD, accessed 13 July 2023.
[16] Creative Recovery Network and Foundation for Rural and Regional Renewal 2022, *Impacts of Creative Recovery*.
[17] Creative Recovery Network and Foundation for Rural and Regional Renewal 2022, *Impacts of Creative Recovery*.
[18] Centre for Reworlding, *Creative Resilience Lab*, accessed 13 July 2023.

Culture is the foundation for First Nations peoples' health and wellbeing

- Culture is the foundation for Aboriginal and Torres Strait Islander health and wellbeing.[19]
- First Nations-led approaches that centre culture within wellbeing and health are well progressed. The cultural determinants of health and wellbeing are anchored in First Nations ways of knowing, being and doing. Culture is central to understanding health and wellbeing and shapes relationships between self to Country, kin, community and spirituality.[20]
- The Australian Government's National Cultural Policy, *Revive*, seeks to harness culture's impact on Australia's resilience and wellbeing by providing a pathway for arts and culture to contribute to whole-of-government outcomes:
    - The policy harnesses the vital contributions of culture to First Nations advancement, economic development and trade; innovation and intellectual property; employment, skills and job security; foreign affairs and cultural diplomacy; infrastructure and regional development; energy transition, adaptability and resilience; social cohesion and community revitalisation.

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[19] Salmon M, Doery K, Dance P, Chapman J, Gilbert R, Williams R and Lovett R 2019, *Links Between Aboriginal and Torres Strait Islander Culture and Wellbeing: What the evidence says*, Mayi Kuwayu. Commonwealth of Australia, Department of Health 2017, *My Life My Lead – Opportunities for strengthening approaches to the social determinants and cultural determinants of Indigenous health: Report on the national consultations*.

[20] Lowitja Institute 2020, *Culture is Key: Towards cultural determinants-driven health policy Final Report.*

Australian Government
Department of Health and Aged Care

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
Steven Hunt
What is your email address?
Steven.Hunt1@health.nsw.gov.au
What is your organisation?
Corporate Services Northern New South Wales Local Health District (NSW Health)
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
☐ Yes ☒ No ☐ Prefer not to say
Please select which applies to you: ☐ Individual citizen ☒ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
Overall, the objectives are consistent with an informed climate response. The words climate preparedness or preparedness could be utilised instead of resilience.
2. How could these principles be improved to better inform the objectives of the Strategy?
Overall, the principles are consistent with an informed climate response. Specific wording regarding regional and vulnerable communities should be included. For example, the NNSW region is diverse in its populations, having a higher proportion of marginalised communities including Aboriginal and Torres Strait Islanders, individuals with disabilities, people of low socioeconomic status, farmers and a growing aged population.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
Scope 1,2 and selected scope 3 Stationary energy (electricity, gas, non-vehicle diesel/petrol) Renewable energy generated. Waste Fleet Business travel Staff commute Patient visitor travel Water Medical gases & MDI (selected) Construction
4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
Consultation with NSW Government and NSW Health recommended.
5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
Consultation with NSW Government and NSW Health recommended.

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
NSW Service Agreement (limited) Government Resource Efficiency Policy (Health Resource Efficiency Strategy) MoH Energy Efficiency Performance Metric NSW Net Zero Strategy
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
The commonwealth in consultation with the states, and in line with international best practice; should provide leadership in defining the inclusions and exclusions of carbon footprinting. Including detail of the Scopes and GWP metrics to be utilised per unit of measurement. This is to allow consistency for comparative reasons. On a more granular level, we require access to standardised data formats. The biggest hurdle at this time is access to data across the various service providers for health. For example, with water consumption in regional NSW we have multiple providers (8) with each entity providing data in differing digital and analogue formats. Given cost of water metering and accounts management tracking of water consumption is resource intensive. This consultation could consider supporting health services by providing resources to improve data management opportunities in regard to data collection and overall reporting.

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
Overall, these six focus areas are consistent with emission reduction pathways. In support a recent report from NSW Climate Risk and NetZero: *NSW Health Carbon footprint and carbon reductions options – Final Report* identified carbon hotspots and carbon reduction pathways for a number of health modalities. Recommend this consultation consider this report. For a copy of the report (currently not realised) please contact moh-netzero@health.nsw.gov.au
9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?
Thermal performance of buildings (NaTHERS style rating system). Existing and new car parks to have solar panel shading (as per Acceleration of Renewable Energies Bill, 2023, Assemblée Nationale, France) . At present for existing carparks, NSW does not provide funding for frames to support solar panels. Having legislation and funding will provide significant benefit for many healthcare facilities where the energy may be utilised behind the meter. There is potential to unlock significant capacity to assist renewable energy. Co-benefits include reduced heat island effect, protection against climate variables (sun, hail), providing power in carparks allowing electric vehicle charging. Providing safer and more climate friendly spaces for staff and patients. Resources and legislation to support data capture and reporting.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
NSW Health Carbon footprint and carbon reductions options – Final Report identified that travel was responsible for 25% of emissions. And staff commute the primary contributor of this category. For comparative purposes staff commute was only second to building energy (electricity) across all categories. Given sphere of influence regarding staff travel, initiatives supporting low carbon travel should be prioritised for staff members. Incentives should be considered to improve adoption of ride-share, EV/Hybrid, electric bike and flexible work (where conditions allow) In regard to electric vehicle infrastructure, electric vehicles and implementation, additional resourcing would expedite the introduction of EV and reduce risks in the implementation to the LHD.Greater incentive could be provided from a cost perspective.
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
A recent full scope carbon footprint utilised an input-output methodology to estimate the carbon footprint of the supply chain at Lismore Base Hospital (in NNSWLHD). The review indicated overall 26% of emissions (NHS categories) were due to the supply chain.

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Overall NNSWLHD has little impact in determining the supply chain, given limitations in procuring low carbon alternatives and access to the circular economy. This consultation should consider how the commonwealth can influence the medical supply markets and encourage high quality low carbon products to be available to the Australian market.

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

This consultation should support NSW Climate Risk Net Zero team in its initiatives developed to improve the carbon footprint with medicines and gases. The NSW Health Carbon footprint and carbon reductions options – Final Report estimates this category is around 8% of total emissions.

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

Overall waste management is restricted by availabilities in the circular economy around recycling streams. At present limitations in availability of recycled content reprocessing is a significant barrier in diverting waste from landfill.

Access to funding for waste management activities onsite could be supported with greater resources. Given complexities of service provision,staffing, housing, and disaster recovery (we are based in Lismore, but is applicable to our region) realisation of greater improvements in waste management are competing with the former mentioned complexities.

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

At present education should be considered as a specific action area. Works conducted by the NSW Health, Climate Risk and Net Zero Team should be supported and considered for deployment at a national level. The Net Zero Team should be supported with greater resourcing in a collaborative arrangement to allow greater engagement across health entities.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Promote opportunities such as virtual care within private providers.

Provide support for private providers to reduce emissions.

16. Where should the Strategy prioritise its emissions reduction efforts?

    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

    b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

a. Priority should be provided to where the largest quantity of carbon emissions is available. Where possible fossil fuels should be replaced by fuels with a lower carbon intensity as quickly as possible. This would support a greater adoption of

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renewable energy and support electrification of services currently provided by gas (natural or LPG).

b. Energy priorities can be based on site specific abatement cost curve (McKinsey Curve) analysis of options. Additional co-benefits could be considered for the analysis.

For example, with incentivising the use of renewable energy in hospital (carparks), co-benefits include shading, asset protection, systems resilience, electrical supply opportunities (EV)

Waste priorities would benefit from a collaborative whole of government approach.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Provision of funding for solar carparks. In NSW this may be run in conjunction with electric vehicle strategy and unlock significant co-benefits as previously described.

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks, and vulnerabilities for adaptation action?
NNSW LHD submit the embedded document in response to this question.  Impacts of climate change on health and Regarding a whole-of-system approach to health systems preparedness a regional approach should be utilised. The Climate Risk Ready (NSW Government) methodologies should be utilised as a whole of region approach. With relevant stakeholders to be engaged. Facilitation from a central authority is critical for the development of this action.
19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: a. What are the key considerations in developing a methodology? b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally? c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
a. Key considerations should consider the regional variation in vulnerability amongst different communities. Consideration should also be provided regarding network resilience of government and non-government service providers including third party service providers. For example, the 2022 floods had a major impact upon NNSWLHD's service delivery. In some parts of the LHD, service demand increased. This was not only due to the impacts of the floods on the health of our community, but also because of the impacts upon other service providers such as GP practices and aged care facilities, and because some community members did not have suitable home circumstances to enable discharge. b. Consideration of the NSW Climate Risk Ready training should be considered. At this time 225 people in NSW government, local government, and other jurisdictions have completed the training (including me). c. Support and resourcing are required to expedite vulnerability assessment and adaptation planning. For example, NNSWLHD has committed to develop an Environmentally Sustainable Healthcare Adaptation Plan. At this time given competing priorities resources could be made available to expedite the process. And develop staff and organisational maturity around vulnerability assessment and adaptation planning.

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

Any vulnerability risk assessments could consider;

Assets
Operations
Community
(+Supply Chain)

The NSW Climate Risk Ready frameworks should be considered for guidance.

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

From a systemic aspect climate adaptation plan should be progressed and first iteration finalised

Pragmatically improving preparedness for the health district for climate-based events. Additional resources would assist in expediting the responsibilities across the multiple services located across 35 over 20,732 square kilometres.

For example, all sites and services were asked to review the flood response to the Feb 2022 floods in Northern NSW (summary from LHD Disaster Manager)

Recommendations were developed for each facility;
Focus is on improving preparedness down to unit and service level.

Determining the actions that need to be taken when:

- Alert / Watch and act / or emergency warnings triggered.
- Standby status for code brown (external disaster)
- Verification of the incident

Develop preparedness check lists for an all-hazards approach.
A readily available check list to be implemented when site or service on standby.
Issues to be considered and action steps documented at part of preparedness:

- Communication and notification
- Site Incident Management Team
- Staff
- Equipment (including power packs, chargers etc)
- Resources (linen, consumables, fuel for generators etc)
- Medications
- Patients (special or vulnerable health populations: e.g., renal, mental health, chronically unwell, maternity)
- Evacuation or relocation considerations

Review Emergency Plans

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- Ensure they are relevant for natural disasters and not just traumatic mass casualty incidents.

Public Health considerations

- Collaboration with the North Coast Public Health Unit
- Monitoring and surveillance during the response and recovery phases of a natural disaster

Primary Health Network

- Collaboration with Healthy North Coast who maintain communication with Residential Aged Care facilities and Disability services.
- Conducting education sessions for RACF and disability services (6-12 monthly) in association with the PHN and SES. These sessions raise awareness of emergency planning and the importance of having robust preparedness checklists independent of the local health service.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
No comment
23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?
No comment

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
 Impacts of climate change on health and Enabler 1: Support and consider specific training modules for different health modalities. Including in service training where required. Enabler 2: Support, as per Evidence Check (embedded) that research is conducted on a local basis (see discussion p31 p 52) Enabler 3: Support, as per Evidence Check (embedded) Enabler 4: Support Enabler 5: Support, resourcing to be considered to support additional reporting. To include reporting systems, training and FTE
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
a. In general, it can be considered with the exception of Enabler 2 the Enablers are in start up or development mode. Whilst research capability exists in can be cost prohibitive for some agencies. Findings of the Evidence Check report research gaps (p31) *Our Evidence Check has found there are limited studies specifically tailored to NNSW that model the potential impact of climate change. Further research may harness local climate data that can be used to inform regional models that rely on the downscaling of global climate model data. The use of locally relevant and practically useful climate data to predict the frequency and severity of extreme events for NNSW will inform the best adaptation approaches.* b. Overall effective Commonwealth-State relations are critical to support delivery. NSW Health should be supported in its climate risk and net zero initiatives. Actions include greater coordination at a national level, support at state level and resourcing at regional and District levels.

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

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Respondent details

What is your name?
Fiona Charlson (on behalf of the Mental Health and Climate Change Research Network Member)
What is your email address?
f.charlson@uq.edu.au
What is your organisation?
Mental Health and Climate Change Research Network, The University of Queensland
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
☐ Yes ☒ No ☐ Prefer not to say
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative

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☒ Academic or Researcher

☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative

☐ Aged Care Service Provider

☐ First Nations Health Service Provider

☐ First Nations Community Group

☐ First Nations Peak or Advocacy

☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Overarching comments

The evidence linking climate change to detrimental mental health impacts is now clear. Several climate-related exposures, including heat, humidity, rainfall, drought, wildfires, and floods were associated with psychological distress, worsened mental health, and higher mortality among people with pre-existing mental health conditions, increased psychiatric hospitalisations, and heightened suicide rates (Charlson et al., 2021).

However, compared with other health areas, the mental health impacts of climate change have received far less attention. Mental health is notably absent from impact assessments and policies related to climate change and health in Australia (Mental health and climate change policy in Australia: an analysis using the 'AAA' framework' manuscript under preparation). This reflects a broader omission of mental health within climate change and health policy and decision-making mechanisms. Where mental health and climate is frequently mentioned in documents, there is little mention of vulnerable groups or tangible policy actions. Out of the 16 national health adaptation strategies reviewed by the Lancet Countdown report in 2018, mental health was the least considered climate-sensitive health outcome, mentioned by only 5 of the 16 national health adaptation strategies (Charlson et al., 2022).

This is despite mental disorders featuring in the top 5 diseases causing burden across the life course, and being the **leading cause of disease burden** in 15-24 year olds (AIHW, 2022). The cost to the Australian economy of mental illness and suicide is estimated to be up to about $70 billion per year, and an additional to this is a further (largely avoidable) cost of approximately $150 billion per year associated with diminished health and reduced life expectancy for those living with mental illness (Australian Government Productivity Commission., 2020). Unfortunately, the additional impacts of climate risks were outside the scope of the Productivity Commission report but are anticipated to be large.

Furthermore, mental health has a strong bidirectional relationship and high comorbidity with physical health conditions. The complex pathways between social, economic, environmental and political determinants and mental health, particularly in the context of climate change make it a truly cross-cutting issue. There is perhaps no other health area requiring such a commitment to embedding this issue across policies both within and outside of health (Policy review, manuscript under development).

[What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?]

As will be highlighted throughout this submission, mental health is consistently overlooked in policy and research, thereby limiting available support for the identification of real-world solutions and decision-making.

This submission intends to provide mental-health specific recommendations which are **supplementary** to the submissions of the Climate and Health Alliance, of which we fully endorse. Recommendations are derived from the best available evidence at the time of writing and as such will go beyond the formal health system to explore adaptation measures and will therefore focus on Proposed Objectives 3 and 4, and Enablers.

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
2. How could these principles be improved to better inform the objectives of the Strategy?
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
4.
5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

16. Where should the Strategy prioritise its emissions reduction efforts?

    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

    b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

- As highlighted in the prelude of this submission, mental health conditions are of high significance, particularly in the context of climate change.
- Climate risks which are of particular significance for mental health in the Australian context are extreme weather events (bushfire and flood), drought and heat.
- Vulnerable groups, include persons living with a pre-existing mental illness, youth, First Nations people, farmers, those experiencing social and economic inequities.
- There is a need to determine community vulnerabilities, but also strengths and existing resources.

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:
    a. What are the key considerations in developing a methodology?
    b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?
    c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

- For reasons outlined in the prelude of this submission, it is critical that mental health is **embedded** across vulnerability and adaptation assessments and plans.
- A better understanding of the **sustained and long-term** mental health consequences of incremental climate change will equip decision makers with a better understanding of where and how to invest in mental health infrastructure and resources.
- Assessments that **map and evaluate mental health interventions** can provide decision makers and communities with a robust understanding of all resources currently in place, or needed, to address climate change-related distress, enhance affirmative mental health, and support psychosocial resilience.(Hayes & Poland, 2018).
- The literature pertaining to the mental health impacts of climate change is currently highly heterogenous in terms of measures and indicators. There is strong value in developing a **standardised set of mental health indicators** to facilitate benchmarking across jurisdictions. This work can build on preliminary work, such as that of Hayes et al and the MJA-Lancet Countdown on Climate and Health (Beggs et al., 2022; Hayes & Poland, 2018). The establishment of a national reference group for determining these indicators would be useful.
- Estimates of the **economic costs** of the mental health impacts of climate change are absent, yet are likely to be substantial, and crucial for informing decision-making in climate mitigation and adaptation strategies. Research into the economic costs of climate change-driven mental health outcomes can and should consider the magnitude and distribution of economic impacts on individuals and families (health, productivity, workforce participation, school attendance), communities (anti-social behaviour, employment, investment), and health care systems across the short and longer-term (Charlson et al., 2022).

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
Work being led by the Mental Health and Climate Change Research Network is currently compiling case studies for guidance on embedding mental health into vulnerability and adaptation assessments.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Develop and implement education and awareness raising among policymakers and healthcare professionals about the diverse mental health impacts of climate change (beyond that of climate distress and climate anxiety). Create a roadmap for how mental health will be equitably embedded within all health and climate initiatives, including appropriate representation on reference groups and advisory committees. Develop an **evidence-based** mental health and climate change adaptation plan based which expands beyond the formal health system and includes community-based approaches. Establish interdisciplinary and intergovernmental collaborative bodies which are able to address the cross-sectoral nature of mental health to achieve sustained and meaningful improvements in mental health.

Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
Health and mental health – climate change should be included as an important determinant of outcomes in all health- and mental health-related policies. This was one of the recommendations in the World Health Organisation's recent mental health and climate change policy brief (World Health Organization, 2022). Adaptation in the context of health involves strengthening the climate resilience of health systems, where mental health should be integrated within this approach to build resilient mental health systems (World Health Organization, 2022). **Disaster and emergency management** – We broadly support the recently endorsed National Disaster Mental Health And Wellbeing Framework (https://nema.gov.au/about-us/budget-2023-24/Mental-Health-Wellbeing-Framework). We draw particular attention to the increasing frequency and magnitude of disasters and the additional implications it has for disaster and emergency management and in Australia. Mental health support has traditionally been 'helicoptered' into post-disaster response and recovery with little to no focus on preparedness. Existing reactive and short-term responses include frequent implied and direct reference to the concept of 'recovery'. This is problematic in three ways: it conceives of extreme weather events as single one-off occurrences; implies their unexpected nature; and contains an integral assumption of an end point where individuals/communities are 'recovered'. Models of mental health and wellbeing support

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(including funding models) need to change, shifting away from 'recovery' towards a focus on preparedness and adaptation (Longman et al., 2023).

Climate and energy – Develop climate change **adaptation** strategies inclusive of mental health to strengthen health system, implement preventative strategies and address social determinants of health. Climate change **mitigation** actions can provide mental health co-benefits to reduce vulnerability and social inequities, and enable sustainable development (Lawrance, 2021).

Social Services – elements of social capital play critical roles in determining mental health outcomes and it has been shown that individuals, families and communities who possess greater social capital are generally more psychologically resilient to disasters and other impacts of climate change (Noel et al., 2018). The need to **strengthen social support systems in communities** as a means to reduce psychosocial impacts after an extreme weather event is clearly evident. It is overwhelmingly evident that people lacking social support are much more vulnerable to suffering from psychosocial effects in times of great emotional need and distress. Therefore, in order to effectively address psychosocial impacts, the negative pre-existing relationships have to be dealt with before they result in negative consequences. Although community building may appear to be the role of local government, realistically all levels of government must be committed to enhancing and maintaining community capacity in an efficient and coordinated system that transcends from the federal government down into the communities. Tools are currently available in the literature and in emergency management practice that display the potential to enhance community coping capacity, in particular to disasters, at an individual or local level (Chowdhury et al., 2011). It is important to recognise that social capital can act as a buffer, but that psychological distress is often most common in those from low socioeconomic backgrounds, and with lower levels of social capital (Uphoff et al., 2013).

Furthermore, mental health has significant and clear implications for **Treasury**, (as highlighted by the Mental Health Productivity Commission report), and particularly the **National wellbeing framework - Measuring What Matters** (https://treasury.gov.au/publication/p2023-mwm)

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

A multisectoral approach will require collaboration and coordination at all scales of governance. However, there are currently no obvious examples of best practice in terms of the mental health impacts of climate change.

There are Australian and regional (Oceania) initiatives underway, led by the University of Queensland's Mental Health and Climate Change Research Network, to bring together transdisciplinary researchers, policy and practice, people with lived experience and other stakeholders to establish a community of practice and progress a collaborative agenda to address the mental health impacts of climate change. Leveraging this work could be an efficient way of progressing Australian policy development.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

We support the addition of 'measurement' and 'governance, finance and planning' as an enablers. We refer to the point made previously in this submission that 'the literature pertaining to mental

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health impacts of climate change is currently highly heterogenous in terms of measures and indicators. There is strong value on developing a standardised set of mental health indicators to facilitate benchmarking across jurisdictions.'

There is also currently an insufficient focus on preparedness. For the purposes of this submission, we have inserted content into 'communication and engagement' but may benefit from its own enabler group.

25. For each of these enablers:
    a. What is currently working well?
    b. What actions should the Strategy consider to support delivery?

1. Workforce, leadership and training

Leadership in the mental health impacts of climate change is sparse and underdeveloped. Special interest groups exist but frequently have a narrow view of mental health and climate change, and fail to consider solutions beyond specialist mental health services.

A recent survey of Australian psychologists has highlighted that, overall, the participants shared a consensus that climate change affects human health but a lack of knowledge on climate-health impacts and that the education they received is insufficient. There is a need for increased education, training and workforce development among mental healthcare workers (Stilita et al, manuscript under development).

The development and implementation of training for mental health professionals to recognise and respond to climate related mental health issues is needed. Training program for professionals to recognise, prepare for, and respond to mental health impacts of climate change.

There are also numerous examples of effective psychosocial interventions which can be delivered by non-specialist health workers and trained community members. Some existing brief, scalable and transdiagnostic psychological interventions might be suitable candidates for addressing the mental health impacts of climate change. Advantages of these include broad population reach, the ability to address multiple/common problems and ease of implementation in terms of training needs and resources required, which is particularly important as resources become increasingly strained with the predicted economic costs of climate change (Charlson et al., 2022).

2. Research

While climate change and mental health research is a rapidly growing field, it has largely focused on assessing the mental health risks due to climate change, with less applied research on practical issues such as identifying and evaluating interventions and policies (Charlson et al., 2021). A research priority setting exercise has been undertaken and has highlighted 10 priorities to enable progress on improving mental health outcomes associated with climate change (Charlson et al., 2022).

3. Communication and engagement

Findings of a recent study suggest (1) the long-term psychosocial impacts of extreme weather and climate change require sustained recovery interventions rooted in local knowledge and interdisciplinary action; (2) there are unintended consequences related to psychosocial interventions that can incite complex emotions and impact psychosocial recovery; and (3) perceptions of mental health care, among people exposed to climate-related trauma, can guide climate change and mental health response and recovery interventions (Hayes 2022).

Support to develop community leadership in mental health and identification of focal points is valued. There have been isolated attempts to do this, and a formal mapping exercise would illuminate examples which may be able to be modelled as best practice.

Stakeholder and community **engagement** is essential to inform policy identification, development, implementation, maintenance, and monitoring so that outcomes reflect the needs of populations and systematic vulnerabilities are minimised. Responding to the mental health impacts of climate

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change will require locally-led, place-based approaches, which are specific to the needs of individual communities (Easton-Gomez et al., 2022).

Community-based approaches can **empower** and improve individual and collective capacity to cope and buffer the stress-induced psychosocial effects (Chowdhury et al., 2011), where people impacted by climate change are recognised as active participants and leaders rather than passive recipients of external aid (World Health Organization, 2022). In order to support healthy and resilient communities, CAHA's Framework recommends investing in community mental health programs to support people affected by climate-related disasters, as well as anxiety and distress due to climate change impacts on health, lives, and livelihoods (Climate and Health Alliance, 2021). It will be important to identify those particularly at risk in order to inform the development of appropriate resilience-building measures, and to ensure that all mainstream services are culturally safe for Indigenous peoples, people of colour, ethnic minorities and people at risk of discrimination.

Construction of knowledge-building pathways requires early establishment and ongoing maintenance of communication channels. These pathways can serve to enhance resilience through emotional preparedness and support-building avenues. Interventions that foster community awareness and community engagement processes can help build mental health literacy and strengthen individual and community coping mechanisms, leading to enhanced resilience outcomes. In every situation, interventions must display cultural empathy and be culturally relevant to the targeted populations. These approaches increase the likelihood of participation by members of diverse communities that may be especially vulnerable to climate and disaster adversity. Various avenues for communication channels offer promise, including the use of social media and community or cultural events that provide multiple opportunities to engage and share knowledge and/or key messages (to and from community members) (Easton-Gomez et al., 2022).
A systematic literature review has identified policy and framework recommendations aimed at supporting emotional resilience in communities. Such strategies should focus on community **preparedness** through needs-based assessments and community engagement, fostering knowledge-building pathways and ongoing collaboration among system levels to address a diversity of community needs. These systematic approaches would ensure the accessibility and appropriateness of relevant supports by establishing frameworks that are regularly monitored, evaluated, and promoted (Easton-Gomez 2022).

5. Monitoring and reporting

Surveillance and monitoring of the psychosocial consequences of climate change need to explore:

- the longitudinal mental health consequences of indirect and chronic climate risks
- the overarching mental health implications related to the knowledge of climate change writ large (e.g., amongst climate change researchers, environmental activists, and others immersed in the science and work associated with climate change and environmental degradation);
- affirmative mental health outcomes related to community resilience in the aftermath of extreme weather events (a.k.a. post-traumatic growth);
- the application of measurement and monitoring tools that investigate group and community-level mental health outcomes related to climate hazards (e.g., community resilience, sense of community, mutual aid, etc.); and,
- research that addresses the timing and triggers of mental health outcomes related to climate-change hazards (e.g., initial versus delayed impacts, both positive and negative) (Hayes & Poland, 2018).

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Climate and health monitoring efforts need to include mental health (and relevant social determinants) as part of their indicators in order to track the impacts of climate change, and progress in addressing these impacts (Beggs et al., 2022). This will require increased accessibility to mental health databases that can be linked with the multiple available environmental databases (Beggs et al., 2022).

Robust and routine evaluation of mental health and psychosocial support programs and policy are currently lacking and require substantial commitment and investment.

Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

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References

AIHW. (2022). *Australian Burden of Disease Study 2022*. Retrieved 25 July from https://www.aihw.gov.au/reports/burden-of-disease/australian-burden-of-disease-study-2022/contents/summary#Diseases

Australian Government Productivity Commission. (2020). Productivity commission inquiry report: mental health. *Canberra, Australia*.

Beggs, P. J., Zhang, Y., McGushin, A., Trueck, S., Linnenluecke, M. K., Bambrick, H., Capon, A. G., Vardoulakis, S., Green, D., & Malik, A. (2022). The 2022 report of the MJA–Lancet Countdown on health and climate change: Australia unprepared and paying the price. *Medical Journal of Australia*.

Charlson, F., Ali, S., Augustinavicius, J., Benmarhnia, T., Birch, S., Clayton, S., Fielding, K., Jones, L., Juma, D., & Snider, L. (2022). Global priorities for climate change and mental health research. *Environment International*, *158*, 106984.

Charlson, F., Ali, S., Benmarhnia, T., Pearl, M., Massazza, A., Augustinavicius, J., & Scott, J. G. (2021). Climate Change and Mental Health: A Scoping Review. *Int J Environ Res Public Health*, *18*(9). https://doi.org/10.3390/ijerph18094486

Chowdhury, P. D., Haque, C. E., & Smith, G. (2011). A critical review of climate change induced psychosocial impacts and options for strengthening social support systems [Article]. *American Journal of Environmental Sciences*, *7*(4), 316-330. https://doi.org/10.3844/ajessp.2011.316.330

Climate and Health Alliance. (2021). *Healthy, Regenerative and Just: Framework for a national strategy on climate, health and well-being for Australia*.

Easton-Gomez, S. C., Mouritz, M., & Breadsell, J. K. (2022). Enhancing Emotional Resilience in the Face of Climate Change Adversity: A Systematic Literature Review. *Sustainability*, *14*(21), 13966.

Hayes, K., & Poland, B. (2018). Addressing Mental Health in a Changing Climate: Incorporating Mental Health Indicators into Climate Change and Health Vulnerability and Adaptation Assessments. *Int J Environ Res Public Health*, *15*(9). https://doi.org/10.3390/ijerph15091806

Lawrance, E., Thompson, R., Fontana, G., Jennings, N. (2021). *The impact of climate change on mental health and emotional wellbeing: current evidence and implications for policy and practice. Briefing paper No 36.* Grantham Institute.

Longman, J., Patrick, R., Bernays, S., & Charlson, F. (2023). Three Reasons Why Expecting 'Recovery'in the Context of the Mental Health Impacts of Climate Change Is Problematic. *International Journal of Environmental Research and Public Health*, *20*(10), 5882.

Noel, P., Cork, C., & White, R. G. (2018). Social Capital and Mental Health in Post-Disaster/Conflict Contexts: A Systematic Review. *Disaster Med Public Health Prep*, *12*(6), 791-802. https://doi.org/10.1017/dmp.2017.147

Uphoff, E. P., Pickett, K. E., Cabieses, B., Small, N., & Wright, J. (2013). A systematic review of the relationships between social capital and socioeconomic inequalities in health: a contribution to understanding the psychosocial pathway of health inequalities. *International Journal for Equity in Health*, *12*(1), 54. https://doi.org/10.1186/1475-9276-12-54

World Health Organization. (2022). *Mental health and climate change: policy brief*. https://www.who.int/publications/i/item/9789240045125

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Australian College of Midwives

ACM: For midwives. With women. For the future.

National Health & Climate Strategy

Submission

Issued July 2023

Australian College of Midwives Submission: National Health and Climate Strategy

Via email: health.climate.consultation@health.gov.au

Introduction

The Australian College of Midwives (ACM) welcomes the opportunity to provide a submission on the National Health and Climate Strategy. ACM is the peak professional body representing midwives in Australia. ACM is focused on ensuring better outcomes for women, babies, and their families, through improved choice and access to quality maternity care close to home and supporting the profession by enabling midwives to work to full scope of practice.

ACM recognises the urgency of action to mitigate climate change. Midwives in Australia work in a range of models of care including hospital based, primary health, community, private practice, and homebirth. Midwives work across metropolitan, regional, rural, and remote geographical locations. Midwives are impacted by extreme weather events and natural disasters and therefore play a role in local disaster planning, preparedness, response, evaluation, and research. Environmental health affects all people and ACM believe midwives are essential in supporting and educating women, their families, and the profession to understand and be aware of the impacts of climate change and steps they can take to reduce this impact.

ACM has responded to the Consultation paper questions that have the most impact on midwives and midwifery.

Consultation Paper Questions:

1. **How could these objectives be improved to better support the vision of the Strategy?**

Measurement of agreed objectives are essential to continuously inform and improve outcomes in healthcare. Identification of knowledge gaps and including experts across adjacent professions to review the strategy at regular intervals is essential. Standardised monitoring, recording, and reporting ensure accountability and demonstrates implementation of the Strategy. Benchmarking and national trends enable healthcare facilities to compare their performance to industry standards to drive quality improvements, efficiency, and patient experience.

Mitigation of workforce issues is an ongoing challenge in the health sector. Embedding climate education into health professionals' orientation and development as a long-term strategy may increase retention.

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Leaders should encourage a sense of community amongst staff through joining special interest groups and portfolios. Adequate resourcing is required to ensure already stretched personnel can implement transformative change.

Adapting and translating evidence to fit context of practice is essential across all objectives. University education is one sector where mutually beneficial sharing of information can quickly improve learning outcomes and grow knowledge amongst communities. Innovation and research in healthcare are ways to prioritise a commitment to climate action.

Health in all Policies*.* Health impacts from a public and private perspective are necessary to ensure equity is valued and access to healthcare improved. A whole of government commitment and approach to policy, practice and research is required to ensure a just transition and fair and equitable funding and incentivisation. Importantly, the whole of health workforce, infrastructure, transport, consumables (including pharmaceuticals) and consumers are represented, offset, and embedded into National Safety and Quality in Healthcare Accreditation Standards and business as usual.

2. **How could these principles be improved to better inform the objectives of the Strategy?**

First Nations leadership at all levels must underpin the vision of the strategy. ACM supports the Uluru Statement from the Heart and the three tenets of Voice, Treaty and Truth. Contribution and participation by Aboriginal and Torres Strait Islander people from diverse backgrounds and not just the voices of established leadership figures, will help ensure the Voice is representative of the ever-evolving needs of all First Nations people in Australia which includes their knowledge, wisdom, and contribution to climate change in this country. Mapping inequities across Australia and identifying the regions where closing health gaps are most prominent must be led and monitored by experts who are culturally informed and in consultation with consumers with lived experience.

Tackling health inequities by considering those most vulnerable first; First Nations families, pregnant women; immunocompromised, priority populations including CALD communities as well as the elderly and frontline health workers. Rural and Remote Australia are the most vulnerable regions in Australia and must be prioritised as part of this strategy, incorporating evidence-based midwifery continuity of care as a model that can contribute to positive climate change. Targeted health interventions utilising innovation is essential.

Population Health and prevention. The public health perspective must highlight midwifery led care as the primary maternity care for well women. Midwifery care is a preventative health measure and optimises outcomes for women and babies that have impacts across the lifespan on the chronic burden of disease.

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The premise of ***One Health*** is easily understood and should be promoted at a National level from primary school age in the education sector. Including a global health perspective within this principal would further capture understanding. The State of the Worlds Midwifery Report (2021) is an example of global maternal awareness. Partnering with low-income countries to reduce maternal and neonatal morbidity and mortality rates can impact global climate change at a local level while maintaining an awareness of biodiversity, unintended consequences, and human rights interventions.

Evidence-informed policy making replicates evidence-based midwifery practice in Australia informing, for example ACM consultation and referral guidelines and the newly developing Living Evidence for Australian Pregnancy and Postnatal care (LEAPP) Guidelines.

Partnership-based working across all levels of government and beyond: Peak professional bodies such as ACM are key contributors to a nationally consistent response to climate change. Consultation and implementation ensure both clinical and strategic contribution from the profession including ready and widely disseminated information sharing between members and professional networks.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

Maternity care is impacted by Scope 1, 2 and 3 emissions and other greenhouse gas emissions, such as patient and visitor transport. Therefore ACM believes all emissions should be in scope and included in the National strategy.

4. What existing First Nations policies, initiatives, expertise, knowledge, and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

National Aboriginal and Torres Strait Islander Health Plan 2013-2023: This plan recognises the importance of addressing the social determinants of health, including climate change, and the need for culturally safe and responsive health care.

'Birthing on Country' seeks to provide culturally safe and responsive care to Indigenous mothers and families in their own communities, with a focus on maintaining cultural connections to country and community. The approach recognises the importance of empowering Indigenous women and communities to make decisions about their own care and health (Kildea et al, (2021).

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A key premise of the Birthing on Country RISE principles is that Aboriginal and Torres Strait islanders have access to birthing close to home in a culturally safe environment. Evidence shows that access to birthing close to home with midwifery continuity of care improves health outcomes for indigenous mothers and babies (Sandall et al., 2016). This includes pre-term birth rates reduced by 50%, It reduces pregnancy loss/neonatal death by 16%, Reduces intervention at birth (e.g., induction, forceps, caesarean), Increases breastfeeding rates, antenatal visits attendance and perinatal mental health. **R**edesign maternity services, **I**nvest in workforce, **S**trengthen family capacity and **E**mbed community control. Birthing on Country results in;

- More babies born healthy and strong
- More mothers and babies stay together through strengthened family capacity.
- Expanded First Nations maternal and infant health workforce.
- Increased First Nations governance over services delivered during this critical stage of life (Best Start to Life (2022)).

Birthing on Country and Birthing in our Community models are driving system-wide reform, aimed at transferring funding and control of maternity services for First Nations families from mainstream services into First Nations hands through community-controlled health services. Birthing on Country recognises the importance of a First Nations workforce to drive a strengths-based service and provide birthing services that are clinically and culturally safe.

There are additional innovative approaches to reducing First Nations Health inequities, such as Djakamirr training in NT and consultation here should be led by experts, in a culturally safe approach, with insight and expertise in designing and implementing these programs.

Growing Deadly Families strategy in Queensland through Queensland Health focuses on valuing cultural traditions, values and beliefs of Aboriginal and Torres Strait Islander people and listening to the needs of their communities as essential elements to providing culturally focussed and safe maternal health services for mothers of Aboriginal and Torres Strait Islander babies through co design, woman-centred, comprehensive, and culturally capable maternity care and a culturally capable workforce (Queensland Government, 2019).

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5. **What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?**

The best methodological approach includes yarning methods among a group of targeted First Nations stakeholders, in conjunction with performing in-person consultation sessions within the broader community. Expert advisory groups must include First Nations midwives, Elders, and knowledge holders, as well as academics and other experts in relevant fields. These groups must be included to provide ongoing advice and guidance to ensure that the Strategy remains responsive to First Nations perspectives and needs. As discussed in question 4, there are existing First Nations Maternity strategies underpinned by community co-design and control.

6. **No response**

7. **What additional data and information is required to support targeted emissions reduction efforts within health and aged care?**

Clinical waste management is not standardised or measured nationally and there are barriers to recycling accessibility and capability in local, regional, and state jurisdictions across Australia, worsening with remoteness of geographical location.

A national approach should be implemented as a published metric with targeted emission reductions.

The National Health Reform Agreement Review is an opportunity to include climate health targets in this space, to incentivise or require jurisdictions to target emissions reduction.

Midwives collect statistics through systems such as perinatal data to contribute to the collective understanding and improvement of health outcomes for women and babies in Australia as published in the annual AIHW Mother and Baby reports (2021). Adding to this equipment, consumables, and resource usage to inform data and projects may help to understand accountability towards reducing emissions.

A deeper dive into midwifery scope of practice and understanding trends around primary out of hospital and institutionalised care by midwives may contribute to a deeper understanding to inform emission reduction efforts in the profession. Individual health providers ability to measure their own waste impact and calculate emissions may lead to a stronger commitment to reduce carbon footprint and contributes

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to both the individual and collective organisation level climate strategy adherence resulting in a more significant impact.

Mitigation

8. **What do you think of these proposed focus areas for emissions reduction? Should anything else be included?**

Consideration needs to be given to;

Human Resources – staff recruitment and retention, employee satisfaction and changing generational expectations must factor into future planning, efficiencies and carbon footprint cost to an organisation. Priority must be given by government to reduce the reliance and dependence on the locum workforce for obstetrics and midwifery as these increase environmental impact, cost and reduces continuity of care.

Asset Management should be considered from an environmental, recycling and cost perspective. Equipment exchange programs across Australia and internationally to low-income countries should be considered prior to destruction.

Leadership – strong midwifery leadership ensures best practice appropriate models of care are implemented, evaluated and sustained, including adherence to clinical governance and policy and procedure compliance (e.g., climate strategy). Leadership also ensures oversight with appropriate testing and admissions, reducing the likelihood of overservicing, over testing or unnecessary hospital admissions. Hospital in the home and virtual clinics, online antenatal education are further examples of efficiencies in the maternity sector.

Chemical use – cleaning and emergency response (e.g., use of fire extinguishers)

9. **Which specific action areas should be considered relating to the built environment and facilities (including energy and water)?**

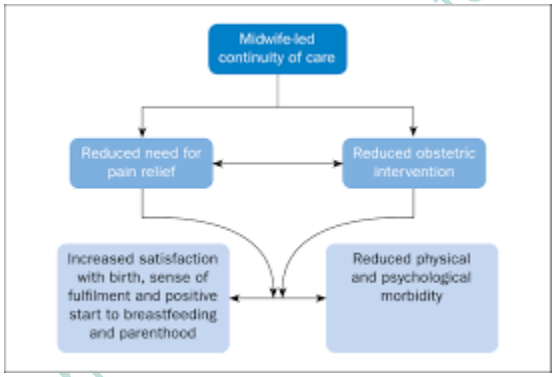
New hospital builds must meet a minimum standard of planning, environmental and structural design, material, community growth, surge or multi-purpose ability with technology that allows for digitisation and efficiencies. Birthing suites and maternity services must have external access, where women and families can labour indoors and outdoors, connecting with country where possible. Maternity services that are stand alone, community based and external to hospital wards and theatres should be considered or additional to traditional maternity spaces. Birthing pools to cater for water birth and water immersion should be economical and part of a routine birth space. Renewable energy options and restricting single

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use products without compromising infection control and patient safety should be prioritised. Hospital environments should also contribute to the overall mental health and wellbeing of both staff and consumers. Midwives and consumers of maternity care must be included in new design and re-design.

10. **Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?**

Implementing Continuity of Midwifery Care models such as Midwifery Group Practice and Birthing on Country models and accessing telehealth as an intervention to reduce poor outcomes for women and babies in rural and remote Australia supports climate action. There is an overall reduction in transport usage when a midwife works within the community. Continuity of Midwifery Care improves perinatal outcomes including a 24 % reduction of preterm birth and by 50% for First Nations babies and improved perinatal mental health (Sandall et al., 2016; Kildea et al., 2021 & Cummins et al., 2022). These models are therefore positively associated with a significant reduction in the use of neonatal retrieval services.



Continuity of Midwifery Care model is identified as the best practice model for improved choice and outcomes for women, babies and their families. This model of care has been shown to reduce need for pain relief, intervention rates and maternal and neonatal mortalities.

Increased interventions at birth such as medical induction and caesarean equals more emissions and single-use plastics waste. Maternity care intervention rates in the past decade have increased (AIHW). Predicting the ongoing increase to enable modelling with the aim of mitigating this is essential.

Consumers of maternity care need to be able to access sites close to public transport and not be restricted by parking and access barriers. Extremes in weather (heat, cold, rain, cyclones) need to be factored into consumer and staff access to facilities. Travel and transport (e.g., Patient travel schemes) for care outside of the local community are large contributors to increased cost, time delays, poorer clinical outcomes, aeromedical and road retrieval costs. Rural and remote areas should factor in return trip travel, car and

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bus pooling/servicing, include car seats and wheelchair access, living away from home family accommodation outside of hotels for women relocating to access birthing services.

Retrieval services bordering state and territory geographical markers should consider a memorandum of understanding for accessing a closer tertiary hospital outside of local or state jurisdiction (e.g., Broome to Perth, Western Australia versus Broome to Darwin, Northern Territory).

11. **Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?**

Local supply chain options should be prioritised over offshore options wherever possible.

12. **Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?**

Nitrous oxide (N2O) is used by more than 50 percent of Australian women to relieve pain during labour, followed by epidurals and opioids according to the Australian institute of Health and Welfare (AIHW). The Australian and New Zealand College of Anaesthetists have recently advocated for a reduction in N2O in an attempt to improve environmental sustainability, however further research and alternative solutions such as nitrous oxide destruction systems should be considered so as to not unintentionally impact maternal and neonatal outcomes and to substitute a less invasive pain relief option with a more invasive one (UniSA). The review of Nitrous oxide use in maternity should be duly considered based on existing national and international recommendations in the context of the labour and birth / maternity care setting. Continuity of Midwifery Care has been shown to reduce the levels of pain relief women use including artificial oxytocin. Non-pharmacological pain relief methods should be promoted as a climate action.

Investing in the Endorsed Midwifery workforce will increase the number of midwives in Australia with a qualification of endorsement for scheduled medicines, meaning increased access by women across Australia to a skilled and trained health professional who can prescribe medication, pathology and diagnostics. This supports a depleted obstetric maternity workforce, and also increases access by women to abortion pill – as seen in the recent roll back or restrictions by the TGA for the prescribing and dispensing of MS-2Step. **Recommendation –** harmonisation of the Poison's Act nationally and expansion of the Pharmaceutical Benefits Scheme medication list for Midwives and an increase in the Medical Benefits Schedule item numbers for midwives.

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13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

An evidence-based guide to procurement, recycling, infection control and waste reduction in maternity care is required. Clinical equipment and consumables for professional development and training should form part of the workplace reporting and clinician awareness on cost per item is necessary for an intentional commitment to reducing unnecessary waste. Regular auditing and accountability are required. Encouraging the use of digital prescribing systems to reduce paper waste.

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

Midwives provide care from pre-pregnancy, antenatal, labour and birth and postnatal to the first 1000 days of life. Scope of practice extends to sexual and reproductive health and child, family and maternal health. Midwives are experts in the provision of primary maternity care and therefore provide a critical link to the establishment of a climate strategy that will impact across the lifespan.

Access to publicly funded homebirth across Australia. Queensland and Tasmania are the only two jurisdictions in Australia not providing women the choice of publicly funded homebirth. A study by Hu et al 2023 demonstrates significant cost savings to government if 5% of women accessing a birthing hospital in Queensland, had access to and birthed at home compared with standard hospital care.

ACM promotes breastfeeding as the gold standard for infant feeding and nutrition. This position is reflected in ACM facilitation of the Baby Friendly Health Initiative (BFHI) program nationally. The ACM position aligns with the WHO Code. The College does not advertise or endorse formula, bottles or teats. ACM recommends that the BFHI program be a jurisdictional requirement nationally to promote breastfeeding rates and thereby improve long-term health outcomes and reduce the excessive manufacturing and disposal of plastics required for artificial feeding.

15. **What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?**

Providing incentives for private practicing midwives to adopt sustainable midwifery practices can help encourage their involvement in the Strategy's climate emission reduction efforts. This should include funded rural and remote placements during student midwives' clinical placements and incentivising the midwifery workforce to work in continuity of care models.

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Private practicing midwives should be included in the co-design process of the Strategy to ensure that their unique perspectives are considered. This could involve engaging with the Australian College of Midives and other networks to ensure that private practicing midwives are represented in the design and implementation of the Strategy.

Consumers can play a key role in promoting sustainable practices and advocating for climate action. ACM advise that consumers may not be aware of the impact that healthcare has on the environment and the importance of reducing emissions. Providing education and information on sustainable healthcare practices and the impact of climate change can help consumers understand the importance of emissions reduction and how they can contribute to the effort. Encouraging consumer advocacy through community engagement events, social media campaigns, and other outreach efforts can help raise awareness and promote action. Consumers can be involved in the implementation of sustainable practices in healthcare facilities by providing feedback via surveys and making suggestions for improvement. Engaging with consumer organisations through partnerships and outreach efforts can help raise awareness and promote action. Involving consumers within the health system in the Strategy's emissions reduction efforts will require education, advocacy, implementation of sustainable practices, incentives, and engagement with consumer organisations.

16. **Where should the Strategy prioritise its emissions reduction efforts**?
    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas? – No response
    b. Which of the six sources of emissions discussed above are the highest priorities for action?

Action is required across all priority areas; however an impact assessment and environmental scan may provide tools for prioritising the six sources into priority areas and/or phasing.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

The prioritisation of a climate strategy is essential for all health practitioners. Immediate climate and sustainability action, education and awareness campaign are required so that visible impacts are felt at an

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individual and local level and medium- and long-term commitments and goals are measurable, achievable, and realised.

ACM as a quick win, strongly advocates for the roll-out of continuity of midwifery models of care nationally, including the increased support and funding of the workforce, in both public and private midwifery settings, including endorsed midwifery, to sustain this in rural and remote areas of Australia. The birth rate in Australia is stable at just over 300 000 births/year. Continuity of care, and the utilisation of endorsed midwives to their full scope of practice is a significant and evidence based monetary saving that could be re-invested into climate response and sustainability.

Adaption

18. **What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?**

The Sustainable Healthcare Module by the Australian Commission on Safety and Quality in Healthcare should form the basis of a further development of an education toolkit around climate risk recognition, mitigation, and adaptation.

Health leadership requires the implementation of climate strategy and process into management practices, culturally safe care, governance and safety and quality portfolios.

19. **Should the Australian government develop a National Health Vulnerability and Adaption Assessment and National Health Adaption Plan?**

As vulnerable populations are disproportionately affected by climate change, these assessments could better inform and strengthen access to quality healthcare, disaster response and infectious control measures are prioritised. However, many vulnerable populations would greatly benefit immediately if currently available heath practice models were implemented in rural and remote areas such Continuity of Midwifery Care and high-quality health care for all Aboriginal and Torres Strait Islander people. The time, effort and expense should be invested in already successful evidenced models of care.

20. **Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaption planning for health systems specifically, for instance by issuing**

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guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach?

Yes – as discussed above

21. **What immediate high-priority system adaptation actions are required in the next 12 – 24 months?**

Workforce development, training and leadership and a climate risk assessment.

Health in All Policies

22. **What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?**

Health research incorporating climate action messaging needs to be highlighted and distributed across sectors to improve the evidence base and inform future education.

23. **What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?**

ACM suggests drawing on the strengths of a collaborative network is the most effective way to advance climate and public health policy. This could involve developing a shared understanding of the importance of addressing climate change and its impact on maternal health, as well as identifying shared goals for emissions reduction and sustainable healthcare practices.

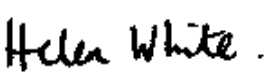
Engaging the health workforce in conversations about climate change is essential and an important step towards climate action. Successful examples of collaboration in this area include the Birthing on Country model of care in Australia, which involves collaboration between midwives, Indigenous communities, and health facilities to provide culturally safe and responsive maternity care in Indigenous communities.

Conclusion

As demonstrated, midwives must be acknowledged as a standalone profession to nursing with a unique and essential contribution toward climate action. Inclusion of midwives' voices in all future consultation where the health and safety of women and babies is discussed is essential. Thank you for this opportunity

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to provide feedback on the Australian Government's National Health and Climate Strategy consultation paper.





Helen White
Chief Executive Officer

Alison Weatherstone
Chief Midwife

E: Helen.white@midwives.org.au W: https://www.midwives.org.au

References

AIHW (2021) Australia's mothers and babies. Retrieved from https://www.aihw.gov.au/reports/mothers-babies/australias-mothers-babies/contents/labour-and-birth/analgesia

AIHW (2021) https://www.aihw.gov.au/reports/mothers-babies/national-core-maternity-indicators-1/contents/labour-and-birth-indicators/caesarean-section

Australian Breast-Feeding Association (2023). 'Want to help the children? Help the parents': Challenges and solutions from the Babies and Young Children in the Black Summer (BiBS) Study. Retrieved from https://www.breastfeeding.asn.au/sites/default/files/2023-06/BiBS%20Study%20Report%20Final.pdf

Australian College of Midwives. National Midwifery Guidelines for Consultation and Referral. 4th Edition. Retrieved from https://www.midwives.org.au/common/Uploaded%20files/_ADMIN-ACM/National-Midwifery-Guidelines-for-Consultation-and-Referral-4th-Edition-(2021).pdf

Australian Living Evidence Consortium (2023). Living Evidence for Australian Pregnancy and Postnatal care (LEAPP) Guidelines. *Terms of Reference*. Retrieved from https://static1.squarespace.com/static/5c1aeebd9f87705cde7498f1/t/647eaf740849d34f3d834830/1686024053557/LEAPP+Governance+Terms+Of+Reference_V1.pdf

Baby Friendly Health Initiative Australia (2023) Retrieved from https://bfhi.org.au/

Best Start to Life: A National Gathering Report (2022). Retrieved From https://www.beststarttolifeconference.com/_files/ugd/a9d136_a04918bdff704878982d8c5d1fcded05.pdf

Centre for Sustainable Health Care (2023) How Health professionals can use social media to spread environmental awareness. Retrieved from https://sustainablehealthcare.org.uk/blog/how-health-professionals-can-use-social-media-spread-environmental-awareness#:~:text=As%20frontline%20workers%20observing%20these,harmful%20effects%20of%20climate%20change

Cummins et al. (2023). Does midwifery continuity of care make a difference to women with perinatal mental health conditions, A Cohort study, from Australia. Retrieved from https://www.sciencedirect.com/science/article/pii/S1871519222003055

Released under the Freedom of Information Act 1982

DOH (2019) https://www.health.gov.au/sites/default/files/documents/2019/11/woman-centred-care-strategic-directions-for-australian-maternity-services.pdf

Hu, Y., Allen, J., Ellwood, D., Slavin, V., Gamble, J., Toohill, J. &Callander, E. (2023). The financial impact of offering publicly funded homebirths: A population-based microsimulation in Queensland, Australia. https://www.sciencedirect.com/science/article/pii/S1871519223002287?via%3Dihub

Kildea et al. (2021). Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomised, interventional trial. Retrieved from https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(21)00061-9/fulltext

Pharmaceutical Benefits Scheme retrieved 2023 https://www.pbs.gov.au/browse/doctorsbag

Queensland Government. (2019) Growing Deadly Families. *Aboriginal and Torres Strait Islander Maternity Services Strategy 2019-2025*. Retrieved from https://www.health.qld.gov.au/__data/assets/pdf_file/0030/932880/Growing-Deadly-Families-Strategy.pdf

Riley (2021). https://www.anzca.edu.au/getattachment/a48de2f6-9591-4334-a06f-67d978b302ff/Australasian-Anaesthesia-2021

Sandall J, Soltani H, Gates S, Shennan A, Devane D. (2016). Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews 2016, Issue 4. Art. No.: CD004667. DOI: 10.1002/14651858.CD004667.pub5. Accessed 21 March 2023.

UNFPA, WHO, ICM.(2021) The State of the World's Midwifery 2021. Retrieved from https://www.unfpa.org/publications/sowmy-2021

University of South Australia (2022) https://www.unisa.edu.au/media-centre/Releases/2022/pain-is-no-joke-in-labour-but-new-study-shows-withdrawing-laughing-gas-has-no-adverse-outcomes/#:~:text=According%20to%20a%20recent%20report,equivalent%20to%20driving%206%20kilometres

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RACP
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EDUCATE ADVOCATE INNOVATE

From the President

31 July 2023

Professor Paul Kelly FAFPHM
Chief Medical Officer
Australian Government Department of Health and Aged Care
GPO Box 9848
CANBERRA ACT 2601

Via Email: Health.Climate.Consultation@health.gov.au

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Dear Professor Kelly

RACP feedback on the National Health and Climate Strategy Consultation

Thank you for the opportunity to provide a submission on the National Health and Climate Strategy Consultation Paper ('the Consultation Paper').

We commend the Australian Government and the Department of Health and Aged Care ('the Department') on its engagement with stakeholders across Australia to inform the development of the National Health and Climate Strategy ('the Strategy'). Within the Royal Australasian College of Physicians (RACP), we have worked closely with our lead climate change and health body and have also consulted a broad cross-section of RACP bodies and specialty societies.

Our submission is focused on the following key asks:

- The Strategy must be fully funded and resourced on an ongoing basis.
- National Cabinet must sign off on the Strategy and establish a governance framework and funding mechanisms that enable urgent, coordinated, and effective implementation of the Strategy.
- First Nations knowledge and leadership must guide all aspects of the Strategy through strong partnerships and co-design.
- The Strategy must focus on building healthy and climate resilient communities through whole of government and Health in All Policies approaches that mobilise sectors outside of health to address the environmental, cultural and social determinants of health.

A commitment to promoting health and climate resilience must guide the Strategy

The RACP would like to see a focus on the health and wellbeing of communities and populations alongside the Strategy's current health system focus. We would like this to be communicated through a clear vision that supports our suggested objectives:

1. Healthy and Climate Resilient Communities – Improve the health and wellbeing of populations and build the capacity of communities to thrive in the face of climate change through Health in All Policies and prevention.
2. Climate Resilient Health Systems – Build health system capacity to anticipate, respond to, cope with, recover from and adapt to climate change, including learning and transformation.
3. Environmentally Sustainable Health Systems – Integrate resource stewardship and climate mitigation across all health systems to ensure no cumulative harmful impacts on the natural environment or society.

We are supportive of the principles in the Strategy and would like to see them integrated throughout the Strategy. The principles could be strengthened by:

1. Prioritising First Nations leadership and approaches to health and connection to community and Country and including protections for intellectual and cultural property.
2. Tackling health inequities through addressing the social and wider structural determinants of health, acknowledging health as a human right, and addressing intergenerational inequity, just transition, and global climate justice.
3. Integrating a population health and prevention approach throughout the Strategy.
4. Considering models in addition to One Health, such as planetary health, that best reflect the connection between human health, environmental health, and the wider determinants of health within the Strategy.
5. Ensuring that the Strategy is informed by diverse types of evidence including Indigenous knowledge, qualitative evidence, lived experience of patients, pilots, experiments, demonstration sites, and grey literature.
6. Focussing partnerships on those that can support a Health in All Policies approach to human health through addressing the wider determinants of health.

We are pleased to see a focus on prevention and optimising models of care in the Consultation Paper. However, we recommend broadening this to consider other health reform measures that can contribute to more environmentally sustainable and climate resilient healthcare systems. We also commend the recognition that reducing low-value care can contribute to lowering emissions while improving patient care. We call for urgent funding to expand programs that minimise the use of low value care and encourage innovation such as the RACP's Evolve program.

Governance, leadership and funding are required for successful implementation

The RACP is pleased to see the inclusion of enablers within the Strategy. However, we consider that these need to be strengthened and expanded. Our suggested enablers are:

1. Governance and leadership to develop and fund a cross-sector implementation plan led by the Australian Government in partnership with states and territories.
2. Funding the Strategy on an ongoing basis including implementation and development of future iterations.
3. Human resourcing for all aspects of Strategy development and implementation.
4. Measurement of emissions and underlying risks to track emissions reductions and contribute to vulnerability assessments and adaptation planning.
5. Technology, tools and instruments for facilitating information sharing, measurement, innovation, and compliance.
6. Health in All Policies to ensure appropriate, tools, guidelines, training and support systems are in place for effective implementation.
7. Workforce and training to engage, support and build workforce capacity as agents of resilience and environmental sustainability within the health system.

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8. Research to encourage innovation and expand the evidence-base for the Strategy's climate health actions.
9. Communication, engagement and collaboration to connect different sectors, bring together national, state, and territory governments.

Medical colleges are campaigning for a healthier, climate resilient future

We would like to draw your attention to the RACP's climate change and health policy and research work, which has guided our submission. RACP has positions statements on Climate Change and Health, Environmentally Sustainable Healthcare and the Health Benefits of Mitigating Climate Change. More recently we commissioned a report - Climate Change and Australia's Healthcare Systems – A Review of Literature, Policy and Practice, which was endorsed by nine other medical colleges.

We are continuing to work with medical colleges through our Healthy Climate Future campaign, which is now endorsed by 13 medical colleges including the RACP and six specialty societies.

The Healthy Climate Future campaign calls for the Strategy to include:

- A plan for equitably decarbonising healthcare, to achieve net zero emissions in healthcare by 2040
- The development of a rigorous and accessible online system to consolidate the evidence base for climate health action, along with guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning.
- The Development and roll out guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning. These must be co designed and guided by First Nations leadership.
- A health systems reform approach that centres prevention, optimising models of care, and reducing low value care and resource use.
- Establishment of a surge health and medical workforce for deployment in response to extreme weather events.
- Establishment of a monitoring and evaluation framework with indicators that show progress on health outcomes, health system resilience and capacity-building and targets that demonstrate a reduction in health system emissions.

The Australian Government should also:

- Invest in a national Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system
- Establish a Climate Friendly Health System Innovation Fund to provide grants to local health services for emissions reduction and sustainability initiatives.

Our comprehensive response to the Department's questions on the Consultation Paper is attached. It expands on the above points and provides further direction and suggestions, with reference to useful resources and literature.

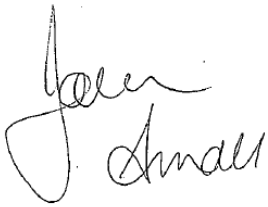
We hope to have the opportunity to provide input on the draft National Health and Climate Strategy before it is finalised.

We look forward to continuing to work with you on the development and implementation of the Strategy including through continued involvement with the Chief Medical Officer Advisory Group.

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Please contact Ekta Sharma, Senior Policy & Advocacy Officer via email at ClimateChangeHealth@racp.edu.au if you require further information. We are happy to meet to discuss our feedback.

Yours sincerely



Dr Jacqueline Small

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Australian Research Data Commons (ARDC)
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☑ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body ☑ Other - national research infrastructure provider

Proposed Objective 4: Health in All Policies

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Our work is guided by two sets of National Research Infrastructure (NRI) principles. Due to the high costs of research infrastructure, one set of principles relates to investment. The following are some key NRI principles:

- Research infrastructure is collaborative and planned in a way to provide a network of capabilities that serve the national interest and are aligned with government priorities.
- NRI resources are focused to achieve maximum impact in national priority areas.
- Investment encourages and leverages opportunities for co-investment from states and territories, university, public and private sectors.[1]

Co-investment for our infrastructure projects may take the form of monetary or in-kind contributions (e.g. expertise, data, equipment, services). ARDC supports national scale data initiatives which may draw together multiple stakeholders from different sectors, jurisdictions and disciplines. To illustrate these national data initiatives, we briefly discuss three co-investment projects in the area of human health and the environment.

(i) Australian Urban Health Indicators

This project aims to develop a suite of new indicator data assets to improve our understanding of the health of Australian urban and regional populations. It will integrate health, socio-economic, environmental and other urban datasets to provide a more holistic understanding of population cohorts in different parts of the country. The project focuses on three case studies on cancer determinants, heat health vulnerability and urban liveability and health.

Our partners: Australian Urban Research Infrastructure Network (AURIN) (project lead), Population Health Research Network (PHRN), and researchers.

(ii) Assessing the Impact of Bushfire Smoke on Health

This project will deliver a federated Australian air quality data system and a bushfire-specific air pollution exposure dataset that is consistent throughout Australia. It will bring together the vast amount of air quality data collected in Australia into a common architecture and provide air pollution exposure mapping, processing and analysis that links this data with population health data. The project supports capability uplift in smaller jurisdictions so that the maximum value of Australia's investment in air quality monitoring and modelling can be realised. Importantly, by standardising and codifying the air quality data ecosystem in Australia, the project lays the foundation for ongoing improvement of air quality data services.

Our partners: National Air Quality Technical Advisory Group (NATAG) (project lead), Curtin University, University of Tasmania, University of Sydney, Australian Space Data Analyses Facility, Australian Institute of Health and Welfare (AIHW), and the Australian Government - Department of Agriculture, Water and the Environment.

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[1] Extracts from NRI Principles and NRI Investment Principles: Australian Government, *National Research Infrastructure Roadmap* (2021) (Department of Education, Skills and Employment: Canberra 2021) 14.

(iii) Integrated National Air Pollution and Health Data

This project involves standardising data inputs from all air pollution monitoring stations in Australia. It will build a database containing all historical and current observations, including those for particulate matter of 2.5 micrometre, nitrogen dioxide, carbon monoxide, sulphates, ozone and ultrafine particles. The database can then be used in modelling and to develop geospatial predictors of pollutant exposure.

Our partners: Curtin University (project lead), NSW Department of Planning Infrastructure and Environment, Environmental Protection Authority Victoria, Australian Institute of Health and Welfare, University of Queensland, and Monash University.

Proposed Objective 4: Health in All Policies

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

The second enabler reads, '[r]esearch - investing in and supporting coordinated climate and health research will improve the evidence base." On the face of it, this enabler appears to imply a linear or uni-directional process of knowledge production. However, the practice of research - or re-search ('search again') - generally involves seeking new knowledge with reference to an existing body of knowledge. As such, we suggest that the title and description of the second enabler be revised and reworked. To address the challenges of a changing climate, the reform of our healthcare system could be viewed as part of the process of continuous improvement or informed by the virtuous cycle of learning as proposed in the model of Learning Health Systems.[2]

The proposed National Health and Climate Strategy can be contrasted with the approach adopted in the *National Biosecurity Strategy* (2022) (NBS). One of the priority areas in the NBS is "integration supported by technology, research and data." The aim of this priority area is to "create a more connected and efficient system in which we better leverage existing and new technology, research and data to facilitate more timely, informed and risk-based decisions."[3] The NBS recognises that research alone will not be sufficient to create enduring capabilities. Complementing research with technology and research infrastructure offers a pathway to increase the return on investment of research, avoid duplication, and maintain ongoing reliable and underpinning capabilities.

Developments in research infrastructure offer critical and innovative tools to conduct and support research, from conception to publication. In particular, digital research infrastructure (DRI) can be designed to facilitate the important task of collecting, processing, storing and providing access to cultural and scientific data. Data and DRIs have acquired prominence as a consequence of increasing digitalisation, rapid datafication and the need to address the replication or reproducibility crisis. While research activities tend to be undertaken as discrete projects, research infrastructure provides longer term capability for researchers and their stakeholders to address complex society challenges in an ongoing and coordinated manner. As the *Brno Declaration* observed, research infrastructures (RIs) "bring together a critical mass of human, material and financial resources, and integrate a large variety of stakeholders … in a multi-disciplinary and cross-sectorial way."[4] Furthermore, RIs

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[2] English et al 2016, Friedman et al 2014, Deeny and Steventon 2015.
[3] Department of Agriculture, Fisheries and Forestry (DAFF), *National Biosecurity Strategy* 2022, (Canberra) 33.
[4] The full title of this source is the *Brno Declaration on Fostering a Global Ecosystem of Research Infrastructure*: European Strategy Forum on Research Infrastructures (ESFRI), *Brno Declaration on Fostering a Global Ecosystem of Research Infrastructure* (14 December 2022) clause 2, 2

> … are essential to conduct breakthrough fundamental research and drive excellence, extending the frontiers of human knowledge beyond yet known horizons, to perform cutting-edge applied research, advancing the technology development and feeding into science-driven innovation, and to provide services in the support of tackling grand societal challenges…[5]

The National Collaborative Research Infrastructure Strategy (NCRIS) is an existing Australian Government initiative designed to deliver national research infrastructure (NRI) facilities, services and capabilities. Among the 24 existing facilities, several provide system wide support for data and compute (eg the Australian Research Data Commons, the National Computational Infrastructure, and the Pawsey Supercomputing) and some have domain or problem specific analytics capabilities relevant for health studies and environmental science (e.g. Bioplatforms Australia and PHRN (Population Health Research Network)). Recently, NCRIS has also established the Australian Earth-System Simulator (ACCESS-NRI). The aim of this facility is to support development and research with the Australian Community Climate and Earth System Simulator (ACCESS). The partners for this collaborative initiative include the Bureau of Meteorology, CSIRO, five Australian universities and other national and international organisations. NRIs form part of an ecosystem of enabling capabilities to support the Australian research sector and its work on national priorities.

25. For each of these enablers:

a. **What is currently working well?**
b. **What actions should the Strategy consider to support delivery?**

The ARDC's People RDC and HeSANDA research data infrastructure programs develop a national infrastructure model which facilitates the sharing of health information throughout Australia. Over the past four years, we have been working with our stakeholders in the clinical trials research sector to build a national data discovery portal and develop the required norms and standards for the publication of metadata and data dictionaries and indicators. Recently, the ARDC has commenced a follow-up project to extend the HeSANDA program to other health study data types, specifically clinical quality registries and cohort studies.

The ARDC supports DoHA's proposal to conduct a scan of current research activities pertaining to climate change and health (E.2.1). In our view, the successful implementation of the National Health and Climate Strategy will in part require enabling data and digital infrastructure. The ARDC would be happy to work with the Department to align our research data infrastructure programs to support the implementation of the Strategy. Specifically, we propose that the Strategy incorporates the FAIR Data Principles. Data is FAIR if it is "Findable," "Accessible under well defined conditions," "Interoperable" and "Reusable."[6] These principles have been referenced in both international and national instruments including the *UNESCO Recommendation on Open Science* (2021) and the *NHMRC Open Access Policy* (2022). FAIR data will also be necessary as part of a suite of activities to enhance the trustworthiness of artificial intelligent systems.

<https://www.esfri.eu/latest-esfri-news/brno-declaration-ris#:~:text=The%20Brno%20Declaration%20on%20Fostering,the%20closing%20of%20ICRI%202022.>.

[5] As above, clause 1, 2.

[6] Mons, Barend, Cameron Neylon, Jan Velterop, Michel Dumontier, Luiz Olavo Bonino da Silva Santos, and Mark D. Wilkinson. "Cloudy, increasingly FAIR; revisiting the FAIR Data guiding principles for the European Open Science Cloud." *Information Services & Use* 37, no. 1 (2017): 49-56.

To support the objectives, principles and enablers, we propose the following actions which are drawn from related government documents:

> (i) Address gaps in the generation of knowledge by supporting access to expertise, capabilities and infrastructure (i.e. research facilities, equipment, systems, services) that seeks to drive new research discoveries and accelerate innovation.[7]
>
> (ii) "Actively share data and research to streamline research efforts and facilitate the adoption of outcomes ensuring that they are accessible, interoperable and reusable where practical."[8]
>
> (iii) To avoid duplication and siloing of efforts, align with and complement other related strategic agendas and activities.[9]

Proposal (i) is edited text from the current MRFF Priorities. Proposals (ii) and (iii) derive from the *National Biosecurity Strategy* (2022). In our view, all three are applicable in the context of climate change and health.

[7] Australian Government, MRFF, *Australian Medical Research and Innovation Priorities 2022-24*, 2.
[8] Department of Agriculture, Fisheries and Forestry (DAFF), *National Biosecurity Strategy* 2022, (Canberra) 33.
[9] For example, the National Collaborative Research Infrastructure Strategy (NCRIS); as above, 36.

Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
Jacqueline Murdoch
What is your email address?
Policy@iuih.org.au
What is your organisation?
Institute for Urban Indigenous Health
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
☐ Yes ☒ No ☐ Prefer not to say
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☒ First Nations Health Service Provider ☐ First Nations Community Group ☒ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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About IUIH

The Institute for Urban Indigenous Health Ltd (IUIH) is a not-for-profit Aboriginal and Torres Strait Islander Community Controlled Health Service (CCHS) which leads the planning, development, and delivery of comprehensive primary health care and social support services for Aboriginal and Torres Strait Islander people in the South-East Queensland (SEQ) region.

IUIH was established in 2009 by its four founding Member Organisations:

- Aboriginal and Torres Strait Islander Community Health Service (ATSICHS) Brisbane Limited
- Kalwun Development Corporation Limited (Kalwun Health Service)
- Kambu Aboriginal and Torres Strait Islander Corporation for Health
- Yulu-Burri-Ba Aboriginal Corporation for Community Health

Since then, IUIH has established the Moreton Aboriginal and Torres Strait Islander Community Health Service (MATSICHS).

Together these entities comprise the IUIH Network of 19 clinics across SEQ (see Attachment A). Each member CCHS retains its own governance, with IUIH acting as the regional lead or 'backbone' of the Network. Through regional planning, development, advocacy and purchasing, alongside the implementation of a coordinated approach to service delivery known as the IUIH System of Care, IUIH achieves transformational change to the delivery of health and social support services across the Network.

IUIH is the largest Aboriginal and Torres Strait Islander Community Controlled Health Service (ACCHS) in Australia, operating an annual budget of over $110 million with over 740 staff. It is the biggest employer of Aboriginal and Torres Strait Islander people in SEQ.

Our SEQ region represents the largest and fastest growing Indigenous population in Australia, with current population exceeding 100,000 projected to grow to 130,000 by 2031[1].

Key recommendations

IUIH welcomes a National Health and Climate Strategy and its strengths-based emphasis on First Nations leadership, knowledge and experience as central to decision making on climate and health policy at all levels.

To further strengthen the National Health and Climate Strategy's applicability, content and appropriateness to the CCHS sector, we recommend the following:

1. A greater emphasis on prevention and comprehensive primary health care, including the provision of care with culture at the centre. The best way to improve healthcare whilst reducing emissions is to prevent illness and disease. Primary health care organisations – and especially CCHSs – play a key role in prevention and need to be at the centre of the Strategy.
2. A focus on place-based adaptation and mitigation planning given the diversity of Aboriginal and Torres Strait Islander cultures, as well as the diversity of climate impact on First Nations around Australia.
3. An explicit call to accelerate improvements in housing and environmental health, especially for Aboriginal and Torres Strait Islander people, given the increasing impact of housing on health in a changing climate.
4. Specific potential strategies and examples that are applicable in the primary health care context. Traditionally almost all policy and strategy has focussed on hospitals and large-scale health providers and their suppliers as opposed to smaller-scale community primary health organisations.

[1] ABS, Census of Population and Housing, 2021, Aboriginal and Torres Strait Islander Peoples Profile - I01.

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5. A specific reference to the need to fund the CCHS sector to provide leadership and expertise in decision making on climate and health, including but not limited to:

    - Participating in assessments of climate change impacts on communities and their consequences for health and wellbeing.

    - Funds to minimise the carbon footprint of the health system by transitioning to renewable energy, improving thermal properties of clinics (and staff housing in remote locations) and instituting behaviours to conserve energy and reduce medical waste.

    - Working with communities, local stakeholders/sectors, and where required external experts, to develop local adaptation and mitigation plans. Work across sectors such as transport, energy, communication and housing for coordinated sustainable outcomes.

6. A greater emphasis on the need to defund low value care and to streamline health care systems. Low value health care, duplication of care and unnecessary services are not client-centred and contribute to unsustainable health care.

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
An explicit vision has not been clearly articulated in the consultation paper – this needs to centre Aboriginal and Torres Strait Islander leadership, knowledge and expertise. "Measurement" should be reframed as an enabler rather than an objective of the Strategy. "Health in all policies" should be reframed as improving the social, cultural and environmental determinants of health. "Mitigation" should be reframed as "Sustainable and effective health systems" "Adaptation" should be reframed as "Climate resilient health systems" Therefore the three proposed objectives would be: 1. Sustainable and effective health systems 2. Climate resilient health systems 3. Improved social, cultural and environmental determinants of health
2. How could these principles be improved to better inform the objectives of the Strategy?
We support the central position of First Nations leadership in the principles of the Strategy and the strengths-based approach that this takes. The explanation of "tackling health inequities" uses deficit terminology and frames the populations as the problem, rather than highlighting the wider structural causes that lead to health inequities – this needs to be reworded. The contribution of environmental health and housing – and the inequity that exists in this between Aboriginal and Torres Strait Islander people and other Australians - needs to be explicitly referred to with respect to "tackling health inequities".

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We support the use of a population health perspective – this needs to be supported by local comprehensive primary health care that centres culture.
3. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
CCHSs provide comprehensive and holistic primary healthcare. The centrality of culture, social and emotional wellbeing and prevention in CCHSs align with the objectives of sustainable and effective health systems and the Strategy should draw upon this expertise both to continue this and as an example for mainstream health systems.
4. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
The Closing the Gap priority reforms which all governments and peak bodies have committed to could be used as the fundamental principles to allow for co-design and ensure First Nations voices, decision-making and leadership. These should be explicitly referenced and how they will be used explicitly laid out in the Strategy. The priority reforms are: 1. Formal partnerships and shared decision making 2. Building the community controlled sector 3. Transforming government organisations 4. Shared access to data and information at a regional levelf

Proposed Objective 1: Measurement

5. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
The IUIH Network is in the process of starting an internal climate and health reference group to improve sustainability and resilience.
6. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
The relative emissions of various programs - this data could be presented in a similar way to a cost-effectiveness analysis, e.g. emissions per unit of health outcome like a life year gained, or a death prevented The relative emissions of primary care vs. hospital care/tertiary care. The emissions impacts of low value care and the potential gains in reducing this. The emissions that could be avoided by closing the gaps in socioeconomic and health outcomes that affect Aboriginal and Torres Strait Islander people, e.g. by closing the gap in birthweights of babies.

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Proposed Objective 2: Mitigation

7. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?
Increased funding for prevention and comprehensive primary health care, especially CCHSs, to design their own models to keep people well and out of the hospital system.
8. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
NA
9. Where should the Strategy prioritise its emissions reduction efforts? a. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?
1. Prevention and optimising models of care 2. Supply chain 3. Medicines and gases 4. Waste 5. Built environment and facilities 6. Travel and transport
10. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
The Therapeutic Goods Administration should consider the safety and effectiveness of rescheduling over the counter metred dose inhalers.

Proposed Objective 3: Adaptation

14. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?
Housing and environmental health need to be prioritised. Adaptation actions need to be place-based given the diversity of impacts of climate change on First Nations people.
16. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Funding should be provided to health organisations, especially small organisations like ACCHSs, to design and begin to implement their own sustainability and resilience plans.

Proposed Objective 4: Health in All Policies

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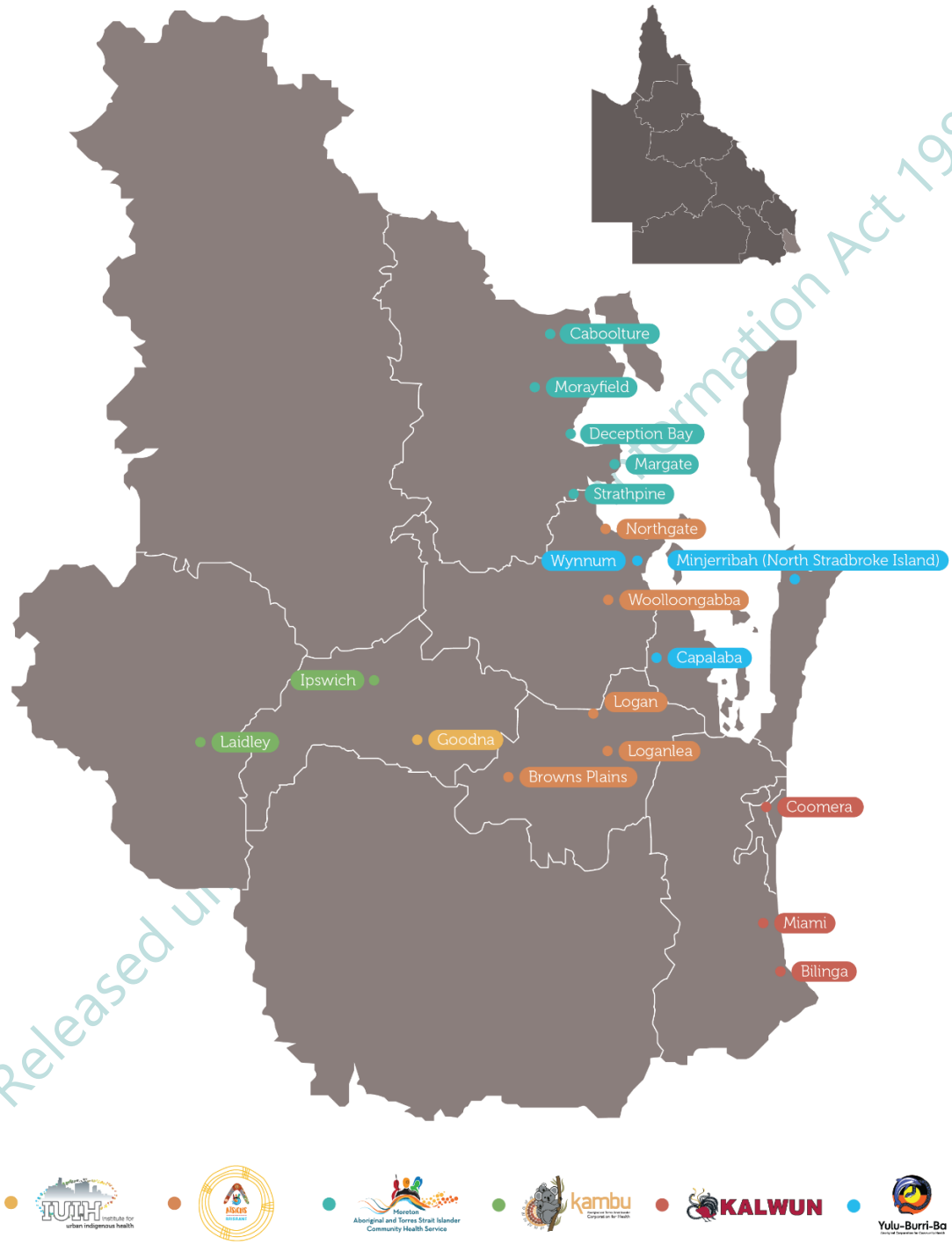
17. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
Urgent action is needed to improve housing and environmental health to reduce or avoid the potential for climate change to increase inequity between Aboriginal and Torres Strait Islander people and other Australians.

Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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Attachment A: IUIH Network



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Response to National Health Climate Strategy Consultation Paper

QAIHC
Queensland Aboriginal and Islander Health Council

The Queensland Aboriginal and Islander Health Council (QAIHC) is the peak leadership and policy organisation representing Aboriginal and Torres Strait Islander Community Controlled Health Organisations (ACCHOs).

QAIHC welcomes this opportunity to comment on the National Health Climate Strategy ("the Strategy") Consultation Paper. Climate change presents risks and opportunities for Aboriginal and Torres Strait Islander people, many of whom seek comprehensive primary health care from ACHHOs located across Queensland and Australia. ACCHOs provide more than half of all comprehensive health care to indigenous Queenslanders. However, the extent of this service provision is not universally acknowledged, nor is it well understood by mainstream service providers, including governments. There is a significant opportunity in the development of the National Health Climate Strategy to appropriately recognise the extent to which ACCHOs play an integral part in health service delivery.

Climate change impacts have the potential to significantly affect ACCHOs and the individuals and communities they support, including by:

- Putting clients, particularly the elderly and those required to work outdoors, at increased risk of exposure to extreme temperatures. This risk is exacerbated for clients who do not live in appropriately insulated housing or live without affordable access to air conditioning or other means of regulating temperature.
- Placing individuals and communities at increased risk of unplanned isolation due to climate events. For example, cyclones, fires, and floods all have the potential to isolate individuals or communities without warning and for extended periods of time.
- Significantly disrupting utilities and the other community infrastructure necessary for ACCHOs to provide health care. Reinstating or repairing infrastructure in rural and remote areas often takes time.
- Adversely impacting food security. In rural and remote Australia, food security is already tenuous. Many communities have limited access to affordable fresh food, this challenge may be compounded by weather events that significantly impact food production or the food supply chain.
- Changing communities' exposure to virus and insect vectors, for example Dengue Fever or Japanese Encephalitis Virus (JEV). Climate impacts might also result in increased pest populations or change the prevalence of dangerous animals, snakes, and marine stingers.
- Prolonged heat or cold might also change patterns of physical activity and exercise, particularly if it is no longer safe or comfortable to exercise outdoors. This may have disproportionate significance for indigenous people who experience a higher burden of disease and benefit significantly from preventative health measures including healthy diet and exercise.

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In a sustained climate emergency, it is anticipated that ACCHOs will be expected to provide care to communities, possibly including acute care, they are not currently resourced for. In this context, it will be important that community-controlled health organisations have strong links to local hospital and health services, and regional disaster management planning organisations and frameworks, are involved in disaster management scenario planning and forecasting, and receive financial assistance to operate without interruption during climate-related events.

It will also be important that ACCHOs are supported to:

- Operate during adverse climate events. This will require new investments in infrastructure to ensure their resilience, particularly during events that result in disruptions to services such as electricity supply. Some ACCHOs operate from buildings that are not well suited to their environment and may not function well if a climate event results in extreme temperature changes.

- Understand, and plan for climate impacts, including health risks for clients associated with climate change.
- Renew building stock, incorporating design approaches that increase resilience to weather events. Existing facilities are typically not suited to continued operation, particularly during extreme weather events. This is significant as ACCHOs often provide comprehensive primary health care to the majority of Aboriginal or Torres Strait Islanders in a community.

Climate related events present significant risks and opportunities. National and State responses to climate change must support community-controlled organisations to:

- Prepare for and mitigate the risks of climate change including adverse climate events, and
- benefit from technological advancements designed to create climate resilience.

ACCHOs should participate in the development of and be identified as a key partner in, local, regional and state disaster management plans. Building a significant planning capability will allow ACCHOs to:

- Identify risks and mitigation strategies, including by identifying required planned in investment in infrastructure or workforce capability.
- Receive up-to-date information about short, medium and long-term forecasts and climate data that will help inform planning and preparedness activities.
- Advocate for funding for the sector where evidence about likely climate impacts points to increased costs of service delivery.

Many ACCHOs in remote areas will need funding to build resilience including through investments in robust buildings and infrastructure that is thermally efficient and makes appropriate use of solar and battery storage, and emerging technologies.

New investments in infrastructure should ensure that ACCHOs incorporate features that allow the safe provision of primary health care during climate emergencies that are likely to disrupt utility networks. Where possible, new investment should also assist ACCHOs to decrease their carbon footprint

The Australian Centre for Disease Control Stakeholder Engagement Report (health.gov.au) highlights the significant risks of Climate Change. It also points to the need to drive ssignificant improvement in coordination across the Australian public health sector. Fostering genuine collaboration within our federated structure is key.

QAIHC believes this strategy should prioritise research into the impact of climate change on the health of Aboriginal and Torres Strait Islander people, whether living in rural and remote settings or in Australia's cities and towns.

The Strategy should acknowledge that Aboriginal and Torres Strait Islander people have demonstrated the capacity to understand and adapt for changes in environment for thousands of years. With disconnection from Country and traditional practices there should be a clear acknowledgement of the increased social and emotional wellbeing that this will have on Aboriginal and Torres Strait Islander people. Programs need to be developed and funded to address this.

QAIHC commends the authors on the quality and of the Consultation Paper. In general, it is comprehensive document that correctly identifies the relevant considerations that should inform the Strategy. For this reason, it is not necessary that QAIHC responds to all questions asked. However, we make the following comments about questions 1 and 2:

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1. How could these principles be improved to better inform the vision of the Strategy?

Balance between wisdom and action

The principles are broadly appropriate and will inform the vision of the strategy well. QAIHC is particularly supportive of the principles relating to population health and prevention (principle 3) and the partnership approach (principle 6). The clear articulation of the critical role indigenous knowledge will play and is welcomed.

While first nations leadership, knowledge and experience should be central to decision-making, QAIHC also believe the Strategy must strike the right balance between wisdom and action, pursuing evidence to inform policy making and undertaking projects that achieve meaningful change on the ground is critically important.

Express acknowledgement of the right to development, self-determination

While climate change presents significant risks, mitigation strategies, including approaches to decarbonisation, and health system reform present equally significant opportunities for innovation and economic development. The strategy should seek to ensure indigenous peoples and communities benefit from the economic, social and cultural development opportunities associated with creating a truly resilient health system In this context, the Strategy should expressly acknowledge both the right to development and commitments made by Australian governments, including through the National Agreement on Closing the Gap, to greater self-determination in the delivery of solutions.

The concept of the right to development is rooted in the idea that all individuals and peoples, especially those in indigenous cultures, have the inherent right to participate in, contribute to, and enjoy the benefits of economic, social, cultural, and political development. This right was formally recognized by the United Nations in the Declaration on the Right to Development in 1986.

2. How could these objectives be improved to better support the vision of the Strategy?

Expand objective of Adaption to address social determinants of health

QAIHC considers the objective of Adaption would be improved if it were expanded to expressly identify as an objective, the ability of health of the health system to operate across or in cooperation with other systems to address the health impacts of climate change by enabling the social determinants of health.

For example, if a climate- change related weather event impacts a discrete community, flooding the community, compromising water and sanitation, QAIHC believes the health system, whether acting alone or in cooperation with relevant agencies, must be able to respond immediately to impacts affecting social determinants of health.

In practical terms this might mean addressing water security, effecting repairs to sanitation systems or meeting housing needs as a priority in addition to any clinical responses. If the health system's only response is to treat the

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illness that results from a community living in a contaminated environment this Strategy will have failed. This is a particularly important consideration in rural and remote Australia where a hospital service may be the only organisation with the financial means and workforce capacity to respond immediately to reinstate infrastructure.

QAIHC also notes that our federated health system is inherently complex. In remote and very remote communities where market failure is already a debilitating feature of health service provision and primary care is often provided by State health services or the community-controlled sector as providers of last resort, a high degree of engagement and support from will be required from State health systems and community-controlled health organisations for the Strategy to succeed.

Health In All Policies (HIAP) approach

The Health in All Policies (HIAP) approach is supported. However, QAIHC is aware that HIAP, which seeks to integrate health considerations into the decision-making processes of all sectors and policies to improve population health and reduce health inequalities, is not without challenges, including:

- *Complexity and coordination:* Implementing the HIAP approach successfully requires a high degree of coordination and collaboration between government departments and stakeholders. This can be challenging due to differences in priorities, budgets, and timelines, making it difficult to achieve a unified and effective approach.

- *Lack of political support:* internationally, celebrated successes and failures, suggest HIAP relies heavily on political will and support. If there is insufficient backing from policymakers, particularly within government agencies, it may lead to underfunding or lack of commitment, hindering the implementation of cross-sectoral health initiatives. These challenges are potentially compounded in a federated system, where interface issues often interfere with efficient coordination and response.

- *Resource constraints:* Integrating health considerations into all policies may require additional resources, which some sectors might be unwilling or unable to allocate. Budget constraints and competing priorities could limit the feasibility of implementing HIAP fully.

- *Conflicting interests:* Different sectors often have competing interests and objectives. HIAP might face resistance from sectors that prioritise economic growth or other goals, leading to compromises that could dilute the health impact.

- *Slow policy-making process:* Including health considerations in policy development may slow down decision-making processes. This can lead to delays and hinder the agility required to respond to urgent public health issues.

- *Measurement and evaluation challenges:* It can be difficult to measure and attribute specific health outcomes solely to the HIAP approach since multiple factors contribute to population health. This makes it challenging to evaluate the effectiveness of the strategy accurately.

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- *Lack of awareness and understanding:* Many policymakers, professionals, and the public may not fully grasp the concept of HIAP, which can hinder its successful implementation and adoption.

- *Potential for marginalisation:* If not implemented carefully, the HIAP approach might unintentionally overlook vulnerable populations and exacerbate existing health inequities. Some sectors might prioritize policies that benefit specific groups, leaving marginalized communities behind.

- *Limited focus on individual behaviour:* While HIAP addresses structural determinants of health, it may not directly address individual behaviour change, which also plays a crucial role in overall health outcomes.

Despite these challenges, QAIHC accepts that – *if implemented successfully* – a HIAP approach has significant potential to address complex health challenges by encouraging collaboration across sectors and fostering a more holistic understanding of population health. To be successful, it requires ongoing evaluation, political commitment, and meaningful engagement with stakeholders from various sectors. That is, extraordinary will and skill.

About the Queensland Aboriginal and Islander Health Council

For more information about QAIHC, including our vision and values please visit our website - www.qaihc.com.au.

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Government of South Australia
SA Health

Ref: A5078918

Chief Public Health Officer
Public Health Division

Citi Centre Building
11 Hindmarsh Square
Adelaide SA 5000

PO Box 287 Rundle Mall
Adelaide SA 5000
DX 243

Tel 08 8226 6302
Fax 08 8226 0720
ABN 97 643 356 590

www.sahealth.sa.gov.au

Dr Madeleine Skellern
Director, National Health, Sustainability and Climate Unit
Department for Health and Aged Care
Office of Health Protection | Chief Medical Officer Group
Australian Government Department of Health and Aged Care
madeleine.skellern@health.gov.au

Dear Dr Skellern Madeleine

RE: Public consultation on the National Health and Climate Strategy

Thank you for your recent visit to South Australia to conduct the health sector consultation on the National Health and Climate Strategy. As a participant of this workshop, and the government officer's debrief that followed, I appreciated the opportunity to meet and provide input at this stage of the Strategy's development.

I note that the Strategy is intended to map out a much longer program of work supporting national priorities and effort, commencing with its first iteration as a three-year plan. I strongly welcome the potential for this Strategy to drive much needed climate change mitigation and adaptation initiatives and facilitate cross-government collaboration.

I acknowledge that the scope identified in the discussion paper and objectives, principles, high-level actions, and enablers that have been tabled for discussion to date are subject to change pending results from the recently concluded round of consultation.

It is important that any future iteration of the Strategy includes a clear vision, the scope to include future roles and responsibilities and a dedicated focus for primary prevention (as distinguished from primary care). It is also important that the Strategy consider national health reform arrangements, relevant health regulation and policy as significant levers and enablers for action, in addition to those already proposed.

In closing, I would appreciate your advice on the decision pathway and timeframe for finalisation for the Strategy as understanding these will be essential in providing essential jurisdictional input into any future iterations.

I look forward to engagement on the next iteration of the Strategy as this vital national roadmap and its priorities develops.

Yours sincerely

PROFESSOR NICOLA SPURRIER
Chief Public Health Officer
Public Health Division

1/08/2023

NACCHO
National Aboriginal Community Controlled Health Organisation
Aboriginal health in Aboriginal hands
www.naccho.org.au

National Health and Climate Strategy

Department of Health and Aged Care

July 2023

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ABOUT NACCHO

NACCHO is the national peak body representing 145 Aboriginal Community Controlled Health Organisations (ACCHOs). We also assist a number of other community-controlled organisations.

The first Aboriginal medical service was established at Redfern in 1971 as a response to the urgent need to provide decent, accessible health services for the largely medically uninsured Aboriginal population of Redfern. The mainstream was not working. So it was, that over fifty years ago, Aboriginal people took control and designed and delivered their own model of health care. Similar Aboriginal medical services quickly sprung up around the country. In 1974, a national representative body was formed to represent these Aboriginal medical services at the national level. This has grown into what NACCHO is today. All this predated Medibank in 1975.

NACCHO liaises with its membership, and the eight state/territory affiliates, governments, and other organisations on Aboriginal and Torres Strait Islander health and wellbeing policy and planning issues and advocacy relating to health service delivery, health information, research, public health, health financing and health programs.

ACCHOs range from large multi-functional services employing several medical practitioners and providing a wide range of services, to small services which rely on Aboriginal health practitioners and/or nurses to provide the bulk of primary health care services. Our 145 members provide services from about 550 clinics. Our sector provides over 3.1 million episodes of care per year for over 410,000 people across Australia, which includes about one million episodes of care in very remote regions.

ACCHOs contribute to improving Aboriginal and Torres Strait Islander health and wellbeing through the provision of comprehensive primary health care, and by integrating and coordinating care and services. Many provide home and site visits; medical, public health and health promotion services; allied health; nursing services; assistance with making appointments and transport; help accessing childcare or dealing with the justice system; drug and alcohol services; and help with income support. Our services build ongoing relationships to give continuity of care so that chronic conditions are managed, and preventative health care is targeted. Through local engagement and a proven service delivery model, our clients 'stick'. Clearly, the cultural safety in which we provide our services is a key factor of our success.

ACCHOs are also closing the employment gap. Collectively, we employ about 7,000 staff – 54 per cent of whom are Aboriginal or Torres Strait Islanders – which makes us the third largest employer of Aboriginal or Torres Strait people in the country.

Enquiries about this submission should be directed to:

NACCHO
Level 5, 2 Constitution Avenue
Canberra City ACT 2601
Telephone: 02 6246 9300
Email: policy@naccho.org.au
Website: naccho.org.au

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Recommendations

NACCHO recommends:

1. the Strategy utilise the traditional perspectives and expertise of Aboriginal and Torres Strait Islander peoples and Rangers in land and water management.
2. consideration of more effective and reliable power options for remote Aboriginal and Torres Strait Islander communities as part of the Strategy including the use of rooftop solar schemes.
3. major investment in adequate water systems by Commonwealth and jurisdictional governments as a critical primordial prevention measure to address endemic health issues in communities.
4. the inclusion of regulatory and funding levers to influence health product manufacturing and packaging to reduce waste.
5. dedicated, long-term funding for ACCHOs to deliver prevention and early intervention activities across their communities.
6. long-term investment in community-led, local food production and harvesting initiatives.
7. investment in roads, bridges and sea landings for remote communities to ensure reliable and efficient food supply as well as food security during periods of extreme weather.
8. major investment in housing from Commonwealth and jurisdictional governments as a critical primordial prevention measure to address endemic health issues in Aboriginal and Torres Strait Islander communities.
9. Government apply flexible, sustainable-design principles to housing for Aboriginal and Torres Strait Islander people that respond to local cultural needs, environments and climate change.
10. Government partner with community-controlled organisations, particularly ACCHOs, to undertake natural-disaster planning, response and recovery; and that ACCHOs are funded to support disaster management preparedness, response and recovery.

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Acknowledgements

NACCHO welcomes the opportunity to provide a submission to National Health and Climate Strategy – Consultation. NACCHO would like to acknowledge the valuable input received from Dr Alana Gall, Postdoctoral Research Fellow at Southern Cross University, the Aboriginal Health Council of Western Australia (AHCWA) and the HEAL Network in this submission. We also acknowledge the support of the Public Health Association of Australia.
NACCHO supports the submissions made by our Members and Affiliates to the consultation.

National Agreement on Closing the Gap

At the meeting of National Cabinet in early February 2023, First Ministers agreed to renew their commitment to Closing the Gap by re-signing the National Agreement, first signed in July 2020. The reforms and targets outlined in the National Agreement seek to overcome the inequality experienced by Aboriginal and Torres Strait Islander people and achieve life outcomes equal to all Australians.

This Government's first Closing the Gap Implementation Plan commits to achieving Closing the Gap targets *through implementation of the Priority Reforms*. This represents a shift away from focussing on the Targets, towards the structural changes that the Priority Reforms require, and which are more likely to achieve meaningful outcomes for our people in the long term:

Priority Reform Area 1 – Formal partnerships and shared decision-making
This Priority Reform commits to building and strengthening structures that empower Aboriginal and Torres Strait Islander people to share decision-making authority with governments to accelerate policy and place-based progress against Closing the Gap.

Priority Reform Area 2 – Building the community-controlled sector
This Priority Reform commits to building Aboriginal and Torres Strait Islander community-controlled sectors to deliver services to support Closing the Gap. In recognition that Aboriginal and Torres Strait Islander community-controlled services are better for Aboriginal and Torres Strait Islander people, achieve better results, employ more Aboriginal and Torres Strait Islander people and are often preferred over mainstream services.

Priority Reform Area 3 – Transformation of mainstream institutions
This Priority Reform commits to systemic and structural transformation of mainstream government organisations to improve to identify and eliminate racism, embed and practice cultural safety, deliver services in partnership with Aboriginal and Torres Strait Islander people, support truth telling about agencies' history with Aboriginal and Torres Strait Islander people, and engage fully and transparently with Aboriginal and Torres Strait Islander people when programs are being changed.

Priority Reform 4 – Sharing data and information to support decision making
This Priority Reform commits to shared access to location-specific data and information (data sovereignty) to inform local-decision making and support Aboriginal and Torres Strait Islander communities and organisations to support the achievement of the first three Priority Reforms.

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Introduction

Aboriginal and Torres Strait Islander people are the oldest continuous living culture in the world and have a deep understanding of and connection to Country. Through this connection, Aboriginal and Torres Strait Islander peoples have cared for and sustained their environment for thousands of years. Country holds a great significance for Aboriginal and Torres Strait Islander peoples and is deeply linked to culture, spirituality, identity, language and family. When Country is disrespected or damaged, not only does it cause disconnection from culture and spirituality, it also impacts the health and wellbeing of Aboriginal and Torres Strait Islander peoples. The ongoing legacy of colonisation, including the persistence of racism, discrepancies in life outcomes and the lack of input into public policy and programs, compound the impacts of climate change on Aboriginal and Torres Strait Islander people.

Impact on cultural practices

NACCHO welcomes the Strategy's acknowledgement of the negative impacts of climate change and global warming on Aboriginal and Torres Strait Islander cultural practices, and on health and wellbeing. One example is a Pakana/Palawa cultural practice called kanalritja[1], that has been impacted by rising acidity in the ocean. Higher acidity is affecting not only the numbers of mollusks used in kanalritja through decreased kelp growth, but also the quality of the shells, making them very thin and fragile. Adaptation and mitigation efforts are underway by Pakana/Palawa people in Tasmania to maintain this important cultural practice.[2]

It is critical to slow the rate of climate change and mitigate its impacts to ensure Aboriginal and Torres Strait Islander people can maintain connection to culture and Country through practices such as kanalritja. To do so, the Strategy must use the expertise of Aboriginal and Torres Strait Islander people and their long history of knowledge to manage the land and water.

Aboriginal and Torres Strait Islander Rangers continue to use traditional land management practices such as fire. They work to protect threatened native animals and plants, reduce and mitigate bushfires and maintain cultural sites. They do this by combining traditional knowledge and conservation training[3]. In northern and central Australia, Aboriginal and Torres Strait Islander Rangers have had an impact in guarding biodiversity and reducing bushfires. Research has shown that the world's best fire management systems in emission reduction practices are in northern and central Australia and being led by Aboriginal and Torres Strait Islander Rangers and Land Managers[4].

NACCHO is encouraged to note the Government's recent commitment to double the number of Aboriginal and Torres Strait Islander Rangers by 2030.

NACCHO recommends the Strategy utilise the traditional perspectives and expertise of Aboriginal and Torres Strait Islander peoples and Rangers in land and water management and embed this practice in Commonwealth and jurisdictional Safety Guidelines such as fire.

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[1] NITV, 1 March 2023, https://www.sbs.com.au/nitv/article/how-3d-printing-can-preserve-culture-in-the-face-of-climate-change/h481mj97e

[2] Australian Government Geoscience Australia. Retrieved from: https://www.ga.gov.au/education/classroom-resources/hazards/natural-hazards/bushfire.

[3] B Williamson. Caring for Country means tackling the climate crisis with Indigenous leadership: 3 things the new government must do, 2022. Retrieved from: https://theconversation.com/caring-for-country-means-tackling-the-climate-crisis-with-indigenous-leadership-3-things-the-new-government-must-do-183987

[4] R Fisher, J Altman. The world's best fire management system is in northern Australia, and it's led by Indigenous land managers, 2020. Retrieved from: https://theconversation.com/the-worlds-best-fire-management-system-is-in-northern-australia-and-its-led-by-indigenous-land-managers-133071

Impact on health and wellbeing

The impacts of climate change amplify health and wellbeing issues facing Aboriginal and Torres Strait Islander people and communities. The impact of climate change compounds the social determinants of health including, housing, employment conditions, education, social relationships, income, poverty and the distribution of power and resources. Changes in climate patterns cause greater frequency, severity and duration of extreme weather events, affecting the natural and built environment. Aboriginal and Torres Strait Islander people, particularly those living in regional and remote areas are at significant risk of poorer health outcomes as a result of climate change both directly through extreme events such as heatwaves, floods, bushfires, dust storms and indirectly via worsening air quality, threats to food and water supplies, and effects on mental health.

Climate change can also have direct health impacts which may include heat-related illness and respiratory illness from poor air quality. Climate change can also lead to food and water-borne illnesses and other infectious disease. Climate change may reduce the ability to access and engage in social gatherings and cultural practices, ceremonies and other activities—due to interruption of natural weather cycles, harsh weather conditions and/or inaccessibility of routes and/or destinations. Reduced cultural and community access and engagement has implications for social and cultural connectivity and wellbeing.[5]

Principles

NACCHO is very pleased to see a focus on First Nations leadership and health equity in the principles of the Strategy. We are also pleased to note the emphasis on Aboriginal and Torres Strait Islander health and climate change as well as the incorporation of the National Aboriginal and Torres Strait Islander Health Plan, the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan, and of course, the National Agreement on Closing the Gap.

If we hope to see real and sustained improvements for Aboriginal and Torres Strait Islander communities, deliver better health outcomes and improved social and emotional wellbeing, Aboriginal and Torres Strait Islander leadership and control must be at the core of systemic shifts in the way governments seek to address climate change. It is imperative that Government prioritise Aboriginal and Torres Strait Islander voices and expertise in developing the Strategy throughout the entirety of the work. Engagement with forums such as the Coalition of Peaks, Ranger groups and establishing an Aboriginal and Torres Strait Islander Advisory Group in the development of the Strategy is essential. The Strategy would also benefit from a review of Aboriginal and Torres Strait Islander projects that focus on climate change issues, mitigation and adaptation.

Objective 1: Measuring Emissions

A broader focus than emissions measurement is required. Acknowledging the difficulty of measuring other outputs such as waste, a focus on emissions only is unlikely to adequately capture the impact of health systems on climate change.

Objective 2: Mitigation

International climate science reports indicate that Australia is especially vulnerable to climate changes and its impacts, including heightening risks associated with heat, drought and bushfires. It is anticipated there will be an increasing impact on long sections of coastline, river deltas, wetland

[5] Ford, 2012. Indigenous Health and Climate Change. *American Journal of Public Health*, 102(7), https://ajph.apha

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areas and islands due to erosion and saltwater inundation, and that inland areas will also be more prone to bushfires, dust storms, extremes in temperatures, flooding and droughts.[6]

Built environment and facilities

In Australia, as the risk and impact of climate change increases, energy consumed for heating and cooling also increase. To address this issue, infrastructure needs to be better adapted, providing higher heating and cooling performance, while also reducing energy consumption. The simplest principles used to reduce consumption for heating and cooling can include glazing systems, better-designed windows, higher insulation levels, natural ventilation and rooftop solar panels. These techniques are effective, however, have not been placed at the core of building design practice, especially in remote communities and Aboriginal and Torres Strait Islander housing. Such initiatives could significantly reduce household and organisational reliance on fossil fuels.

Many remote communities are already on off-grid power and are using generators and pre-paid systems which is increases the risk of poor health outcomes. “Most Australians take safe housing and uninterrupted electricity for granted. Yet in remote Aboriginal and Torres Strait Islander communities, low quality poorly insulated housing and energy instability are common”.[7] Currently many Aboriginal and Torres Strait Islander communities do not have access to permanent, reliable power, this shortage is expected to increase during periods of temperature variability; which in turn has effect on health outcomes for Aboriginal and Torres Strait Islander people.[8]

A 2021 study of 3,300 Aboriginal and Torres Strait islander households in remote communities showed the extent of this issue. The study used daily smart meter data and regression analysis to assess the relationship between temperature, electricity usage and disconnection in 28 remote communities. The study found that nearly 91% of households experienced a disconnection from electricity during the 2018-2019 financial year. Moreover, 74% households experienced disconnection more than ten times.[9]

It is evident that prepaid meters often leave Aboriginal and Torres Islander households disconnected from electricity. Prepaid meters work by allowing households to purchase power cards and swipe on the meter for usage. If households do not have money on their power card, electricity is simply disconnected. This means that regulator protections against energy disconnection for consumers is non-existent. However, people living in urban areas largely use post-paid billing systems and have protection from disconnection. The use of rooftop solar power could be a solution for many Aboriginal and Torres Stair Islander households. Rooftop solar can reduce energy insecurity, as more than 3.4 million households are currently enjoying the benefits of renewable technology to help the environment and lower power bills.[10]

In a pilot study done by researchers at the Australian National University (ANU), rooftop solar demonstrated significant benefits for Aboriginal and Torres Strait Islander prepay customers. The pilot study trial tested the effectiveness of solar energy for prepay customers in Tennant Creek. A

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[6] CSIRO, 2012, *Marine and Atmospheric Impacts on Remote Indigenous Communities in Northern Australia*
[7] Lea T, Grealy L, Moskos M, et al. Sustainable Indigenous housing in regional and remote Australia — final report No. 368. Melbourne: Australian Housing and Urban Research Institute, 2021. https://www.ahuri.edu.au/research/final-reports/368
[8] Quilty S, Frank Jupurrurla N, Bailie RS, Gruen RL. Climate, housing, energy and Indigenous health: a call to action. Med J Aust. 2022 Jul 4;217(1):9-12. doi: 10.5694/mja2.51610. Epub 2022 Jun 16. PMID: 35708259; PMCID: PMC9545280.
[9] T Londen, S Quilty, et all. Energy insecurity during temperature extremes in remote Australia, 2021. Retrieved from: https://www.nature.com/articles/s41560-021-00942-2
[10] J Blakkarly. Remote Aboriginal communities left behind in Australia's rooftop solar boom, 2023. Retrieved from: https://www.choice.com.au/shopping/shopping-for-services/utilities/articles/remote-aboriginal-communities-left-behind-in-solar-boom

Warumungu elder and his family were disconnected 12 times a year before the installation of solar panels. However, after installation, benefits included a reduction in energy cost and elimination of disconnection. The family reported that having solar panels has made their household more stress free and enjoyable. Rooftop solar schemes should be made more readily available for Aboriginal and Torres Strait Islander communities, as they are amongst those who can gain the most from this scheme.[11]

NACCHO recommends consideration of more effective and reliable power options for remote Aboriginal and Torres Strait Islander communities as part of the Strategy including the use of rooftop solar schemes.

Water Quality

Climate change and its impact on fragile environmental conditions adversely affects water quality and the health and wellbeing of Aboriginal and Torres Strait Islander people and communities. water The impact on water quality and supply leaves many Aboriginal and Torres Strait Islander people in remote communities without access to safe drinking water. A recent study showed 25,000 Aboriginal and Torres Strait Islander people are not able to access safe drinking water across 99 remote communities.[12] Broome and surrounding regions face particular water quality and supply issues due to susceptibility to industrial contamination. Climate and associated weather changes worsen the situation. Water supplies in many communities are increasingly contaminated by microbes or chemicals - in the Kimberley this includes contaminates such as arsenic. High salinity and the use of shallow aquifers are problematic in many communities.

NACCHO recommends major investment in adequate water systems by Commonwealth and jurisdictional governments as a critical primordial prevention measure to address endemic health issues in communities.

Supply chain

A focus on health system mitigation is narrow at best, and small sale given the estimated contribution of 6% of national emissions. Government has higher level levers at its disposal that will be more impactful than small scale reductions in energy use. A focus on manufacture of health equipment and medications for example, is critical.

It has been highlighted that manufacturing is one of the top three sources of greenhouse gas emissions causing global warming and climate change, as well as the highest waste generation industry. Manufacturing companies produce various types of products from food packaging, electronic devices to large items like aircrafts. With the rapid population growth and development of countries, manufacturing sector is only set to increase which can have a detrimental impact on the environment unless more sustainable manufacturing protocols are adopted.[13]

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[11] Australian National University. Rooftop solar a game-changer for First Nations prepay customers in the Top End, 2023. Retrieved from: https://reporter.anu.edu.au/all-stories/rooftop-solar-a-game-changer-for-first-nations-prepay-customers-in-the-top-end

[12] The Conversation, https://theconversation.com/countless-reports-show-water-is-undrinkable-in-many-indigenous-communities-why-has-nothing-changed-194447

[13] Australian Government, Department of Industry, Science and Resources, 2022, Make it Happen: The Australian Government's Modern Manufacturing Strategy. Retrieved from: https://webarchive.nla.gov.au/awa/20220816062844/https://www.industry.gov.au/data-and-publications/make-it-happen-the-australian-governments-modern-manufacturing-strategy

There is an increasing reliance on single use plastics in the health system, including sheets and some surgical equipment which can be successfully reused, and indeed has for decades. The emphasis on single use items generates an extraordinary volume of non-recyclable waste. Waste reduction in medicines manufacture such as blister packs and cardboard packaging (largely used to simplify transport and counter display) could be significantly reduced with manufacturer engagement or legislative levers.

NACCHO recommends the inclusion of regulatory and funding levers to influence health product manufacturing and packaging to reduce waste.

Another industry that requires closer regulation and employment of funding levers is the mining industry. Emissions from construction, mining and developments in Aboriginal and Torres Strait Islander communities is causing issues with air quality leading to respiratory illness. Some ACCHOs are developing a data set for environmental dust contaminants to demonstrate the potential health impacts of local mining, a model which could be used in this Strategy.

Prevention and optimising models of care

To strengthen the preparedness and resilience of Aboriginal and Torres Strait Islander people and communities, a greater investment must be made in prevention and early intervention services—including public awareness raising and campaigning. This includes raising awareness of the need to keep families and households healthy and well, as identified by UPK, a model for improving environmental health in developing communities.[14] Many ACCHOs across Australia already deliver healthy lifestyle awareness programs, including healthy cooking workshops.[15] Such awareness raising can help embed local perspectives and expertise about traditional foods.

While a shift from primary care to prevention models is welcome, ensuring support for the provision of such work across the sector is required.

NACCHO recommends dedicated, long-term funding for ACCHOs to deliver prevention and early intervention activities across their communities.

However, a focus on behavioural change models can only do so much in the face of circumstances which hinder full participation and the ability for individuals to effectively undertake behavioural change. An increased focus on primordial prevention is critical. In particular, improvement to housing, water quality, energy reliability and food security will improve health and wellbeing outcomes for Aboriginal and Torres Strait Islander communities.

ACCHOs in urban, rural, regional and remote regions mitigate their contribution to climate change in a number of ways. These initiatives are often highly innovative within restricted funding. ACCHOs are pro-active in utilising renewable resources such as solar panels, and at working to reduce their environmental footprint.

The focus on behavioural change approaches also risk pushing responsibility for emissions back down to the individual and community level, rather than requiring government to play a more active, systemic role in mitigation efforts.

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[14] Bailie, 2001, *An Ecological Approach to Health Promotion in Remote Aboriginal Communities*, p43, para 4
[15] Winnunga Nimmityjah, 2019, *Healthy cooking workshops*, http://www.winnunga.org.au/

Communicable disease

Warmer climates also extend the disease transmission seasons. Climate change is improving the climatic and environmental conditions for the transmission of many diseases. This may also lead to an increase in the duration of disease transmission seasons and incidence of vector-borne diseases, such as Ross River virus and encephalitis.

Food safety and sovereignty

Members of Aboriginal and Torres Strait Islander communities have defined food security as '*the land and the sea is our food security. It is our right. Food security has two parts: food security is when the food of our ancestors is protected and always there for us and our children. It is when we can easily access and afford the right non-traditional food for a collective health and active life. When we are food secure, we can provide, share and fulfil our responsibilities, we can choose good food knowing how to make choices and how to prepare and use it.*' This definition highlights the importance of culture and traditional food sources in achieving food security for Aboriginal and Torres Strait Islander people.

The impact of climate change on the environment includes adverse effects on flora and fauna—including food sources. Combined with damage to and resultant inaccessibility of land and water, access to a traditional, healthy diet and hunting and gathering practices can be impeded preventing connection to land and water and affecting social and emotional wellbeing. Limited availability and use of traditional foods as a result of colonisation has resulted in changed dietary patterns of Aboriginal and Torres Strait people from nutrient-dense traditional diets, to energy-dense western diets.[16] It is estimated that 41% of total energy intake among Aboriginal and Torres Strait Islander people is derived from discretionary food and drink items, which are high in saturated fat, salt, and sugar.[17,18] Higher consumption of carbohydrate-based foods, sugar-sweetened beverages and processed meats, coupled with less fruit and vegetables results in sub-optimal dietary intake.[19]

Producing food in and around Aboriginal communities can help increase availability of healthy food. Harvesting and growing more food locally shortens the supply chain of fresh produce, lowering the cost and improving the quality and shelf life of fresh food.

The relationship between our food system and climate change is bi-directional. Food security cannot be addressed or achieved without acknowledging this relationship. Central to promoting food security for all, is building a resilient food system which can withstand climatic changes. Without this, food production, distribution and utilisation will be compromised. Australia currently and will continue to face the impacts of climate change associated with increase in extreme fire events, heavier rainfall, flooding, and longer periods of drought.[20] Many communities have already experienced the impact of extreme weather on food availability and cost. This was seen in

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[16] Shannon, Cindy (2002) *Acculturation: Aboriginal and Torres Strait Islander nutrition.* Asia Pacific Journal of Clinical Nutrition.
[17] Australian Bureau of Statistics (2015) *Australian Aboriginal and Torres Strait Islander Health Survey: Nutrition Results - Food and Nutrients, 2012–13*. Canberra: Australian Bureau of Statistics
[18] Sherriff, S., Kalucy, D., Tong, A. *et al.* (2022). *Murradambirra Dhangaang (make food secure): Aboriginal community and stakeholder perspectives on food insecurity in urban and regional Australia*. *BMC Public Health* 22
[19] Lindberg, R.; McNaughton, S.A.; Abbott, G.; Pollard, C.M.; Yaroch, A.L.; Livingstone, K.M. (2022) *The Diet Quality of Food-Insecure Australian Adults—A Nationally Representative Cross-Sectional Analysis*. *Nutrients 14*
[20] Commonwealth Government (2022) State of Climate 2022 Australian Government: Canberra

early 2022, when road closures due to flooding, in the Northern Territory, inhibited food transport trucks from reaching supermarkets.[21]

NACCHO recommends long-term investment in community-led, local food production and harvesting initiatives.

NACCHO recommends investment in roads, bridges and sea landings for remote communities to ensure reliable and efficient food supply as well as food security during periods of extreme weather.

NACCHO welcomes the development of the National Remote Food Security Strategy.

Objective 3: Adaptation

Critical to adaptation responses are efforts in the primordial prevention space: housing and food security, as well as emergency response.

Housing and infrastructure

Aboriginal and Torres Strait Islander people are significantly more likely to live in overcrowded, poorly maintained housing than other Australians. Inadequate housing is a key indicator and driver of poverty and a critical social determinant of health.[22] The evidence demonstrating the powerful links between housing and outcomes for health is abundant.[23] Safe, environmentally fit for purpose and adequate housing must be treated as a key primordial prevention measure for Aboriginal and Torres Strait Islander communities.[24] Improved hygiene facilities, water infrastructure and living conditions support prevention of communicable diseases including scabies, trachoma and otitis media. Housing shortages and overcrowding in rural and remote communities only exacerbate health issues.

Living in overcrowded housing increases the likelihood of health problems, from ear and eye infections, RHD and mental health issues.[25] The impact of deteriorating housing on occupants, and also the lack of air-conditioning and heating is made more severe where there is overcrowding and an inability to maintain hygiene. During the COVID-19 pandemic, overcrowding made it extremely difficult to isolate or quarantine.

There are also considerable problems with the quality of existing houses. Aboriginal housing and public housing used by Aboriginal and Torres Strait Islander people is often not constructed from high quality materials, and older houses (over 10 years old) often did not adhere to building codes. Extreme weather events increase the speed and extent of deterioration of this low quality housing, including the formation of mould, rusting of pipes and damage to doors and windows, which adversely effects occupants' wellbeing and safety. Occupants' physical health, economic productivity, psychological wellbeing and protection from health hazards and physical security is compromised.

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[21] Dick, S (2022) Northern Territory food shortages continue as parts of the Stuart Highway remain submerged in floodwater Viewed online at: https://www.abc.net.au/news/2022-01-31/nt-food-supply-shortages-flooding-road-transport/100792204

[22] Australian National Audit Office. Indigenous Housing Initiatives: the Fixing Houses for Better Health program. Canberra: Department of Families, Housing, Community Services and Indigenous Affairs ; 2010.

[23] Baker E, Mason K, Bentley R. Exploring the bi-directional relationship between health and housing in Australia. Urban policy
and research. 2014;71–84.

[24] NACCHO, Core Services and Outcomes Framework https://csof.naccho.org.au/

[25] NACCHO and The Royal Australian College of General Practitioners, 2018, *National guide*

Sustained investment in aged and deteriorating housing and community infrastructure more generally is critical. Not only do existing structures need to be upgraded, but future developments need to be designed and engineered to withstand significant weather events and changes in temperature. This should include passive or environmentally sound cooling, heating and ventilation systems. In addition, maintenance and repairs must be carried out efficiently and effectively and take into account changing environmental conditions. Adherence to building codes and guidelines are therefore essential to ensure that housing is climate appropriate and safe.

Addressing these issues provides an opportunity for growth and upskilling of the Aboriginal and Torres Strait Islander workforce with real jobs and provides local people genuine options to stay on Country.

NACCHO recommends major investment in housing from Commonwealth and jurisdictional governments as a critical primordial prevention measure to address endemic health issues in Aboriginal and Torres Strait Islander communities.

NACCHO recommends Government apply flexible, sustainable-design principles to housing for Aboriginal and Torres Strait Islander people that respond to local cultural needs, environments and climate change.

Emergency response

During the 2019-20 bushfire crisis it became clear that national disaster-coordination arrangements do not appropriately consider or cater for Aboriginal and Torres Strait Islander people and communities. Thousands of Aboriginal and Torres Strait Islander people in Victoria, New South Wales and the ACT were directly and indirectly affected by the 2019-20 bushfire crisis, with housing, clinics, Aboriginal Community Controlled Health Organisation (ACCHO) facilities and other community buildings being destroyed or damaged by fire.

During the crisis, NACCHO heard anecdotal evidence of a lack of support provided to Aboriginal and Torres Strait Islander peoples during and after the emergency. This included experiences of racism and discrimination when evacuating and seeking to access emergency support and supplies (including at evacuation centres). These experiences were reflected in NACCHO's submission to the ACT Royal Commission into National Disaster Arrangements[26] as well as a report from the ANU Centre for Aboriginal Economic Policy Research (CAEPR), which found that Aboriginal Australians experienced racism and unfair treatment during the bushfire catastrophe.[27]

Emergency support to Aboriginal and Torres Strait Islander communities affected by the bushfires was largely provided by the Aboriginal Community Controlled Health sector rather than funded agencies. ACCHOs provided this support without the benefit of being involved in emergency response planning, and without the additional funding, resources, staffing or surge capacity provided to mainstream agencies. The report by CAEPR also noted that, the lack of planning involving First Nations peoples meant that the response during the Black Summer bushfires was inadequate,

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[26] NACCHO (2020) *Submission to the Royal Commission into National Natural Disaster Arrangements*, ACT, Canberra.
[27] Williamson, B (2022) *Aboriginal Community Governance on the Frontlines and Faultlines in the Black Summer Bushfires,* Centre for Aboriginal Economic Policy Research, 300, p28. https://caepr.cass.anu.edu.au/research/publications/aboriginal-community-governance-frontlines-and-faultlines-black-summer

ineffective and inappropriate. In the aftermath of the disaster, a lack of much-needed mental health support impacted Aboriginal and Torres Strait Islander people.[28]

Disaster preparedness, response and recovery must recognise and fund the crucial role ACCHOs play in supporting their communities in crisis situations. The provision of consistent funding will help ensure the Aboriginal Community Controlled Health sector is able to provide immediate support to communities affected by natural disasters, has the ability to leverage a surge capacity and workforce in support of a response, and can work closely with emergency response services to coordinate a local response.

NACCHO recommends Government partner with community-controlled organisations, particularly ACCHOs, to undertake natural-disaster planning, response and recovery; and that ACCHOs are funded to support disaster management preparedness, response and recovery.

Objective 4: Health in All Policies

NACCHO is very pleased to see Health in All Policies (HiAP) focus in the Strategy. HiAP is an approach that incorporates considerations of health impacts into policymaking across sectors to improve health outcomes for all people and communities. HiAP focuses on the multitude of factors that go beyond healthcare and recognises that health outcomes are influenced by a wide range of social, commercial, political, environmental and cultural determinants.

The HiAP approach is important for Aboriginal and Torres Strait Islander peoples and communities because it considers the health impacts on Aboriginal and Torres Strait Islander people in all policy decisions. This aligns with the ACCHO model of health, as outlined in the NACCHO Core Services and Outcomes Framework[29] – a holistic approach that considers and addresses factors that contribute to health and wellbeing. The HiAP approach may also be effective in identifying gaps in evidence and achieving health equity.

A HiAP approach supports action to address the social determinants of health that leave some Aboriginal and Torres Strait Islander communities more vulnerable to the impacts of climate change. Particular areas to be addressed include improvement of housing, water supply, food security, and prioritising preventative health. As mentioned above, inadequate housing is a key indicator and driver of poverty and a critical social determinant of health.

A HiAP approach also aligns with National Agreement targets to close the gap in health outcomes and life expectancy for Aboriginal and Torres Strait Islander people.

Enablers

The enablers could be improved to better inform the objectives of the Strategy by emphasising the need for a genuine partnership with Aboriginal and Torres Strait Islander people in line with the stated principle of Aboriginal and Torres Strait Islander leadership. It is not sufficient to simply consult, engage or collaborate with Aboriginal and Torres Strait Islander people, rather the Strategy must have an active partnership and co-design process. This aligns with Priority Reform 1 of the National Agreement on Closing the Gap – shared decision-making.

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[28] National Mental Health Commission (2021) *Our Stories Beyond the Disaster* https://www.mentalhealthcommission.gov.au/getmedia/5221a681-0530-475b-8396-c8fc51c1ac3d/Our-Stories-Beyond-the-Disaster-Research-Report

[29] https://csof.naccho.org.au

Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

DRAFT Thematic stakeholder engagement report

11 August 2023



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What we asked



1 What we asked

1.1 Overview of stakeholder engagement process

The Australian Government is developing a National Health and Climate Strategy (the Strategy). A vital input to the Strategy is the different views, ideas and experiences from stakeholders and the community. To capture these perspectives, the Department of Health and Aged Care (the Department) released a Consultation Paper and undertook a range stakeholder engagement activity, including national workshops, written submissions, and survey responses. The mixed-mode stakeholder engagement process provided an opportunity for a diverse range of voices to contribute and provide feedback on the Consultation Paper, as well as the scope and focus of the Strategy. The below provides a summary of stakeholder engagement activity to date.



Figure 1 – Overview of stakeholder engagement

1.1.1 Consultation Hub and Consultation Paper

During engagement activities, the Department's Consultation Hub provided stakeholders with information regarding the need for a Strategy and outlined available engagement avenues including an invitation for stakeholders to contribute via a long form submission and a shorter survey alternative. The Department drafted a Consultation Paper (available via the Consultation Hub) as a starting point for testing the proposed approach to strategy development, posing 25 questions to frame conversations, written submissions, and online surveys.

1.1.2 Online submissions and survey

The written submissions and the online survey were open to public response from 2 June 2023 to 24 July 2023. The Department received a total of 166 submissions (within the stipulated consultation timeframes) and 104 survey responses, from organisations and individuals across the

diverse stakeholder landscape including medical professionals, primary care, advocacy organisations, academia and manufacturers, as well as medical societies and colleges.

1.1.3 Workshops

In addition to written responses, 12 workshops (three virtual and nine face-to-face) and a First Nations roundtable were held by the Department with relevant organisations, interest groups, governments, and experts. Over 750 invitations were sent to organisations and/or individuals across the breadth of stakeholder groups (as identified by the Department in Figure 2), with over 180 stakeholders attending and contributing to workshop discussions.

The workshops were designed to capture stakeholders' views on the proposed Strategy design including the scope, principles, objectives, and enablers. Workshops were also used to identify sector- and stakeholder-specific focus areas and actions to support the implementation of the Strategy. Each workshop was tailored to best capture the expertise and opinions in the room. Specific workshops targeted aged care, disability, First Nations, and primary care sectors. Phase 2 consultations will be held over August and September 2023 to continue gathering insights from other targeted stakeholder groups. At the completion of each workshop, stakeholders were reminded of the opportunity to further contribute to the discussion and Strategy development via the Consultation Hub.

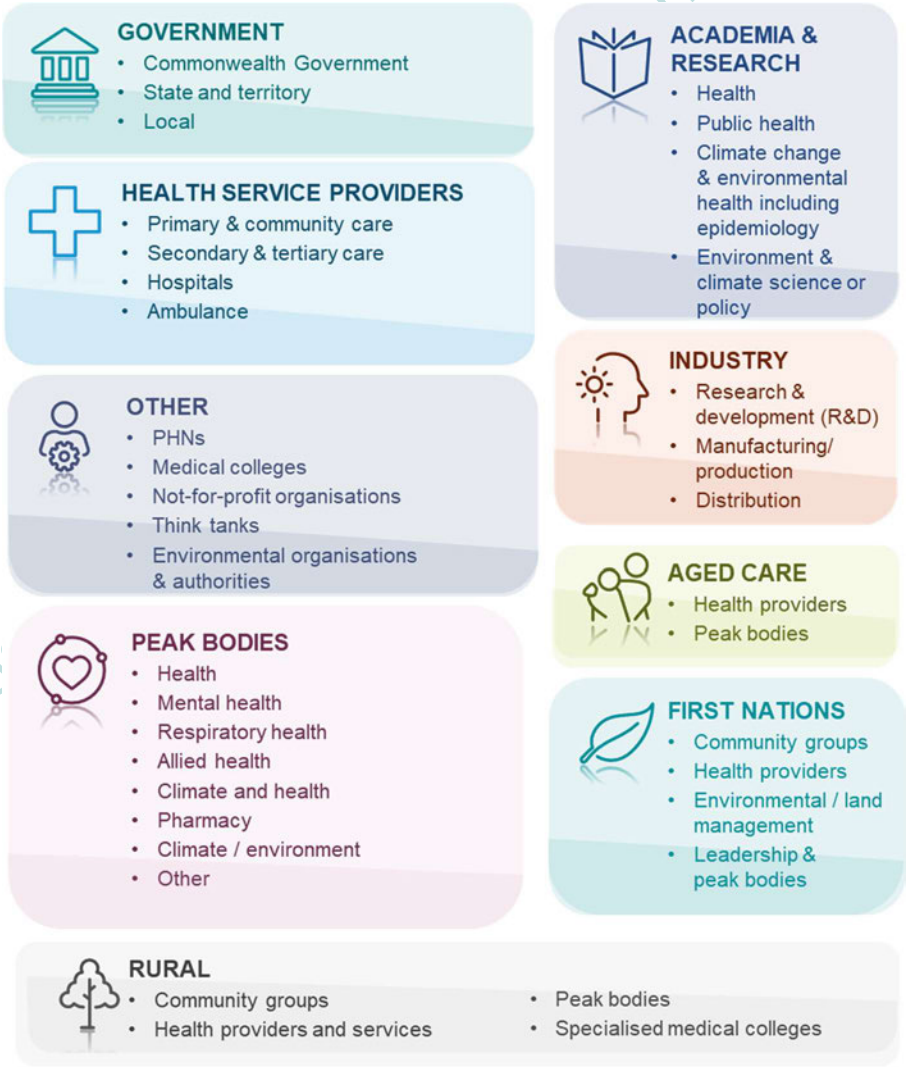


Figure 2 - Stakeholder consultation groups

1.1.4 Limitations

- Based on condensed project timeframes, this report covers high-level themes, with granular detail provided in thematic extracts (not included with this report). Analysis and time allocated to thematic reporting were shortened to provide stakeholders with sufficient time to contribute. Further actions and focus areas will be deduced and prioritised by the Department during the analysis and drafting stages of the Strategy development.
- The report is thematic in nature and as such does not identify or attribute comments to individuals or organisations; rather, it refers to the relevant interested stakeholder groups. The Department will be undertaking targeted discussions with identified organisations and individuals where necessary to gather further details.
- To the extent information presented within this report was provided by stakeholders through the consultation process, it has not been reviewed for factual accuracy, and is representative of themes arising across the engagement activity. Best efforts have been made to represent stakeholders accurately; however, no further work has been undertaken to validate this information. Further research should be performed to support the Strategy developed from this consultation process.
- This report did not aim to quantify the strength or weight of stakeholder views and focuses only on thematic presentation. The views presented are limited by the sample of stakeholders that engaged with the consultation process and is not a representative sample.

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What stakeholders said



2 What stakeholders said

Building on the Consultation Paper and feedback from the consultation process, the themes captured in this section are organised in two categories, specifically:

- **Strategy development and design** – Focuses on feedback and insights gathered relating to proposed design, scope and intent as presented in the Consultation Paper i.e., principles, objectives, and enablers.
- **Consultation topics** – Illustrates thematic areas of focus which have emerged through the various channels of consultation. These topics identify the key areas of action across all objectives outlined in the Consultation Paper, including measurement, mitigation, adaptation, and Health in All Policies.

This report consolidates the insights and themes from across workshops, written submissions, and survey responses under these two categories and their associated themes. Reference has been made to the relevant questions in the Consultation Paper which are most aligned to the stakeholder responses.

The insights across the mixed modes of stakeholder engagement broadly align. In a small number of instances where divergent views emerged, these have been highlighted.

2.1 Strategy development and design

2.1.1 Approach to development of the Strategy

2.1.1.1 Vision, purpose, and outcome

Stakeholders consistently raised the need for a clearly defined Vision Statement to support the objectives of the Strategy.

- Most stakeholders noted that the Consultation Paper does not yet contain a Vision Statement to underpin the objectives and actions of the Strategy. The Strategy states an overarching purpose, then shifts the focus to listing the sectors that should be involved. A Vision Statement should be added as a priority so that the objectives can be reviewed in context of the Vision.
- A stakeholder representing First Nations people encouraged a holistic vision that strives to mitigate the short-, medium- and long-term impacts of climate change, and harnesses opportunities for systemic transformation.
- A peak body proposed a vision and purpose for the Strategy (this was also referenced in multiple other stakeholder submissions) specifically:
    - **Proposed vision** – 'A healthy, climate resilient community and net zero healthcare system'.
    - **Proposed purpose** – 'To reduce the impacts of climate change on the health of the population and the health system; and, to guide healthcare decarbonisation in a culturally safe and just way'.
- A peak body noted the Strategy must also be explicit in its intended outcomes, focusing on protection of population health and wellbeing. They proposed the intended outcomes to be 'To prevent illness, injury and death associated with climate change; minimise the healthcare systems' contribution to Australian emissions; and ensure health systems resilience'.

2.1.1.2 Language, terminology, and definitions

- **Glossary of terminology –** It was recommended that the Strategy include a glossary of definitions so that stakeholders can clearly understand the intention throughout the Strategy, in

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particular ‘health system’, ‘adaptation’, and ‘mitigation’. It was suggested it could leverage ‘*An Australian glossary on Health and Climate Change’.* The glossary provides a shared understanding of the terminology used on health and climate change and has been developed by academics and informed by end-user stakeholders.

- **People in Australia** – It was noted the word “Australians” excludes people living in Australia who are not citizens. This is particularly important in the health context with the challenges faced by culturally and linguistically diverse communities in navigating complex healthcare systems to access care. Where appropriate, the Strategy should refer to “people in Australia” rather than “Australians”.
- **Urgency and emergency** – Stakeholders consistently raised the need to emphasise this is a climate emergency and adopt action-orientated language to drive the necessary change and highlight the urgency. Stakeholders want the Strategy to acknowledge that climate change is also a health emergency and reflect the magnitude of change necessary to avert the worst health impacts.
- **Physical and mental health impacts** – Throughout the Strategy, reference should be made to both 'physical and mental health' impacts of climate change rather than just focusing only on physical impacts.
- **In-scope organisations** – It is important that the Strategy includes a defined scope as to which organisations and structures the Strategy is aimed at. Stakeholders expressed that clarity around the inclusion of services and organisations is important because actions and funding are likely to be allocated according to the organisations named in the Strategy.
- **Children and young people** – Stakeholders noted that throughout the Consultation Paper there is little mention of infants, children, and young people as an at-risk population. This demographic of the Australian population should be acknowledged within the strategy including incorporating their perspectives in consultation, outlining their health impacts from climate change, and including them in the Strategy’s action areas.

2.1.1.3 Messaging of the Strategy

Stakeholders provided the following overarching comments regarding the messaging of the Strategy and what they viewed as critical to success:

- **Timelines and prioritisation** – Stakeholders emphasised the need for the Strategy to provide timelines, priorities, and time horizons for the delivery of the Strategy. An Implementation Plan should be developed to support and accompany the Strategy over the next three years.
- **Emission targets** – As discussed in 2.1.3 Objectives, stakeholders noted the need for more ambitious National emissions reduction targets across all sectors of the Australian economy, including achieving targets earlier than timelines currently set by the Commonwealth Government.
- **Fossil fuels** – Many stakeholders advocated for the rapid transition of Australia’s energy generation facilities away from fossil fuel and towards 100% renewable. See further detail in section 2.2.10 Health in All Policies.
- **Objectives and principles** – Stakeholders called for an explanation on the purpose of the objectives and principles and how they will be used in the development and implementation of the Strategy. Stakeholders also wanted further detail on how these were selected.
- **Using existing frameworks** – Stakeholders advocated for the Strategy to leverage existing climate change and health progress and frameworks in its development. Highlighting the option to leverage previous consultation with climate and health experts to streamline the Strategy development. The *‘Healthy, Regenerative and Just: Framework for a national strategy on climate, health and wellbeing for Australia’*, was explicitly noted as representing relevant experts’ insights and providing relevant policy actions for consideration in drafting the Strategy. The importance of using existing First Nations frameworks was also underlined.

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- **Causes of climate change** – Stakeholders reported that the Strategy should introduce the causes of climate change early in the document to establish context around the actions.
- **Governance arrangements** – Stakeholders suggested mapping the existing forums and governance arrangements which could help in articulating the future roles and responsibilities under the Strategy. Stakeholders noted that the establishment and transparency of governance arrangements and mechanisms, such as advisory boards and Interdepartmental committees, will be key to Strategy implementation.

2.1.2 Scope of emissions

Questions from Consultation Paper

Q3	Which of the various types of greenhouse gas emissions discussed above [in the Consultation Paper] should be in scope of the Strategy's emission reduction efforts?

- **Scope of emissions –** The majority of stakeholders called for all scope 1, 2 and 3 emissions to be included in the remit of the Strategy's emissions reduction efforts, while a smaller number of stakeholders thought that including scope 2 and 3 emissions may be unachievable. The majority view was that clear identification of healthcare sector emissions that fall under each scope is needed. Many stakeholders also called for the scope of the Strategy to be reframed beyond carbon emission reduction of the health and aged care system to address health impacts of climate change on the population. Stakeholders suggested the following:
    - The *National Greenhouse and Energy Reporting Scheme* (NGERS) should be expanded beyond scope 1 and 2 emissions. Stakeholders reported that scope 3 emissions embodied in the supply chain are not a regulatory requirement under the Scheme, so they are not measured or reported despite being the largest contributor to the healthcare footprint. Many stakeholders highlighted that scope 1 and 2 emissions are already commonly measured across jurisdictions.
    - Scope 3 emissions comprise a large proportion of total health and aged care sector emissions (some stakeholders cited approximately 70% to 90%) and therefore warrant a large focus in the Strategy. However, some stakeholders called for treating all scope emissions with equal importance. Health and aged care industry reporting standards may assist in ensuring scope 3 emissions are carefully monitored. Measurement should be consistent across the health and aged care sector.
    - While patient and visitor travel may not fall under Scope 3 emissions criteria, estimates from other comparable settings, namely England's National Health Service (NHS), show it is possible to collect required data. At a minimum, stakeholders called for a feasibility study for measuring health-related travel emissions be conducted. Noting ideally, emissions from all health and aged care travel must be included. Stakeholders emphasised that the Department should look to emulate the approaches by the NHS, particularly around scope 3 emissions.
    - The reduction of scope 3 emissions could be made more explicit within the Strategy's Health in All Policies approach. Emissions should focus both within and outside the health and aged care systems.
    - The Department could use process-based lifecycle assessment and multi-region input–output (MRIO) modelling (as used for the NHS for this purpose) should be included within the Strategy as an important contributor and support for evidence-based decision making around reducing total healthcare emissions.
    - Multiple stakeholders advocated for the inclusion of all scope emissions as a crucial tool to reaching a target of 80% reduction in all emissions by 2030 and carbon-neutrality by 2040.

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- It was proposed that there should be disaggregation of scope 2 figures for the hospital system. The conversion of hospital energy use to 100% renewable can then be targeted and emissions reductions measured.
- Stakeholders called for the inclusion of offshore scope 3 emissions, particularly those from pharmaceuticals and medical devices. This would change the purchasing power of health and aged care so that procurement can be moved towards lower carbon products and impact pharmaceutical and manufacturing decisions on products made overseas.
- There should be a mechanism to measure the complex interplay between different types of greenhouse gases in health and aged care. For example, comprehensive lifecycle assessments have repeatedly determined that adopting reusable over single-use health products can substantially reduce emissions, particularly when the hospital or aged care facility's electricity source transitions to renewables. If scope 3 sources were excluded, the carbon reductions and benefits of instituting policies such as increasing reusable consumables would not be captured.
- Some stakeholders advocated for inclusion of greenhouse gas emissions from the veterinary sector. Based on stakeholder feedback, there should be synergy between climate policy, public health policy and animal health policy, given that animals contribute significantly to people's wellbeing as companions, working animals, and for farmers as a source of income.

2.1.3 Objectives

Questions from Consultation Paper

Q1	How could these objectives be improved to better support the vision of the Strategy?

- The majority (65%, n=60) of those who answered this question noted that the four objectives outlined within the Consultation Paper support the vision of the Strategy. See **Error! Reference source not found.** for a breakdown of responses to this question. A total of 93 responses were received for this question.
- Noting, in some instances stakeholders appear to have selected option 'no' as an opportunity to provide further details or explanation rather than disagreeing with the objectives.
- Across workshops, surveys and written submissions stakeholders provided commentary to both improve the objectives and suggested additional objectives to be included within the Strategy, as detailed below.

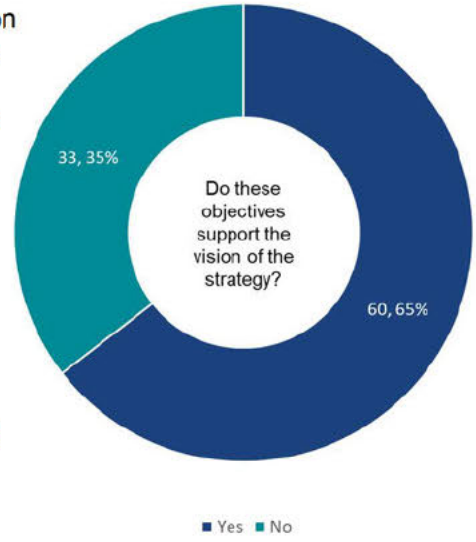


Figure 3 - Survey results to question 6

2.1.3.1 Design of objectives

- **Prioritisation of objectives** – Several stakeholders requested re-ordering the objectives to illustrate priorities and ensure the focus is on enhancing community health, wellbeing, and resilience to climate change.
- **Integration with other strategies** – The Strategy should ensure it aligns with objectives and strategies in other sectors which target similar outcomes. This will ensure that policy efforts are not duplicated and are amplified by work already underway.
- **Targets and detail** – The current framing of the objectives could be strengthened through the inclusion of meaningful targets and key outcomes so that the progress of the objectives can be

measured. Stakeholders noted the need for mitigation targets which are evidence-based and aligned to government targets across the various time horizons. Further discussed below.

- **Proposed 'reframed' objectives** – There was broad reference to and endorsement across stakeholders of the reframed objectives proposed by an Australian peak body. Specifically:
    - Objective 1. Promoting and protecting health and wellbeing: This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at both national, state and territory and local government level.
    - Objective 2. Build a climate resilient community and health system: This Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.
    - Objective 3. Establish a net zero health and aged care system: This Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting best scientific evidence.

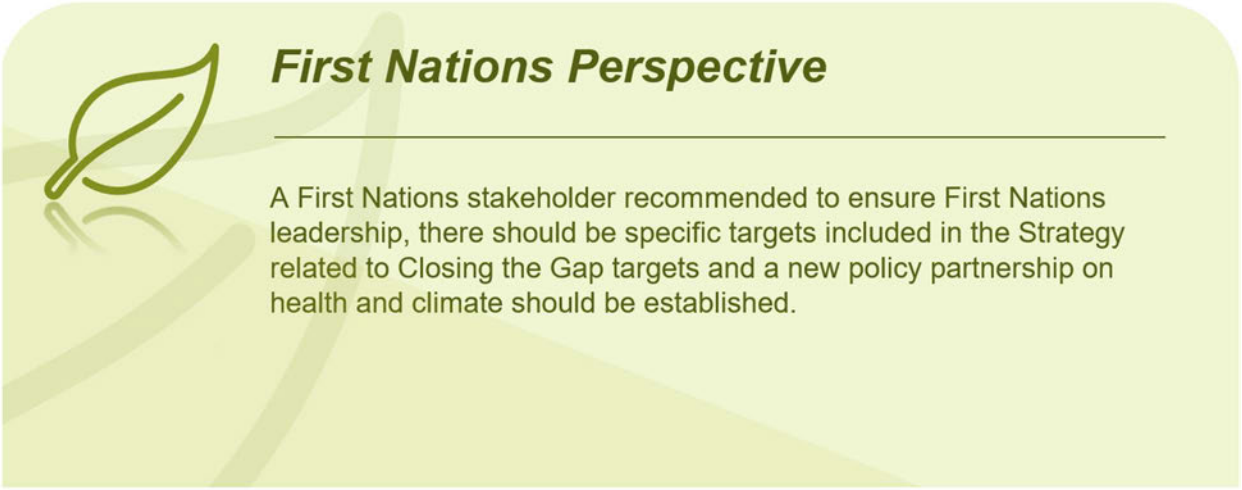
2.1.3.2 Updates to specific objectives

In addition to the above overarching stakeholder comments the following concepts emerged relating to specific objectives. Noting further analysis regarding the proposed actions and focus of the objectives is covered in the following section 2.2 Consultation Topics.

- **Measurement as an enabler** – There were divergent views raised regarding whether measurement should be captured as an objective or rather an enabler to provide the foundation for action. However, a large proportion of stakeholders agreed that measurement should be considered an enabler.
- **Mitigation targets and measuring progress** – Commentary provided across both measurement and mitigation objectives consistently noted the need for aspirational and consistent targets:
    - Stakeholders indicated that it is imperative the Strategy includes specific emissions reductions targets that are consistent with scientific evidence and current best practice.
    - Stakeholders also commented that the measurement objective currently lacks a sense of urgency and to advocate for anything less would undermine the commitment to protect Australian's health and wellbeing from climate change. Some stakeholders representing the views of medical professionals, climate action groups and other groups provided further commentary in this area and specific targets:
        - The objective should align with best practice by considering the emissions reduction targets and actions that are already being undertaken across Australia. For example, the commitment of Hunter New England Local Health Service to be carbon neutral by 2030.
        - Adopt a similar target to the NHS's *Delivering a 'Net Zero' National Health Service*, which proposes net zero by 2040 for emissions the NHS controls directly, and net zero by 2045 for emissions the NHS can influence.
        - Some stakeholders perceived the emission reduction targets outlined in the Consultation Paper as inadequate, preferring more ambitious net zero commitments. Specifically, stakeholders provided targets between a minimum of 50% of 2005 levels by 2030 (in accordance with the *Paris Agreement*) to 75% below 2005 levels by 2030. Stakeholders also went on to elucidate the need for net zero emissions for all sectors, inclusive of healthcare and exports ranging from 2035 to 2045, with others calling for the sector to be net zero by 2040, with an interim reduction target of 80% by 2030.

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— Stakeholders called for the establishment of targets and measures for climate-related injury and disease prevention, health outcomes and mitigation.



- **Extend adaptation beyond health system** – At present, the Consultation Paper refers largely to adaptation in the health system and stakeholders noted that communities should be at the forefront, rather than health systems. Numerous stakeholders expressed that there are two components to adaptation: how the healthcare system adapts, and how the community adapts.

  Some called for adaption to be split into two components – 'Resilience of the health system' and 'Resilience of the community'. Whilst both require adaptation, stakeholders viewed them as two conceptually different objectives. Health system resilience could be determined by this Strategy, whilst community resilience could be addressed in broader climate change resilience strategies.
- **Expand Health in All Policies** – It was suggested the Health in All Policies objective be expanded to reflect the efforts across multiple policy areas. For example, 'Maximise the synergies between good climate policy and public health policy by working across policy areas and sectors to support accelerated emissions reduction and adaptation efforts to protect and improve public health and wellbeing.'

2.1.3.3 Additional objectives to be considered

The following provides an overview of stakeholder suggested objectives for consideration of inclusion in the Strategy:

- **Establish a net zero health and aged care system** – This objective would guide the development of a national net zero plan for health and aged care, based on a comprehensive assessment of the Australian health and aged care system's carbon footprint and best scientific evidence.
- **Informed and engaged communities** – Focused on ensuring communities are informed of the urgency for decarbonisation and the need to move towards sustainable healthcare and are also engaged in mitigation and adaptation efforts.
- **Climate in all health policies** – This objective would signal to the health sector and the Australian community that reducing the impact of healthcare on the planet is everyone's responsibility and should be embedded in all health policy and practice decisions.
- **Leadership and governance** – The integrated translation of policy into practice requires new ways of collaborating, redefining shared authority and facilitating effective shared decision making. It was highlighted that Governance and Leadership may sit better as an objective rather than an enabler, to drive action.
- **Targeted adaptation support** – Specific objective focused on supporting the adaptation needs of priority populations at greater risk of climate change health impacts.

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- **First Nations leadership** – It was recommended that the Department include an objective that works towards Aboriginal and Torres Strait Islander leadership, rather than this being a guiding principle alone. This would support the development of tangible actions that empower First Nations leadership.
- **Planetary Health Equity** – A key objective should be the achievement of planetary health equity (PHE) – the equitable enjoyment of good health in a stable ecosystem. This definition of PHE recognises the impact of climate change on health and health inequities via social factors. It also recognises the importance for health equity of addressing the underlying drivers of climate change.

2.1.4 Principles

Questions from Consultation Paper

Q2	How could these principles be improved to better inform the objectives of the Strategy?

- The majority (67%, n=59) of survey respondents noted that the principles outlined within the Consultation Paper inform the objectives of the Strategy, see **Error! Reference source not found.** for a breakdown of responses to this question. A total of 88 responses were received for this question.
- Noting, in some instances stakeholders appear to have selected option 'no' as an opportunity to provide further details or explanation rather than disagreeing with the principles.
- Across workshops, surveys and written submissions stakeholders provided commentary to both improve the principles and suggested additional principles to be included within the Strategy. The below sections provide a high-level summary of these suggestions, it is not intended to be a comprehensive list, further information is contained within the stakeholder engagement analysis.

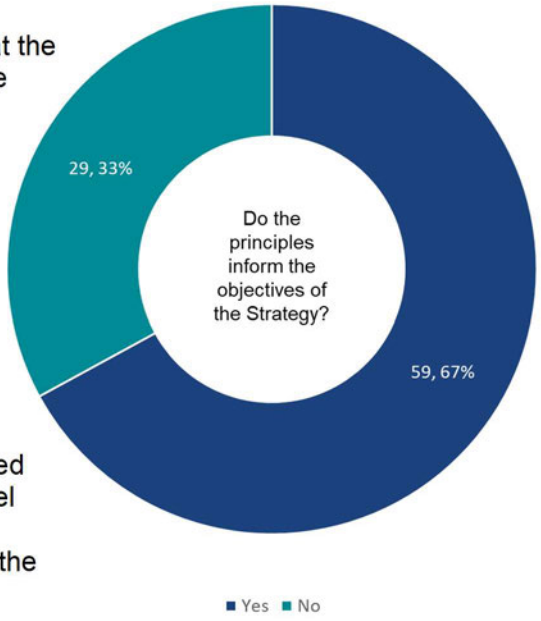


Figure 4 – Survey results to question 7

2.1.4.1 Additional principles suggested

In addition to the principles outlined in the Consultation Paper, stakeholders suggested the following principles:

- **'Do no harm'** – It is essential that safety and quality is central to any actions proposed by the Strategy. Prioritising maintenance of the care outcomes at all stages.
- **Human right to health** – Many stakeholders cited that this Strategy should be underpinned by the principle of Health being a universal human right. Stakeholders affirmed that this right outlines "a clear set of legal obligations on states to ensure appropriate conditions for the enjoyment of health for all people without discrimination". Some stakeholders also mentioned other human rights which intersect with health determinants, such as those related to housing and people with a disability.
- **Holistic view of value-based healthcare** – The Strategy must be underpinned by the established principles of a values-based healthcare system, which include maximising health outcomes, financial sustainability, patient experience, healthcare professional well-being and experience, and addressing inequities.
- **Climate justice/intergenerational equity** – Those who have often contributed the least to the climate crisis are impacted the most, for example, First Nations, young people, people with

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existing co-morbidities. It is vital that inter- and intragenerational health inequality in climate impacts is acknowledged.

- **Strengths-based approaches** – There should be a strength-based perspective throughout the Strategy and its associated actions. Whilst communities are vulnerable, they also have strengths and capacity to enact change and they should be supported to act. Stakeholders made specific comments regarding the Consultation Papers discussion regarding First Nations health and climate change, noting the section alternates between strength-based and deficit-based language and highlighting the need to amend this.
- **Health sector advice and advocacy** – Informed health professionals, and the health sector, need to be able to speak freely about the consequences of climate change on the health and wellbeing of the population. Although the impact on vulnerable groups should be highlighted, there needs to be a clear message that everyone's health and wellbeing is going to be impacted.
- **Trust and transparency** – Experience with compounding natural disasters over the last five years, and the misinformation around COVID-19, has led to an erosion of trust in health and government. This will pose a significant challenge over the next 10 years. An open and transparent approach to community-level communications around climate change and health is imperative to support the successful implementation and delivery of the Strategy.
- **Regeneration** – The acknowledgement that sustainability will not be enough, and that the Strategy must also focus on ways to restore planetary health to create a healthy future.

Overwhelmingly, stakeholders provided consistent messaging regarding the need for place-based approaches. This has been summarised below for consideration as an additional principle in the Strategy.

- **Place-based approaches** – Climate change will affect different places in different ways. Most stakeholders identified the need for mitigation and adaptation strategies to be nationally led but regionally focused. Stakeholders reported the following place-based ideas:
    - Government should ensure the transition to a sustainable economy is managed and planned to support those regions and sectors of the economy most affected by climate change, through the development of regionally specific transition plans that support the viability and sustainability of communities and businesses.
    - Actions should be prioritised based on the specific vulnerabilities, risks and needs of the local communities. There needs to be deep collaboration between communities, local health authorities, Aboriginal Community Controlled Organisations (ACCHOs), local government, and other stakeholder groups to ensure that adaptation actions are equitable, contextually appropriate, and can effectively address immediate health system challenges posed by climate change.
    - Conducting regional and local consultations with First Nations communities, both in rural and urban settings, is essential for capturing diverse perspectives and engaging with specific cultural contexts. These consultations should be inclusive, respectful, and culturally safe, allowing for open dialogue, knowledge sharing, and collaborative decision-making.
    - Resilient communities can be a source of individual resilience during climate events, providing social and material support, which is protective against mental ill-health, and can be a source of shared learning and improve shared resilience to future events. With adequate resources and expert guidance, communities are uniquely placed to develop their own adaptation plans to match their local physical and social conditions.

2.1.4.2 Stakeholder suggested improvements to principles

First Nations leadership

There was almost unanimous support for the inclusion of First Nations leadership, knowledge, and expertise throughout all aspects of the Strategy, particularly central to decision-making.

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- **Define leadership and working in partnership** – The distinction was made between collaboration, co-design, partnership, and leadership as terms all used in the Strategy at various points in reference to First Nations peoples. Emphasis was put on ensuring that First Nations peoples' knowledge and experience is central to decision making however is not the same as empowering First Nations people. Respondents suggested that at worst, it could perpetuate harmful, unethical, extractive practices. To avoid this unintended consequence, the Strategy should clearly spell out what First Nations Leadership means as well as how and which objective it supports and how it will be supported.

  It was recommended that Principle 1 be amended to explicitly include Aboriginal and Torres Strait Islander leadership, noting First Nations knowledge, experience and leadership must be central to decision-making on health and climate policy at all levels. It would also be useful to consider how Principle 1 and Principle 6 interact. As above, it was noted is important to be clear in terminology; if "working closely" means working in partnership, this should be explicitly stated.

- **First Nations as a principle** – It was noted that the discussion of First Nations peoples as a vulnerable group should occur at the principle level rather than in the later section (in the Consultation Paper) on First Nations people. With the focus of the later section to be more value-based and focus on strengths of First Nations peoples and their knowledge in climate and health.

- **Governance and implementation** - This principle should specify the inclusion of First Nations people in governance, design, and implementation of the Strategy. Currently the wording implies that First Nation people's knowledge will be prioritised, but there is not a clear intent about ensuring partnership and leadership by First Nations people.

Further stakeholder feedback regarding the First Nations leadership and input is covered in the later section 2.1.6 First Nations health and climate change.

Tackling health inequities

- **Vulnerable populations and health equity** – The Strategy and principles should clearly define and describe which populations would be most vulnerable to climate change and acknowledge that each of these groups are impacted differently, and there is significant intersection between many of these and other demographic factors. For example, a stakeholder noted there are multiple vulnerable groups in rural and remote communities, including:
  - First Nations peoples
  - People with disability
  - Young people and future generations
  - Low socioeconomic groups
  - Culturally and linguistically diverse communities

  It was also noted that this understanding of specific vulnerabilities should be informed by research and established literature.

- **Socio-economic determinants of health** – This principle could be strengthened to specifically include more of the socio-economic determinants of health, such as housing and financial security, the barriers to accessing to health and other services, and intergenerational disadvantage.

- **Improve health** – Expand this principle beyond 'prevention of disease and maintenance' to 'improve health', for example, by increasing physical activity through shifting short transport trips to active travel.

Population health and prevention

- **Inclusion of environmental health** – It was suggested this principle focus not only on a public health perspective but also an environmental health perspective. Responses to climate change must be underpinned by an Environmental Health perspective which identifies conditions in the environment and environmental conditions that lead to public health risk.

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- **Primordial prevention** – This principle should consider the inclusion of prevention that refers to avoiding the development of risk factors in the first place (primordial prevention). At a population level, primordial prevention includes a focus on health and environmental conditions and recognises that determinants of health are influenced by activities outside of the health system itself.
- **Primary prevention** – It was noted that this principle should explicitly note primary prevention (as distinct from primary care) in addition to those outlined already.

One Health

- **Planetary health** – Majority of stakeholders agreed with using Planetary Health instead of One Health as a principal, some suggested that the 'Planetary Health framework' is better suited to take a broader approach to the impacts of global environmental change on human health. Stakeholders noting that adopting a Planetary Health approach is crucial to capture the inextricable link between planetary health and human health to ensure the Strategy outcomes achieved are in the context of planetary boundaries.

Related to the above, stakeholders also provided comments regarding the scope and broader understanding of One Health including:

- **Ecosystem health** – One Health should include the 'ecosystem health'. To only mention animals and environment is incomplete. For context, an example of healthy indigenous ecosystems was provided – plants and fungi and microorganisms do the biggest amount of work such as decomposing, soil enrichment, plant nourishment, medicine production, oxygen production and carbon storage.
- **Scope of One health** – Ensure that 'one health' is understood in its broadest sense: Human health is not just connected to the health of animals and the environment: it depends upon it. This includes all determinants of health, not just those related to pathogens. Pollution and loss of biodiversity must be considered alongside climate change as major drivers.

Evidence-informed policymaking

- **Balance of cost-effective analysis and equity** – The Strategy should emphasise the need to balance the use of 'cost-effective analysis' with equity- and rights-based approaches. Stakeholders recognised cost-effectiveness is important in priority-setting however they expressed concerns with its inclusion. Decisions based on cost-effectiveness can lead to inequitable decision-making and overshadow the lived experience of people.
- **Equity and justice** – The Strategy should prioritise equity and justice to ensure that no communities are left behind, particularly those experiencing vulnerability, recognising the importance of responsive policymaking.
- **Universalism approach** – It was recommended that this principle adopt a proportionate universalism approach, whereby health interventions and policies are delivered with intensity and scale proportionately to population need and social disadvantage to address health inequities in the context of climate change.
- **Expert opinion for action** – It was noted there is the requirement for expert opinion for 'action on a prudent and precautionary basis in the face of uncertainty and incomplete information'. Stakeholders highlighted the need to be informed by overseas data and consulting with academia to understand specific climate risks to health. The *ARC Centre of Excellence for Climate Extremes* was suggested.

Partnership-based working across all levels of government and beyond

Divergent views were collected regarding this principle, with some stakeholders calling for more targeted and focused consultation and others advocating for the expansion to other bodies and stakeholder groups, including:

- **Targeted partnerships** – Some stakeholders noted the 'Partnership-based' approach is important but specific partnerships should be targeted including with research and education

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bodies, not-for profits, and peak scientific bodies. The purposes of consultation need to be very clear, directed, and transparent.

- **Expand partnerships principle** – Stakeholders called for expansion of this principle to incorporate cross-sector working to capitalise on the skills and expertise of other industries and sectors to ensure community engagement and co-design.
- **International partnerships** – More explicit messaging is needed regarding international collaboration and leveraging of international practices and progress.
- **Healthcare industry** – This principle should specifically mention healthcare industries as partners that government agencies must work with. Government should require net-zero plans and sustainability credentials from all industry partners.

It was also noted that the language regarding 'nationally consistent' may not be appropriate for the varying impacts of climate change across Australia, specifically

- **'Nationally consistent' approach** – Stakeholders highlighted that defining a 'nationally consistent' approach is not appropriate for this principle, noting that climate, service access and delivery as well as impacts from climate change vary significantly across rural, remote and urban areas. It was acknowledged that whilst holistic responses to climate change are appropriate, place-based responses are essential. For example, travel-related emissions may not be an appropriate target area for rural and remote communities where alternative solutions are not readily available.

2.1.5 Enablers

Questions from Consultation Paper

Q24	How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
Q25	For each of these enablers • What is currently working well? • What actions should the Strategy consider to support delivery?

The Consultation Paper identifies five critical enablers needed to implement the Strategy:

- Workforce, leadership, and training
- Research
- Communication and engagement
- Collaboration
- Monitoring, evaluation and reporting.

The appropriateness, completeness and importance of these enablers were tested with stakeholders through the online survey, online submission, and through a short survey accessible via QR code during the in-person and online workshops that asked ranking questions to participants.

As well as assessing appropriateness, completeness and importance, stakeholders had opportunity to suggest modifications to and provide further details for the enablers identified in the Consultation Paper and suggest replacement or additional enablers. The section below has been framed around the online survey questions relating to enablers for clarity.

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2.1.5.1 Improvements to enablers and actions to support Strategy delivery

The short survey accessible via QR code during workshops asked respondents to rank the most important of the enablers presented in the Consultation Paper. Although stakeholders indicated in workshops and long submissions that all enablers are important, when asked to rank the enablers presented in the Consultation Paper, collaboration (40%, n = 17) and workforce, leadership, and training (29%, n = 12) were ranked the most important, while communications and engagement (21%, n = 9), monitoring and reporting (10%, n = 4) and research (n = 0) were ranking least important. Of note, the sample size (n = 42) was relatively small for these findings (see Figure 5).

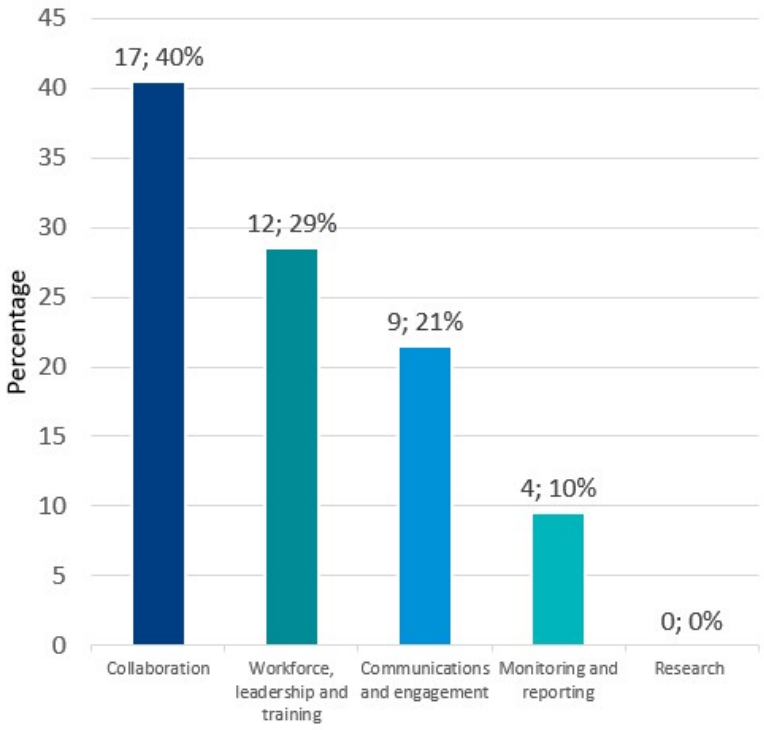


Figure 5 - Enablers from the Consultation Paper ranked most important

The short survey accessible via QR code during workshops also asked respondents to rank each of the enablers from most to least important.

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Figure 6 shows the number of people who ranked each enabler from one to five, with one being the most important. Collaboration was ranked as the most (40%, n = 17) or second most important (31%, n = 13) by over half of the participants. Workforce, leadership, and training was ranked most important by 29% (n = 12) of respondents and second most important by 21% (n = 9) of respondents. Monitoring and reporting and research were again ranked as having the lowest importance.

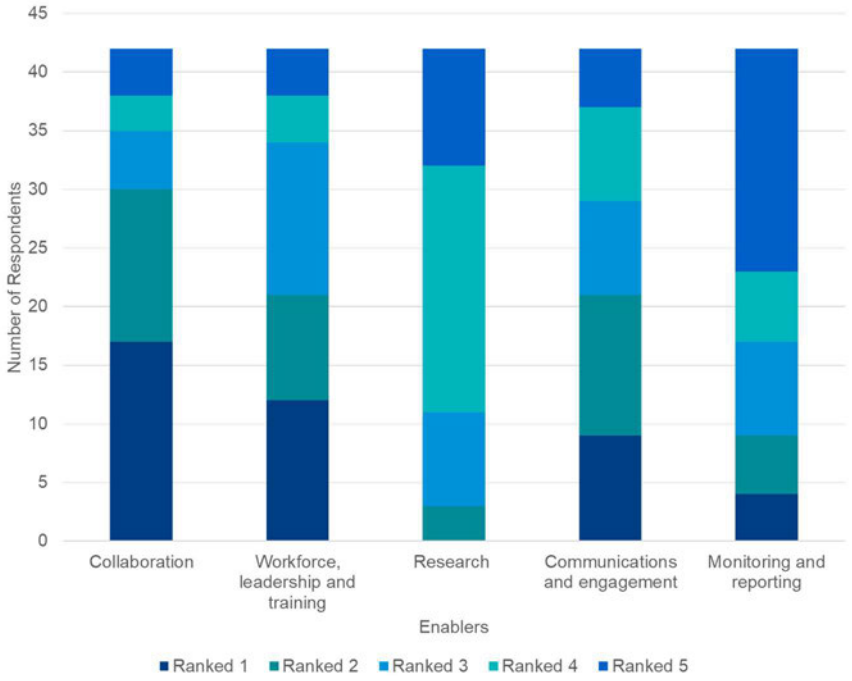


Figure 6 - Ranking of enablers from the Consultation Paper

Respondents were also asked if any additional enablers should be included in the Strategy (Figure 7). Collaboration was ranked 1 or 2 (1 being the highest) by 30 out of 42 respondents (71%). Workforce, leadership and training was ranked 1 or 2 by 20 out of 42 respondents (38%).

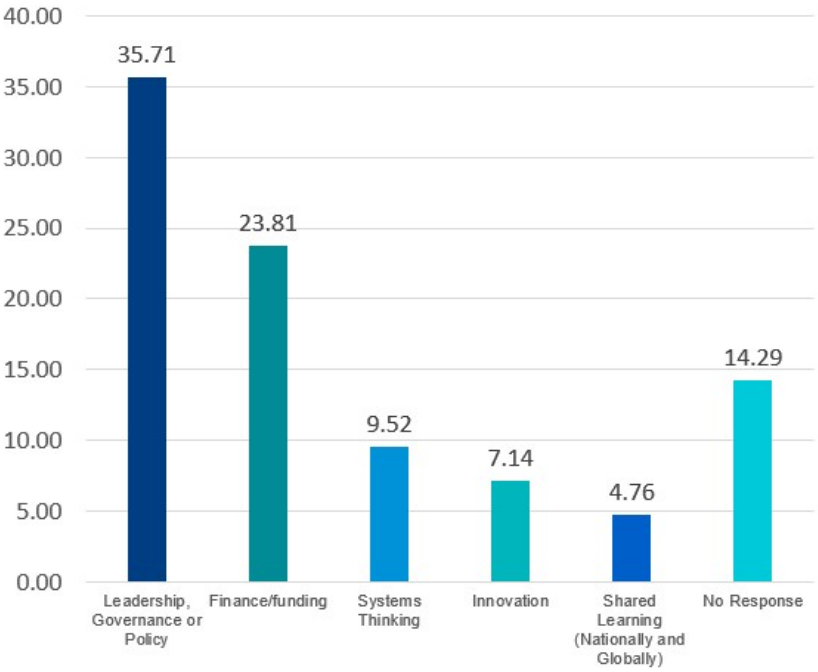


Figure 7 - Additional enablers to be considered

The appropriateness, completeness and importance of enablers were explored further during the long submissions and online survey. Respondents were able to provide further details on the presented enablers and again on potential additional enablers.

Feedback on enablers presented in the Consultation Paper

- **Collaboration –** In line with the high importance placed on collaboration from the QR code survey, stakeholders participating in other consultation formats stressed the importance of collaboration to achieve the objectives of the Strategy. The following further details were provided:
    - There is limited government support to enable collaboration on health and climate change. The health sector has self-organised to collaborate on responding to climate change but requires government investment to scale up.
    - Formal collaboration should not just be instituted between cross-jurisdictional government policy spaces but with industry, consumer organisations, and businesses.
    - Collaboration requires governance including agreed shared accountabilities, clear roles and high-functioning networks, partnerships, and communities of practice to help scale the action required.
    - In addition to governance structures, regular input from health and climate experts, peak professional bodies and advocacy groups is essential.
    - Collaboration should be further expanded to focus on co-design and co-decision making. It should harness local knowledge.
    - There should be support for regional and international collaborations to learn from best practices and leverage global expertise.
    - Other collaboration opportunities include data sharing and research collaboration, policy coherence, capacity building, joint advocacy, climate and health alliances, and local and regional collaborations.



- **Workforce, leadership, and training –** Stakeholders were supportive of this enabler presented in the Consultation Paper. Stakeholders provided guidance on specific actions that could be considered to support delivery of the Strategy, including:
    - Mandating education and training in climate change health impacts and mitigation practices as part of continuing professional development and other forms of training for current health and aged care workers, as well as in education of new staff.

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- Education should explicitly be named within this enabler. Stakeholders highlighted the important role that education plays in galvanising the health sector workforce to support institutional efforts to reduce the impacts of climate change. Stakeholders also cautioned that there is already a high training burden placed on health and aged care workers and that the incorporation of climate education should be appropriate.
- There is a lack of support for workforce capacity building and training. There is a need for a National cross-disciplinary continuing professional development program on climate change and health for the health and aged care sector, and for people in other sectors. Training is required on the Planetary Health paradigm.
- Workforce should relate to all staff including administration, maintenance, food services in addition to clinical and medical staff. There may be a role for dedicated sustainability officers to help enact actions within the Strategy.
- This enabler should also specifically call out the First Nations workforce, leadership, and training to ensure actions are culturally safe and responsive to racism and discrimination.

- **Research –** Stakeholders were generally supportive of the action presented under research in the Consultation Paper. While stakeholders ranked this enabler as lower priority relative to others, they expanded on what else research as an enabler should encompass:
  - There should be more readily available climate data and big data. Based on stakeholder feedback, data will drive a better understanding of the health, social and economic benefits of action on climate change. Data mapping can be performed to identify gaps.
  - Targeted funding for research in the priority areas of the Strategy will help further climate and health research as an enabler.
  - The Department should promote collaboration between researchers, policy staff and clinicians. This will ensure research can be developed in actions on climate change.
  - The Consultation Paper should more clearly outline what will happen when additional areas of research are identified in the proposed scan of current research activities.
  - There should be clear pathways and processes established to translate research into health and climate policy.
  - Work is needed to encourage more researchers in the field of health and climate change. Additional work should be undertaken to encourage First Nations researchers in this field.



First Nations Perspective

According to stakeholders, research should be informed by the priorities of First Nations communities and other groups that will be disproportionately impacted. Research needs to demonstrate true partnership and collaboration with First Nations communities, which takes time to develop. Often, research grants are released with four to six-week turnarounds, giving limited time to develop collaborations with First Nations organisations.

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Ideas in practice – *OneLondon*

OneLondon is a programme designed, planned and managed by a partnership of health and care organisations, working together with the London population and London's health and care providers, to join up personal data to support fast, effective, and safe care delivery through better integration of care, reduction of service user risks and better planning of services.

Local Health Districts and other organisations have commenced emulating this model. One Local Health District reported it has uploaded the Bureau of Meteorology data to allow climate related events to be analysed and then develop operational guidelines to improve workflow through hospitals.

- **Communication and engagement –** Stakeholders stated that communication and engagement are an important component to ensuring buy-in and broad adoption of the actions laid out in the Strategy. Stakeholders provided further comments on communication and engagement enablers, and how they can be used to further the Strategy's objectives:
    - There was broad agreement that public health agencies should expand public and preventative health messaging to raise awareness of the health impacts of climate change. Improved integration of public education and awareness with the primary healthcare sector is especially important in improving outcomes for rural and remote communities that are geographically isolated.
    - Stakeholders described evidence which shows that the impact of single-direction communication and engagement to elicit behaviour change is limited and can be perceived as tokenistic. Stakeholders acknowledged that transforming systems often requires changes in worldviews supported by ongoing genuine dialogue, active listening, and places where people with differing perspectives can connect in safe, respectful and inclusive spaces. Bi-directional communication was encouraged for the Strategy so that governments can hear and learn from communities and respond accordingly.
    - Communication and engagement as an enabler should recognise the important role that digital infrastructure will play in the successful delivery of the Strategy.
    - This enabler should identify government communications campaigns as a tool for enabling change. It was also heard that messaging and communications campaigns are not adequate during emergencies, and further support from governments is required.
    - The Department should develop engagement approaches with First Nations communities, Elders and representatives that are culturally appropriate, and free from racism. It is also necessary to engage with First Nations peoples on Country. Some stakeholders suggested a First Nations advisory group could be established to facilitate this work. Other stakeholders suggested that communication and engagement should be led by ACCHOs.
- **Monitoring, evaluation and reporting –** Stakeholders were generally supportive of the two actions presented in the Consultation Paper. They added the following discussion points:
    - The Department must commit to transparency and public reporting of progress against the Strategy. It should establish a robust monitoring and evaluation framework, including

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an indicator set for routine monitoring, plus a framework for evaluating implementation, effectiveness, and efficiency (including cost-benefit analysis).

- Indicators used or developed for the Strategy should align with international monitoring and reporting frameworks.
- The Department should establish a 'Sustainable Health Unit' to oversee monitoring of progress against the Strategy. This unit should include First Nations representation.
- Targets set in the Strategy should be science-based to enable the health and aged care sector to effectively decarbonise. It was heard that this target should be to achieve net zero by 2040, and 80% carbon emissions reduction by 2030.
- Approaches to monitoring and evaluation should be consistent to minimise reporting burden.
- Air quality was identified as a critical item for indicator development. Monitoring air quality will require significant investment in air quality monitoring infrastructure, particularly in rural and remote areas where the technology is not already available.
- Monitoring and measuring the psychological and social impacts of the ongoing threat of climate change is important, particularly among vulnerable population groups.
- Some stakeholders suggested merging this enabler with an additional measurement enabler (see below).

Additional enablers

- **Measurement –** Although set as an objective in the Consultation Paper, stakeholders strongly asserted that measurement should be used in the Strategy as an enabler. It was also suggested that measurement could be consolidated with monitoring, evaluation, and reporting. Based on stakeholder feedback, this enabler should define specific targets, goals, actions, and timelines, with clear accountability and responsibility frameworks. Measurement should not focus just on emissions reduction, but also to improve understanding of risk and vulnerability and how it is changing.
- **Leadership and governance –** Some stakeholders suggested that leadership and governance be treated as a separate enabler to workforce, leadership, and training. Stakeholders stressed that establishment of a robust governance framework is needed before actions can be performed.
- **Finance, resourcing, and funding –** Many stakeholders highlighted that actions arising from the Strategy must be adequately funded to put into practice. Some stakeholders thought this may sit as a component of collaboration and governance. Stakeholders also highlighted that in adding this enabler, consideration should be given to cost savings realised from undertaking actions in the Strategy.
    - A stakeholder involved in the medical field advocated for funding for mitigation and adaptation of public hospitals to be included in the *National Health Reform Agreement Addendum* from 2025 onwards. Although it was noted that there is variation in the levels of mitigation and adaptation planning in hospitals already, it was suggested that funding is disbursed either through block funding for specific hospitals or Local Health Networks (LHNs), or as part of the National Efficient Price with relevant adjustments according to the needs of individual hospitals. This process must be equitable and not seen as punishing for those hospitals that have already progressed along the climate mitigation and adaptation path. This could also apply to residential aged care facilities.
- **Systems thinking –** It was heard that systems thinking should be added as an enabler to the Strategy to ensure interrelated parts, boundaries and perspectives of the health and aged care work in harmony to increase efficiency, access, and outcomes.
- **Innovation –** Stakeholders held that innovation should be fostered to develop effective solutions and initiatives that contribute to new technology, increase productivity, and service emerging

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problems. They noted this is essential to helping reducing health workforce demand and increasing access and resilience in rural and remote communities.

- **National health reform arrangements –** the Strategy should consider a national health reform agenda, relevant health regulation and policy as significant levers and enablers for action.
- **Fairness and equity** – Prioritising fairness and equity ensures the burden of transitioning to a low-carbon economy is shared fairly among all stakeholders, preventing vulnerable communities from bearing the brunt of the impacts.
- **Governance and accountability –** Governance establishes robust decision-making processes, defines roles and responsibilities, and can provide adequate resources and support for implementation. Governance should incorporate coordination between the National Health, Sustainability and Climate Unit (the Unit), state and territory health sustainability units, and other relevant stakeholders. Accountability structures need to be well-defined, ensuring transparency and responsibility.
- **Health literacy** – Empowering consumers to better understand and manage the health impacts of climate change issues facilitates more informed decisions about their own health.

2.1.6 First Nations Health and climate change

Questions from Consultation Paper

Q4	What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
Q5	What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

2.1.6.1 Alignment with First Nations policies, initiatives, expertise, knowledge, and practices

The Strategy seeks to incorporate First Nations cultures, voices, and expertise as well as respecting data sovereignty and upholding First Nations people's right to self-determination. Throughout the engagement activities, there was strong support for this approach and stakeholders provided views and input as to how this could work in practice and suggested expertise, commentary included:

- **Consultation with First Nations stakeholders** – Consult with First Nations communities who are more likely to experience climate change health impacts. Example include establishing a First Nations Advisory Group, convening a national forum for First Nations leaders, conducting local consultations, and partnering with First nations organisations.
- **Co-design and engagement** – Commitment must be underpinned by genuine engagement and co-design principles. The process should seek to listen to and learn from First Nations Elders and communities about what the priorities are for tackling the health impacts of climate change. The Strategy should prioritise community-led adaptation planning and decision-making to further empower First Nations communities.
- **Connection to traditional lands** – Promote strategies that preserve and strengthen First Nations peoples' connections to their traditional lands and environments, for example, understanding and respecting the significance of land and water in sustaining cultural practices and wellbeing.
- **Proactive inclusion of First Nations knowledge** – This Strategy is an opportunity to incorporate and embed First Nations thinking in a proactive manner. First Nations knowledge and experience as the oldest living culture on earth is crucial in the consideration of resilience and systemic change. For example, it was only after the bushfires of the 2019/2020 summer that

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First Nations management of fire was a focus. Proactive incorporation of this knowledge can reduce the ongoing direct and indirect community health impacts.

- **Streamlined and meaningful engagement** – Whilst the co-design of this strategy was strongly supported by stakeholders, it was noted a challenge in implementing this is often the issue of double handling and over-consulting of communities. There needs to be a streamlined process for meaningful engagement that does not over-burden First Nations people and where possible, avoids duplication of existing structures. Engagement needs to be done with key principles of respect, accountability, deep listening, and cultural safety.
- **Lessons learnt and amplifying success** – Ensure any engagement approaches adopt lessons learnt from the successful First Nations response to the COVID-19 pandemic and amplify those learnings within the broader strategy.

The following policies, tools and guidelines were suggested by stakeholders as relevant to draw upon or align with:

- *Best Practice Principles for Clean Energy Projects* (new guidelines) and a *Clean Energy Negotiations Guide for First Nations* (soon be released).
- *Fire to Flourish* – Monash Sustainable Development Institute.
- *First Nations Clean Energy Network guidelines* (ANU).
- *Climate change and Aboriginal and Torres Strait Islander Health Discussion Paper* – Lowitja Institute.
- *National Aboriginal and Torres Strait Islander Health Plan 2021–2031*.
- *National Agreement on Closing the Gap (2020)*.
- *National Indigenous Housing Guide*
- The 5-Year Plan for Aboriginal and Torres Strait Islander Aged care (2021-2026) "*Our Care, Our Way, Our Future*".
- The *Ngayubah Gadan (Coming Together) Consensus Statement: Rural and Remote Multidisciplinary Health Teams*.
- *Uluru Statement from the Heart*.
- *United Nations (UN) Permanent Forum on Indigenous Issues*.
- *UN Declaration on the Rights of Indigenous Peoples (UNDRIP)*.
- *Wiyi Yani U Thangani Report (2020)*

The below outlines some of the initiatives and expertise suggested by stakeholders as important to addressing climate change and protecting First Nations knowledge:

- **Land-based healing and connection** – Many First Nations communities emphasise the importance of land-based healing and connection to health and well-being. The Strategy should recognise and support these approaches, promoting the revitalisation of cultural practices, land stewardship, and healing relationships with the environment.
- **Cultural land, resources, and water management** – Traditional land and water management practices, including harvesting traditional foods on Country and customary burning practices. The Strategy should incorporate and support Indigenous land and water management practices to mitigate the impacts of climate change, foster ecosystem resilience, and ensure that traditional food sources are protected.
- **Holistic definition of health** – Within the Strategy ensure that a First Nations definition of health is drawn upon; this is more holistic definition than a western/ biomedical definition. This definition should include physical, social, emotional, cultural and spiritual wellbeing as well as connection to Country.

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- **Weather and climate knowledge** – Draw on First Nations knowledge and expertise regarding the land, climate, and weather. Include the Indigenous weather/seasonal/calendar/knowledge into mainstream weather reporting and decision-making regarding climate change strategies.
- **Cultural heritage and language preservation** – Recognising and preserving First Nations' cultural heritage and languages are essential components of climate action. Efforts to protect cultural identity can strengthen the connection to Country, leading to a greater commitment to environmental stewardship.
- **Community-based climate adaptation** – Many First Nations communities have developed adaptation strategies to cope with the impacts of climate change on their traditional lands and livelihoods, the Strategy should ensure consideration and acknowledgment of these strategies.

2.1.6.2 Suggested First Nations governance forums

Stakeholders provided input regarding how best to leverage existing governance forums and what must be established to ensure First Nations voices, decision making, and leadership are embedded in the Strategy, these comments included:

- **Indigenous rights and self- governance** – The Strategy should align with the principles of self-governance and self-determination of First Nations communities. This involves respecting the rights of Indigenous peoples to make decisions about their own health, lands, and resources and supporting Indigenous-led governance structures.
- **Community controlled leadership** – Having governance led by community-controlled organisations and the ability to bring organisations into decision-making and provide policy advice as priority topics and locations change is essential.
- **Shared-decision making** – Governance forums should set out how decision-making will occur under a shared decision-making framework. These forums should seek to ensure representation from a range of bodies that focus on health, environment, land, and community representatives.

The following governance forums, networks and bodies were suggested by stakeholders as mechanisms for engagement and co-design with First Nations people (noting this is not an exhaustive list):

- Australian Indigenous Doctors' Association (AIDA)
- Australian Indigenous Psychologists Association (AIPA)
- Caring for Country Partnership forum (Department of Energy Environment and Climate Action).
- Coalition of the Peaks
- Expert Reference Panel for Aboriginal and Torres Strait Islander Health (ERPATSIEH) of enHealth
- First Peoples Disability Network Australia (FPDN)
- First Peoples' Assembly of Victoria
- Gayaa Dhuwi (Proud Spirit) Australia
- George Institute's Guunu-maana (Heal) Aboriginal and Torres Strait Islander Health Program
- Indigenous Allied Health Australia
- Lowitja Institute
- National Aboriginal and Torres Strait Islander Health Protection (NATSIHP) Sub-committee of the Australian Health Protection Principal Committee (AHPPC).
- National Aboriginal Community Controlled Health Organisation (NACCHO)
- National Aboriginal & Torres Strait Islander Ageing and Aged Care Council (NATSIAACC).
- National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners

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- National Health Leadership Forum (NHLF)
- Northern Territory Aboriginal Health Forum
- Northern Territory Executive Council on Closing The Gap / Aboriginal Affairs
- 'Healthy Country, Healthy People' program (NT)
- Ranger groups - land and sea management ranger groups
- Seed mob (Australia's first Indigenous youth climate network)
- The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM)
- The Earth Systems and Climate Change Hub within the National Environmental Science Program at CSIRO
- The determinants of planetary health: an Indigenous consensus perspective
- The Healthy Environments and Lives Network (HEAL)
- The National Indigenous Disaster Resilience Summit
- Victorian Aboriginal Health and Wellbeing Partnership Forums (and associated Koori caucus) VACCHO Members' Forums
- Voice to Parliament.

It should be noted that a First Nations Organisation commented that currently there is no specific forum that is Aboriginal and Torres Strait Islander-led and resourced to focus on health and climate – the stakeholder observed that this is a governance gap that needs to be filled. The stakeholder commented there is currently work under way by their organisation to engage with Aboriginal and Torres Strait Islander peoples nationally and they are assessing the feasibility of a national governance body, such as a national Aboriginal and Torres Strait Islander Coalition on Health and Climate.

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Ideas in practice –
First Nations Climate Change conference

Conference - 'Stronger Together: What can we all do to transition to greater climate resilience in the Torres Strait region?'

This conference was convened by the Torres Strait Regional Authority June 2022 on Waiben (Thursday Island). The key aims were to identify and then achieve consensus around adaptation priorities for the 2022-27 Torres Strait Regional Adaptation and Resilience Plan. Fifty participants including Traditional Owner representatives, local, State and Commonwealth agency representatives, NGOs and research institutes were involved. Stakeholder - a similar forum could be utilised to facilitate co-design of the Strategy with First Nations people.

2.2 Consultation topics

2.2.1 Measurement

Questions from Consultation Paper

Q6	Beyond the schemes already noted above [in the Consultation Paper], is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
Q7	What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Stakeholders unanimously agreed that a coordinated and standardised measurement activity and public reporting of carbon emissions across the healthcare sector should be prioritised.

The themes that emerged focus on; measurement methodology and support, benchmarks and baselining, and the associated data and information sharing activity. These themes are outlined in more detail below.

2.2.1.1 Measurement methodology & reporting

- **National framework and consistency –** A common view amongst stakeholders was the need for a nationally coordinated and consistent framework, which outlines both the qualitative and quantitative approach to measuring and reporting emissions in the health sector. Several stakeholders provided views on approach to developing a nationally consistent framework and why this is key to success, noting:
    - The importance of engaging or commissioning experts in the estimation of emissions to develop this framework, including consultation and consensus across the health sector prior to finalisation.
    - The framework and methodology will be critical to providing confidence in the integrity and comparability of emissions data.
    - To be effective and ensure the framework is implemented in a consistent manner, there needs to be review and assurance, to verify outputs of measurement activity and to assist with mitigating the risks of 'greenwashing'.
    - There must be transparency regarding scope of measurement and allow for accurate comparisons across entities and jurisdictions.
- **Enforcement and mandatory reporting** – Stakeholders emphasised that the measurement, disclosure and reporting of greenhouse gas emissions must be standardised and mandatory. The following comments were made across stakeholder engagement activities:
    - Organisations will require incentives to better measure and understand their climate footprint, and current reporting schemes have minimal enforcement on health institutions.
    - Relevant legislation and regulatory settings will be required to mandate reporting in a consistent and timely manner.
    - Stakeholders suggested an annual reporting mechanism and monitoring must be implemented and enforced by Commonwealth Government to hold different health systems (including private and public sectors) responsible – this should include the promotion of achievements to incentivise emission reduction activities.
    - Accountability and performance mechanisms must be built into measurement and reporting so that data can be captured and then accompanied by meaningful action and transformative change.

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- **Capacity and skillsets for measurement activity** – In relation to the workforce capacity and capability required to undertake measurement and analysis activity, stakeholders expressed the view that this goes beyond the skillset of the current health sector workforce. Primary healthcare stakeholders, in particular GPs, emphasised that consideration must be given to the administrative burden for individual facilities or organisations as proposed reporting goes beyond what is currently legislated. There will be great disparity across organisational and workforce maturity in gathering and analysing emissions data, with some health facilities already collecting this data and many others who do not or currently cannot. Stakeholders identified possible supports and actions related to measurement capability, suggesting:
    - The establishment of a dedicated team/National Sustainability Development Unit, as well as individual hospital or health district Sustainability Development Units, to increase capacity and support for measurement and reporting.
    - Develop tools and templates to support the measurement framework. Specific to primary healthcare, which is largely made up of small business, tools need to assist businesses to measure emissions and provide a baseline. Whilst there are several generic calculators available, stakeholders noted they don't provide information to support responsible purchasing decisions and reduced carbon emissions.
- **Approach to measurement** – Stakeholders consistently raised the need to leverage international progress, consistently referencing the NHS, and align Australia's approach to measurement with validated and recognised standards. Across both workshops and written submissions stakeholders provided examples of existing tools and standards which should be considered, including but not limited to:
    - *Greenhouse Gas Protocol.*
    - *Measuring what matters – wellbeing framework.*
    - *Global Green and Healthy Hospitals (GGHH).*
    - *Planetary Health Equity Hothouse – ANU planetary health equity impact tool.*
    - *Climate Impact Checkup calculator.*
    - *Green Impact.*
    - *ANZCA Environmental Sustainability Audit tool*.
- **National Schemes** – Some stakeholders expressed concern regarding schemes and accounts referenced within the Consultation Paper, specifically:
    - Reliance solely on Australia's National Greenhouse Accounts for estimating activity will not be sufficient, as emissions from entities that are below the NGERS reporting threshold are not captured. Workshop stakeholders also suggested the lowering of NGERS threshold and mandating reporting could support a more complete estimate.
    - The National Greenhouse Gas Inventory (NGGI) is not adaptable as it estimates emissions using the UNFCCC carbon accounting framework that is designed to report emissions by source. To measure the emissions by sector, it is necessary to determine the emissions from all relevant sources that can be attributed to that sector of the economy through lifecycle assessment.
    - A peak body represented at both workshops and via submissions, highlighted measurement of the health system's carbon footprint should be informed by both top-down and bottom-up data (where available and feasible), such as lifecycle assessments.
- **Carbon footprint methodologies –** related to the above, several stakeholders referenced the use of Environmentally Extended (Economic) Input Output (EEIO) analysis, a process-based lifecycle assessment or a hybrid model as model options for measuring carbon footprint. Stakeholders representing medical professionals emphasised the following additional limitations of EEIO studies in guiding local decision-making and a preference for more granular outputs produced by process-based lifecycle assessment, noting specifically that:

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- EEIO studies are useful for setting the scene and providing a broad overview of the healthcare sector's greenhouse gas emissions.
- Data derived from EEIO studies are often not refined or nuanced enough to guide evidence-based product choice (including pharmaceuticals), or consideration of greenhouse gas emissions from clinical care processes and procedures.
- A limitation of EEIO studies is the assumed linear relationship between financial and environmental costs.
- Whilst stakeholders noted EEIO studies are useful for large, healthcare sector wide estimates of emissions, access to more granular carbon footprint information will be increasingly important in clinical decision-making as the healthcare sector moves towards net zero emissions.
- Whilst process-based lifecycle assessments require careful analyses of various components and inputs, they are a more reliable method when making comparisons between different clinical pathways.

- **Indicators and metrics for measuring climate health –** Stakeholders consistently raised the need for clear units/metrics by which greenhouse gas emissions will be measured. Suggestions were made in relation to existing metrics or indicators which could be built on or leveraged such as calculations for the NHS Carbon Footprint.
- Related to this, was the requirement for capture of standardisation metrics or normalising factors to allow appropriate comparison across different healthcare settings and jurisdictions for example:
  - Gross floor area
  - Number of full-time equivalent staff
  - Number of patient separations
  - Episodes of Care
  - Occupied bed days
  - Length of Stay (LOS)
  - Per patient treated (PPT).
- **Prioritised and proportionate action** – Several stakeholders raised that measurement regulation and reporting requirements need to adopt a practicality lens and should be equitable and prioritised. Some stakeholders provided details on how they would like to see this work in practice
  - Initial efforts and focus on private hospitals and hospital chains, and other large corporate providers (e.g., corporate pathology, general practice chains, aged care chains) then provide smaller-scale local providers with more time and assistance to reach compliance, particularly those operating in a rural and remote setting.
  - Measuring greenhouse gas emissions must be designed to account for a realistic and practical representation of the health system's climate impacts. A stakeholder suggested this could be modelled on the UK's *Delivering a 'Net Zero' National Health Service* document, which breaks down the health system's carbon emissions into categories, such as supply chain and personal travel. This breakdown allows for more targeted actions, as efforts for measurement and reporting could then be prioritised on this basis.
- **Measurement of co-beneficial effects and linkage to health outcomes** – Many stakeholders highlighted the need for measurement activity to go beyond the greenhouse gas emissions to also capture co-benefits. Stakeholders further expanded on this, including:
  - Development of an end-to-end care pathway 'emissions calculation' tool for specific diseases to measure and track emissions across the care journey and assess decarbonisation pathways.

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- Establish better health economics capability to quantify and measure the avoided health costs of reducing emissions and the avoided emissions of improving health outcomes and models of care.
- Develop a model to estimate the beneficial effects of different types of health targets on emissions, for example reducing obesity rates by 10% and the effects this would have on hospital admissions and emissions.
- Need to measure and report on the cost of climate change in-action on Australia's health and healthcare system, for example costs of excess deaths, disability, and healthcare (including mental health related) due to increasing extreme weather events.
- Need to develop health impact projections from climate change - reference to IPCC report - *AR6 Synthesis Report: Climate Change 2023*.

2.2.1.2 Benchmarking & Targets

- **Establishment of baselines** – Many stakeholders highlighted the need to develop an emissions baseline for the health system as a reference point for comparison, ongoing measurement activity and to enable the setting of realistic reduction targets. Specific points of action or consideration include:
  - Engaging experts in the development of emissions baselines.
  - Leverage baseline measurements to support modelling of future scenarios under a variety of conditions i.e., business as usual, committed decarbonisation, to understand impacts of actions and develop targets and like the NHS approach.
  - Develop emissions profiles specific to the health and aged care sectors to both establish baselines and provide insights into the major sources of emissions, hotspots, and opportunities for reduction.

2.2.1.3 Data capture, information sharing and transparency

- **Continuous improvement and information sharing** – There was strong support for the sharing of strategies, innovations and best practice in measurement and reporting activity. Specific commentary from stakeholders included:
  - Comprehensive data and information on successful emissions reduction initiatives and case studies to provide guidance and inspiration for targeted efforts. Sharing best practices and lessons learned can accelerate progress across the industry and foster a culture of continuous improvement.
  - Information on technological advancements, sustainable materials, energy-efficient equipment, and successful case studies can support evidence-based decision-making and guide the implementation of sustainable practices.
- **Data and information required to target emissions reduction efforts** – Stakeholders commented on the need to consider the following with respect to the additional sources of data and information required to measure and support emissions reductions:
  - Anaesthetic gas suppliers carbon emissions i.e., associated with Desflurane and Sevoflurane, quantities sold, and to which sectors public vs private and stratified.
  - Australian database of standard CO_2 conversion factors for healthcare utilisation (e.g., ED, clinic attendance, GP appointments), medical equipment and devices and pharmaceuticals.
  - Australian Disaster Resilience Index data.
  - Building and facility characteristics – building age, thermal comfort, building envelope, resilience standards.
  - Carbon and social accounting mechanisms to calculate the impact of different models of care (e.g., SUSQI metrics).

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- Data related to unforeseen health disasters such as COVID-19 and floods.
- Demographics data - indicating key population vulnerabilities i.e., older population, respiratory conditions, mobility, disability, index of relative socioeconomic disadvantage. Noting a lot of this work has already commenced through ProfileID.
- Emergency data (historical) - climate emergency data of fire, flood, storm, drought and heatmaps including modelled risk, likelihood, and severity of impacts.
- Emerging research, innovations, and best practices in sustainable healthcare.
- Energy consumption within healthcare facilities, data on electricity, natural gas, and other energy sources used in different areas of health and aged care settings, proportion of 100% renewable electricity purchased/used across institutions.
- General practice and primary care data.
- Health workforce and patient transport emissions data and transportation patterns.
- Levels of likely fugitive emissions of 'natural' gas and Nitrous Oxide (N2O) leaks within our hospitals (gas leaks).
- Local data on the interrelationships between the determinants of climate vulnerability and social determinants of health.
- Marginal abatement cost curves to assist in identifying and prioritising work to reduce emissions.
- Natural gas levels, combustion pollutants (NO_2, Benzene, Formaldehyde etc) in the immediate and surrounding vicinity of other health facilities and modelling to extrapolate the likely health effects of exposure.
- Nitrous oxide wastage (verifiable data) i.e., via venting of returned 'empty' cylinders from hospitals.
- Perinatal data (already collected by Midwives).
- Supply chain data, including information on suppliers, manufacturers, and transportation methods.
- Volatile anaesthetic agents – a stakeholder notes this government is collected by the Australian Government however is not currently shared (despite requests).
- Waste generation rates and waste composition within healthcare facilities, the types and quantities of waste generated, including hazardous and non-hazardous waste.
- Water consumption within all social welfare, water usage patterns, identifying water-intensive processes, peak consumption.

- **Data mapping and collection** – related to above-mentioned data requirements, stakeholders recommended the following activities in relations to collecting and support to access the data:
  - A First Nations Stakeholder recommended that the Department include Indigenous Data Sovereignty (ID-SOV) and Indigenous Data Governance (ID-GOV) in the Strategy as guiding principles and non-negotiable components related data ecosystems and processes.
  - Commission a detailed data mapping project to inform health planning. This map would overlay all the locally relevant factors in a publicly accessible format, allowing for informed prioritisation of actions.
    - There is an opportunity for the Commonwealth to create national clarity and consistency around national health emissions data, this could be in the form of guidelines or standards which identify:
    - A consistent (and more fulsome) approach to data collection at the health service facility level.

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  - Which data is most powerful/effective in measuring and driving change?
  - Ways which data integrity can be ensured.
  - Ways in which the data could be leveraged for optimal value.

- **Information systems and management of data** – stakeholders commonly referenced the need for a publicly-available national data base as a mechanism to help identify, measure and report on emissions, and as an information repository to provide guidance and best practice. Some stakeholders provided further detail regarding what capability and intersects the system should have:
  - Integration with existing state and territory incentive schemes, grants research and mandatory reporting requirements (e.g. mandatory reporting for Local Governments through the NSW legislative Integrated Planning and Reporting framework) as well as interoperability of reporting systems, will be key to reducing reporting burden and ensuring access to complete data.
  - Existing large data should be featured as there are multiple health systems with legacy data systems in place. Need to implement something like the 'OneLondon' initiative, which involves the democratisation and use of deidentified data to enable targeted research on climate and health. For example, emergency department data could be analysed for presentations with extreme events and to support preventative actions and plan.

2.2.2 Built environment, infrastructure, and services

Questions from Consultation Paper

Q9	Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?

The built environment consists of all the human-made aspects of people's surroundings, including hospitals, facilities, roads, and other connecting transit systems. Buildings contribute to climate change through their construction, maintenance, and daily operation. This includes the materials they use; their location; and electricity, gas, and water usage.

Stakeholders commonly referenced the need for a harmonised suite of legislative, standards and codes to reduce emissions and adapt to climate change, supported by nationally consistent measurement and ratings.

The themes that emerged focus on: measurement and reporting; legislation and regulation; and implementing energy efficiency programs for current and new builds. These themes are outlined in more detail below.

2.2.2.1 Building standards

- **Strengthening standards** – Most stakeholders identified the need to strengthen building standards for existing and new healthcare facility design. Some ideas put forward across written submissions included:
  - Implement national healthcare facility design and construction standards for new healthcare building design which includes guidance on integrating land/site features into design which optimising patient outcomes and minimising energy needs. New building design should be supported by a transition strategy which includes developing industry capacity and awareness to meet the construction standards.
  - Develop, implement, and monitor indoor air standards for all public buildings, work and education environments, and homes.

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- Establish minimum energy efficiency standards for all buildings (including public and private hospitals, schools, and social housing) to be thermally efficient, renewably powered and climate resilient.
- Building standards need to be strengthened to exclude designs that will result in increased energy needs for heating and cooling.
- Integrating resilience based on construction standards, such as the regularly amended National Construction Code (NCC 2022), would contribute towards reducing preventable health impacts.
- Policy development in urban planning, building codes and other standards relevant to the built environment will need to strike a balance between competing interest and priorities. It is important that the relevant regulatory bodies undertake their work with clear understanding of the relationship between population health and the built environment; and a recognition of the effect on population health.



Aged Care Perspective

Stakeholders highlighted that there will soon be an accommodation framework released that will speak to built form in aged care, especially for older people with dementia. It was suggested the Department should investigate the extent to which the framework could be used to develop better standards for residential aged care facilities. Stakeholders also called for better standards for windows and other sustainable building materials.



Aged Care Perspective

Stakeholders highlighted existing initiatives that could be leveraged to incentivise more sustainable aged care built environment infrastructure and services. Stakeholders reported these could be effective as they are already familiar to aged are providers and facilities. Existing initiatives include:

- The *Accommodation supplement for aged care* to provide additional incentives for facilities and providers to upgrade facilities that meet climate change metrics.

- The *Specialist Disability Accommodation Program* can also be emulated to achieve better architectural responses.

- **Measurement and reporting** – As previously mentioned, many stakeholders identified the need to establish key targets that healthcare facilities and other assets need to adhere to, which

should inform decision-making on retrofitting existing infrastructure, and building new infrastructure. Ideas proposed by stakeholders include:

  - Defining targets for transition to renewable sources of power for all healthcare facilities.
  - Requirement for the measurement of the carbon footprint for any new buildings prior to Development Application approval.

- **Legislation and regulation** – Many stakeholders identified the need for legislative reform and regulation, in the following areas:
  - Mandating government schemes such as the Green Star and NABERS rating for health and aged care facilities to ensure minimum standards of energy and water efficiency across Australia, and provide an independent, auditable verification of their achievement – for effective measurement of emissions reduction, as well as a range of other sustainability metrics.
  - All new hospitals are to be all-electric (fossil fuel-free). All existing hospitals are to develop plans for removing fossil fuels as an energy source and commit to rapidly decarbonising the electricity supply for healthcare facilities.
  - An immediate ban on new gas builds in all new healthcare facilities both public and private.
  - Increase the biodiversity, green space, and canopy/vegetation cover, which delivers co-benefits such as reducing urban heat island effect, shade, clean air and improving mental health and wellbeing. Increasing canopy/vegetation cover and green space can also reduce building energy use and stormwater run-off to local waterways.
  - Environmentally Sustainable Design (ESD) guidelines for health system capital works
- **Energy efficiency** – Stakeholders reported a range of initiatives to improve the energy and water efficiency of health system facilities, including:
  - Implement energy efficiency measures within healthcare facilities. These include upgrading to energy-efficient lighting systems, installing motion sensors and timers to control lighting and HVAC systems, and improving insulation to reduce heating and cooling needs. Conduct energy audits to identify areas for improvement and prioritise energy-saving measures accordingly.
  - Ensuring better building standards such as better insulation, design to maximise natural cooling/avoid overheating, double and triple glazing.

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***Case study** – Net Zero Carbon Standard for Hospitals*

The NHS have developed a new Net Zero Carbon Hospital Standard which will be applied as part of the government's Health Infrastructure Plan. This will drive both clean energy and energy conservation, as well as utilising technologies such as real-time-monitoring.

2.2.2.2 Asset lifecycle management

- **Monitoring of performance** – Monitoring the performance of existing asset operations and emissions, while continuing to identify opportunities to reduce emissions through innovation and low-carbon technologies.

- **Adapt existing infrastructure and assets** – An integrated assessment of the fitness for purpose and modification/upgrade/replacement requirements of healthcare infrastructure across both mitigation and adaptation is required.
    - Integrity and reliability of the public health infrastructure, assets and services are also at significant risk due to evolving climate threats which were not anticipated at the time of their design or construction. Minimise resources on upgrading facilities which need to be moved or replaced due to their vulnerability to flooding, for example.
    - Prioritise renewables, recycled and low-carbon materials into the built environment and integrate low-carbon operating systems into the co-design and upgrade of facilities.
    - Implement energy efficiency and emission reduction programs through investments in renewable energy, energy conservation measures, and low emissions infrastructure.
    - Adopt low-carbon operations through a range of energy, waste, construction, and fleet management policy practices, including offsets, to transition assets and operations towards zero net emissions.
    - A distinction should be made between existing and planned infrastructure. New developments may have opportunities to design with sustainability in mind, whereas retrofitting existing buildings can be prohibitively expensive. Government should provide financial incentives and assistance to meet retrofitting targets.

2.2.2.3 New infrastructure

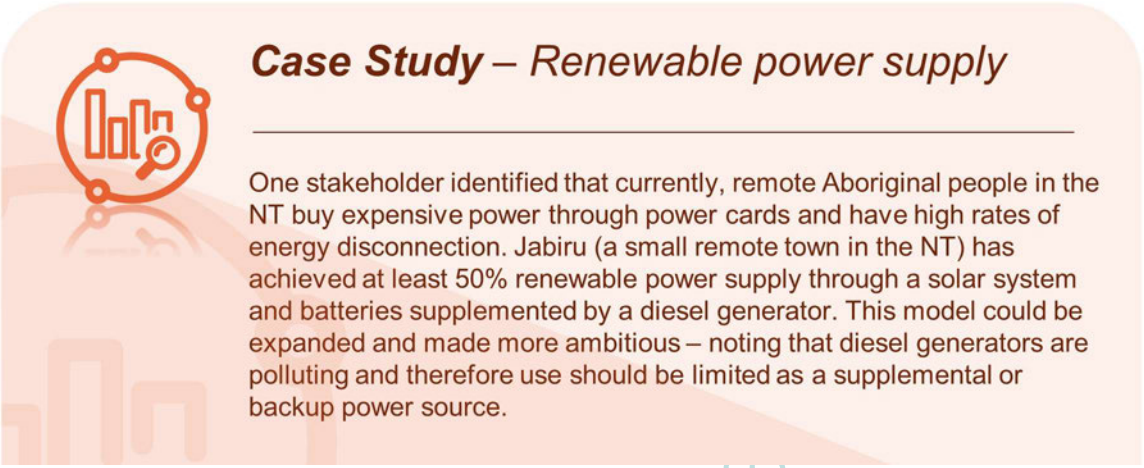
- **Planning for sustainability** – Stakeholders overwhelmingly identified the need for all new health infrastructure builds to consider climate change in future infrastructure delivery, serviceability and whole-of-lifecycle emissions. Stakeholders identified the following actions:
    - All new and replacement infrastructure needs to be constructed to the highest, future-proofed standards for both mitigation and resilience.
    - When assessing the value for money of public tenders for buildings, the tendering process should thoroughly consider whole-of-life costs, upweighting long-term savings that arise from energy efficiency measures.
    - Reduce demand for large, resource-intensive healthcare facilities and ensure only necessary buildings are constructed. The demand for new infrastructure could be reduced through scaling up health promotion, telehealth and care closer to home, without compromising patient outcomes.
- **New build standards** – Similar to the management of existing assets, stakeholders referred to the need to implement planning and standards into the design and build of new health infrastructure. Commonly identified actions include:
    - Integrating climate change and green policy into investment, planning, design, and construction standards of facilities, including the whole-of-life cycle carbon emissions.
    - The building design for new buildings and retrofitted facilities should align with specific green rating systems. The Green Building Council of Australia's Green Star initiative has an internationally recognised rating system setting the standard for healthy, resilient, positive buildings and places.

2.2.2.4 Infrastructure and service disruption and resilience

- **Risk assessment and scenario planning** – Stakeholders identified the need to implement a range of strategies focused on infrastructure and risk management. This included:
    - All health services and other relevant services to conduct climate change risk assessments as a core risk management strategy.
    - Assess the resilience of health infrastructure to climate-related hazards and implement necessary measures to enhance their capacity to withstand extreme weather events, such as bushfires, floods, and storms.

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- **Workforce support** – Most stakeholders highlighted a need to implement programs that support the health workforce understand and work within an evolving risk environment. Specific actions include:
    - Provide training programs for healthcare and built environment professionals to enhance their knowledge and skills in addressing climate related health risks within their remit. This includes education on recognising and managing climate-related health conditions, such as heat-related illnesses and respiratory diseases.



2.2.2.5 Building and facility operations

- **Renewable energy purchasing –** Several stakeholders asserted that all health and residential aged care facilities should transition to renewable energy purchasing agreements. Several energy wholesalers sell energy generated solely from renewable energy sources such as wind and solar. This was viewed as a quick approach to transitioning away from energy generated by fossil fuels until facilities have the capacity to generate renewable energy independently.
- **Energy efficiency** – Stakeholders overwhelmingly identified the need to implement energy efficiency across all health infrastructure assets. This includes moving away from gas to electricity, retrofitting lighting systems, and upgrading HVAC systems with energy-efficient equipment, such as high-efficiency chillers and improved insulation.
    - Most stakeholders suggested ‘greening’ strategies for health campuses and buildings. Green space has a localised cooling impact, improved neighbourhood biodiversity and is also important for mental health and wellbeing.
    - Some stakeholders identified a need to promote behaviour change among staff to encourage energy conservation practices, such as turning off lights and equipment when not in use.
    - The establishment of a national Energy Efficiency Infrastructure Transition Fund was suggested to accelerate the transition to low emissions infrastructure upgrades, with a priority focus on urgent clinical needs.

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Aged Care Perspective

Stakeholders identified the need to develop standards for site selection for the construction of new aged care facilities as a mechanism for adapting to increasing incidence of floods. These standards should also consider continuity planning, including effective sustainable backup power sources for residential aged care facilities to use during flooding.

2.2.3 Travel and transport

Questions from Consultation Paper

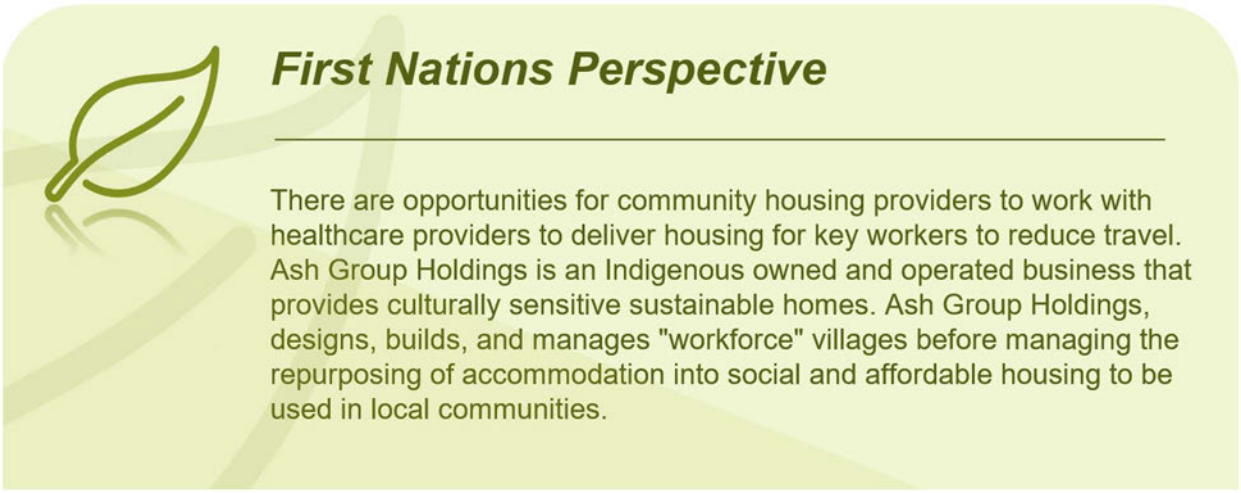
Q10	Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

2.2.3.1 Reducing travel

- **Conference and educational travel** –Several stakeholders reflected on the need to reduce professional development travel, in particular overseas conference flights, suggesting:
    - Cease remunerating senior medical and other hospital staff with business class (high carbon) flights to conferences. This process of remuneration not only contributes to high carbon travel, but it also establishes a culture of travel and messaging to junior doctors, nurses, and future medical professionals.
    - Staff travel emissions should be addressed through restructuring continuous medical education (CME) funding to de-incentivise international travel for conferences, prioritise virtual attendance and permit CME allowances to be reimbursed to the clinician, used for other educational activities or environmental, social and governance projects that benefit the health system.
    - Where it is deemed necessary to travel, there should be a requirement to purchase carbon offsets.
- **Patient and staff travel** – Stakeholders consistently raised the need for policies and programs to reduce unnecessary patient and staff, transport, and travel. Some of the examples provided by stakeholders included:
    - Virtual telehealth consultations, where appropriate, should be incentivised. There was support for the extension of Medicare Benefits Scheme (MBS) items for several core consultations and counselling services. Making these items available permanently as they deliver co-benefits of increased access for rural or marginalised populations while reducing unnecessary transport emissions.
    - A healthcare peak body recommended the inclusion of an action within the travel and transport focus area that highlights the importance of redesigning models of care to reduce the need for transport at all such as virtual models of care, remote monitoring, and telehealth.
    - Deliver more healthcare in regional/remote areas using transportable units to reduce the distances patients need to travel.
    - Implement policies and incentives to reduce travel and associated carbon emissions, such as congestion pricing and low-emission zones.

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- Support for more social and affordable housing surrounding health services to allow staff to live closer to their place of employment and reduce the need for travel to and from work. Australia's well-documented housing affordability crisis means many healthcare workers are forced to live further from their workplace and have longer commutes.



Further analysis regarding telehealth and hub-spoke models is covered in the following section 2.2.4 Prevention and optimising models of care.

- **Active transport** – Many stakeholders emphasised the need for additional support for active travel as a key mitigation for transport and travel emissions. With respect to active travel, stakeholders proposed a variety of actions:
  - Ensure built environment design and urban planning promotes active transport, through adequate housing density, well-connected streets, mixed land uses, and proximate public transport, especially in outer suburban areas.
  - Education and advocacy within the health system for active transport options, for example, instructions detailing public transport access could be provided automatically to each patient/visitor, and end of trip facilities for bicycle users to be accessible for facility staff and visitors.
  - Explore options to incentivise active transport via salary packaging, for example, allow e-bike and bike purchases to be salary packaged.
  - Research the barriers to staff and patients adopting active transport, and then action and regulation to address this. One stakeholder provided an example of a need for advertisement regulation surrounding larger vehicle types like SUV and 4X4 providing increased safety which decrease people's uptake of active transport due to safety concerns.

2.2.3.2 *Improving travel and transport efficiency*

- **Optimise healthcare vehicles** – Stakeholders have called for the optimised use of healthcare facility fleet vehicles, as well support to transition vehicles to more sustainable models. Actions raised across the stakeholder engagement process include:
  - The Strategy should consider the cost of leasing electric fleet vehicles, which is currently twice the cost of internal combustion engine (ICE) vehicles and is therefore cost-prohibitive.
  - Leverage health agencies' direct purchasing power over vehicle fleets, even if some vehicles such as ambulances are leased rather than purchased outright, electrical vehicles or high-fuel efficiency options should be preference.

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- In circumstances where electric vehicle use is not practical, such as in very remote settings, a high fuel efficiency standard must be the minimum.
- Explore partnerships with vehicle manufacturers, government programs, or leasing options to support the transition.
- More research is needed into the use of hydrogen in ambulances and emergency transport; although, size and scale inhibit this in smaller jurisdictions.
- Develop a strategy or transition plan for fleet electrification, considering vehicle range requirements, charging infrastructure, and financial feasibility. Example provided by stakeholder of the Australian Capital Territory Government's commitment to incentivise zero-emission vehicle purchases could be adopted at a national level, specifically for commercial fleet vehicles.
- A stakeholder highlighted that Australia could establish a scheme analogous to the 'electric car pledge' in America.

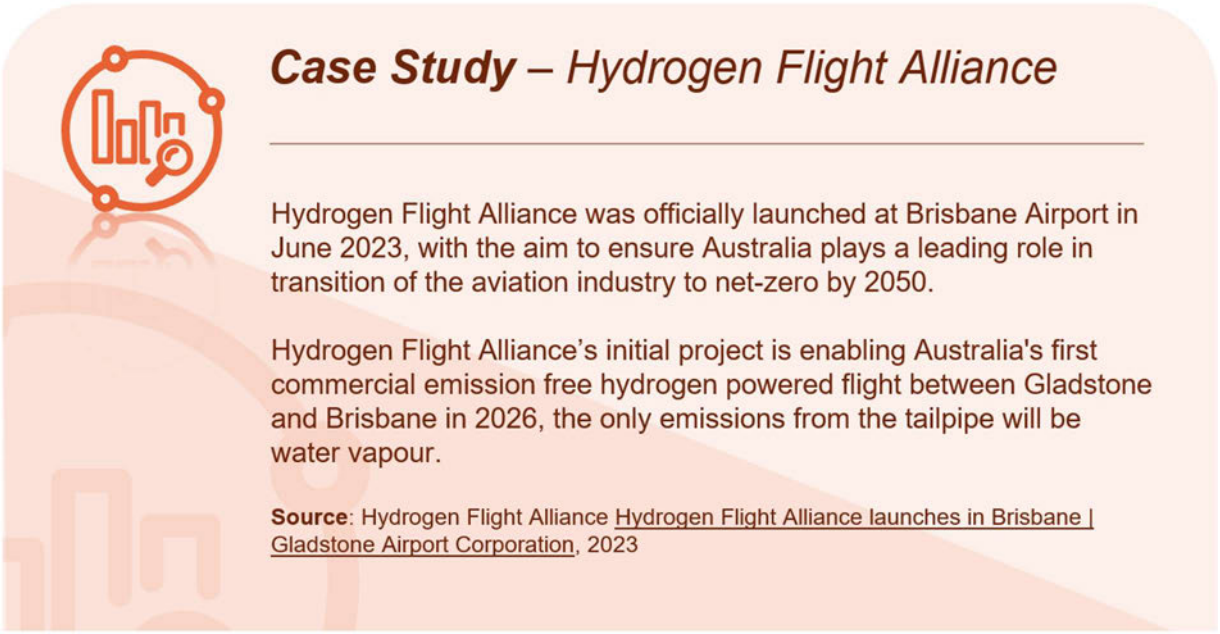


Case Study – Fleet transition

Medicines Australia member company AstraZeneca has announced that all field-based employees in Australia will be transitioning to battery electric vehicles (BEVs) at the change over time of their current vehicle. Similarly, member company Sanofi completed its fleet transition to hybrid electric vehicles in 2022. Many other Medicines Australia member companies are in the process of switching their company owned fleets to 100% electric vehicles and providing incentives for privately owned vehicles to switch away from combustion engines. This could be replicated across health-adjacent industries with incentivisation programs for commercial fleets of a certain capacity. This could also assist with implementation of infrastructure related to electric and hybrid vehicles, such as the proliferation of charging stations, which will have a flow-on impact on greenhouse gas emissions nationally.

- **Low-carbon fuels and fuel efficiency** – Stakeholders shared limitations and considerations regarding fuel efficiency and actions to make this more accessible to the Australia health system.
  - Recommending tightening of national fuel efficiency standards, phasing out internal combustion engine vehicles and committing to providing strong support for non-fossil fuel transport options even where this is relatively embryonic (for example air travel). This will require support for research and development in the field.
  - Workshop stakeholders noted that options exist for lower emission fuels particularly for aircrafts, however current costs are prohibitive, there needs to be incentives or support to move to sustainable options. Sustainable fuels aren't currently produced in Australia, and a lot of sustainable resources are sent overseas to develop sustainable fuels for other countries.
  - Related to this, with the global transition from internal combustion engines and to lower carbon fuels, there is a risk that emergency services vehicles are exposed to price and supply chain challenges in the near-to mid-term.

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Case Study – Hydrogen Flight Alliance

Hydrogen Flight Alliance was officially launched at Brisbane Airport in June 2023, with the aim to ensure Australia plays a leading role in transition of the aviation industry to net-zero by 2050.

Hydrogen Flight Alliance's initial project is enabling Australia's first commercial emission free hydrogen powered flight between Gladstone and Brisbane in 2026, the only emissions from the tailpipe will be water vapour.

Source: Hydrogen Flight Alliance Hydrogen Flight Alliance launches in Brisbane | Gladstone Airport Corporation, 2023

- **Optimise asset deployment** – Multiple stakeholders referenced the opportunity to improve service delivery to reduce unnecessary travel, including:
    - Improved sector knowledge regarding efficient rostering practices to reduce unnecessary staff travel, suggesting national guides could be provided to support this.
    - Improved triaging processes and systems to determine if emergency transport is needed. A stakeholder raised there are too many instances of ambulances being asked to respond to calls when it is not an emergency, resulting in wasted resources and travel emissions.
    - Implement efficient fleet management practices such as vehicle sharing, route optimisation, and driver training to reduce fuel consumption and emissions.
    - Review demand and service models to reduce ambulance kilometres.
- **Public transport** – Stakeholders were supportive of investment in public transport across Australia to improve efficiency and reduce the carbon impact travel and transport across the health system. Specific suggestions include:
    - Promoting public transport use amongst primary health staff. A NSW Primary Health Network (PHN) stakeholder noted PHNs across Australia are strategically positioned through their connection to GPs, primary healthcare providers, and the community. As such, PHNs can assist the Government in facilitating and commissioning necessary training and development for primary health practices to reduce emissions and change behaviours amongst patients.
    - Encourage state and territory governments to offer free public transport options for patients' families and friends. Hospitals can offer shuttle transport to public transport hubs if these are not within safe walking distance.
    - Provide mechanisms and easy to use collaboration channels for staff to carpool to and from work.
    - The Strategy should support collaboration between state and territory government, local government, and health services to improve public transport access and incentives for patients, staff, and visitors at existing and new facilities, as well as to other essential services.
    - Promotion of public transport should be done in conjunction with state and territory government Transport Departments and may include public health media campaigns and

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materials, with a particular focus on urban areas with greater access to both transport and doctors.

- Government must prioritise funding to run cleaner, cheaper transport across rural and remote Australia.
- In actioning any of the above, a stakeholder identified the challenges of shift work and public transportation timing. Highlighting the need for targeted work with staff, public transportation services and those who roster shift workers to facilitate public transport use, car-pooling and ride-share services.

- **Support and incentives for lower carbon travel** – Commentary was provided surrounding the need for support to allow stakeholders to access and adopt existing lower carbon options of travel, particularly for minority or vulnerable groups, and equally implement appropriate disincentives. Some of the examples and further details provided by stakeholders included:
  - Review of current policies perceived to be working in conflict with one another, for example, Australian Tax Office tax breaks for novated lease Electric Vehicles (EVs) conflicts with NSW Health Fringe Benefit Tax sharing arrangements.
  - People in the disability sector often rely on their cars for transport as public transport sometimes isn't accessible or appropriate for them. Many can't afford sustainable transport options such as electric vehicles, this barrier needs to be removed and people supported to invest in low-carbon travel options. Highlighting that less emissions intensive transport system also needs to be a more accessible and affordable one.
  - A similar sentiment was provided regarding low-income access to EVs and prioritisation of policy actions to improve this.
  - Encourage staff, patients, and visitors to switch to EVs by providing information on incentives, offering charging station access, and possibly implementing preferential parking for electric vehicles.
  - Maintain Australia's restriction of 2.5m on the width of heavy vehicles like buses. This will help stop roads and streets from being made wider which would increase the heat island effect and heat stress, increase particulate pollution from tyres and brakes, and reduce space for active travel and trees.
  - Implement disincentives for people to choose personal use motor vehicles such as reducing the paved surface area for onsite carparks.
  - Introduce an employee car purchasing scheme for people who work in private and public health to provide access to fleet discounts for EVs.

2.2.3.3 Improving infrastructure and enablers/supports for low-carbon travel

- **Active transport infrastructure and services** – Stakeholders emphasised the need for facilities and infrastructure to support active transport, including:
  - Provide funding and rapid roll out of extensive active transport infrastructure to address health and climate policy objectives, noting that the four largest capital cities (Sydney, Melbourne, Brisbane, Perth) all have large cycling networks listed on Infrastructure Australia's Infrastructure Priority List. This could be funded by the Australian Government in partnership with state and local governments.
  - The National Obesity Strategy recognises that when access to physical activity opportunities is convenient, affordable, and safe, people are more likely to be active in their everyday lives. Active travel can be impacted by perceived amenity as well as safety concerns. Related to this, ensure adequate end of trip facilities accessible to facility staff and visitors.
  - Best practice design rules will help make streets safe (and feel safe) for all users, including those using active travel – but they must be implemented consistently on new

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and re-built streets and roads and adapted for quickly upgrading all existing streets and roads.

- Establish a rapid formal review of state transport legislation, policies and programs that make walking and cycling less safe and convenient than driving (e.g., urban speed limits, right of way, liability, enforcement). Then tie Australian Government transport funding to immediate reform of these.
- Join the global campaign championed by the United Nations and World Health Organization (WHO) and shift the default speed limit in Australia to 30 km/h, the evidence-based maximum default safe speed, to remove barriers to people adopting active transport options.

- **Electric vehicle charging infrastructure** – Stakeholders emphasised that for EVs to be a viable transport option for patients, staff and facilities, further investment in supporting infrastructure is needed. Stakeholders provided the following considerations and suggested actions:
  - Install EV charging stations within healthcare facility parking areas to support the adoption of electric vehicles.
  - Invest in battery technology to improve resilience of fleets, assist EV charging, and use EVs as batteries.
  - State and territory governments should be responsible for ensuring adequate infrastructure is provided to support low-carbon travel options into the future and supported by the Commonwealth government guidelines and funding.
  - Ensure new building design and standards include adequate planning for infrastructure that supports the transition to net zero. For example, include charging stations in ambulance stations even if the fleet is not electric yet as in the future they should be and this will support reduction of travel emissions.
  - Government should support relationships between medical colleges and Australian EV charging network providers to support EV uptake by clinicians

2.2.4 Prevention and optimising models of care

Questions from Consultation Paper

Q14	Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?
Q18	What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

2.2.4.1 Incentives for models of care

- **Reduce low-value care** – Most stakeholders reflected on the need to reduce incentives for unnecessary medical interventions known as low-value care, and proposed a variety of actions:
  - Investment in cultural change programs that target clinician behaviour towards reducing low-value, unnecessary medical procedures or testing. For example, unnecessary biopsies or specimen tests generate waste and CO_2. Some stakeholders noted that many tests are ordered out of habit or fear of consequences from senior colleagues or litigation.
  - As multi-disciplinary care becomes embedded, improving clinician access to My Health Record and other digital health records to avoid unnecessary or duplicative tests.
  - Explore financial incentives and financing options to support private providers in implementing emission reduction measures. This can include grants, tax incentives, or low-interest loans specifically targeted at sustainable healthcare initiatives. Partner with

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financial institutions to develop innovative financing models that facilitate investment in energy-efficient infrastructure and technologies.

- Either eliminate financial incentives for over-servicing, and/or provide financial incentives to avoid low-value, high-carbon healthcare.
- Incentives or support mechanisms to involve private providers in emissions reduction efforts should be made available to all health providers.
- One large private hospital provider identified the need for the Australian Government consider incentives to support the uptake of digitisation within the private healthcare system, such as tax incentives or budgetary measures to support investment.

- **Non-financial incentives:** Some stakeholders also referred to a need to provide resourcing to peak bodies, training colleges and other key stakeholder groups to support the transition of the primary care sector to lower carbon models of care.

2.2.4.2 New or changed models of care

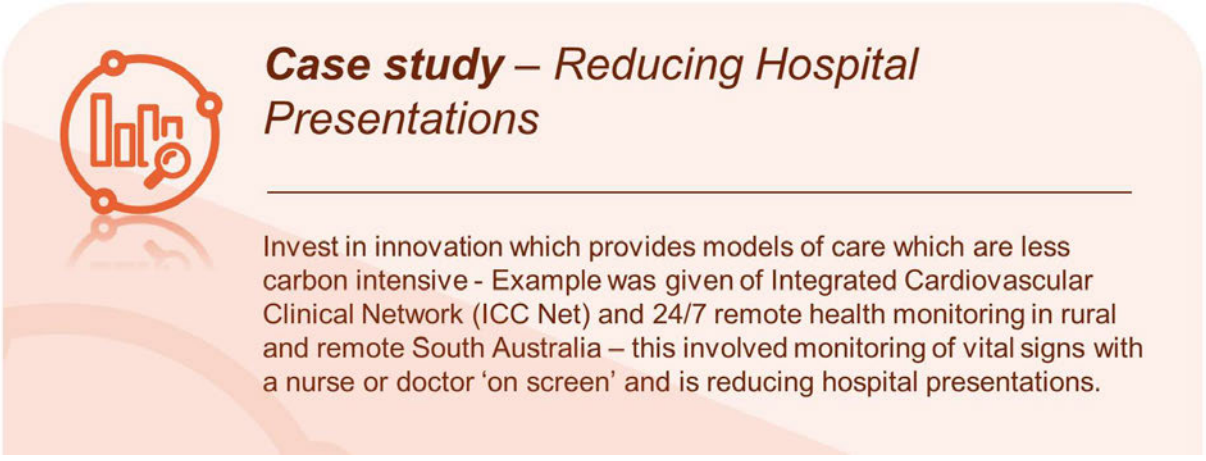
- **Prevention as mitigation** – Most stakeholders referenced the role of prevention and health promotion as an important mitigation strategy.
  - Optimising models of care requires a focus on value-based care approaches that prioritises outcomes that matter to people and communities against the costs of achieving those outcomes across the health treatment pathway.
  - Stakeholders felt that increasing investment in preventative health, including public health campaigns, will improve health outcomes and reduce avoidable hospitalisations which are emission-intensive.
  - Reduce the need for high resource use interventions (such as emergency air retrieval and/or avoidable hospitalisations) by ensuring timely access to local, preventive, and primary care and related services.
- **Vulnerable cohorts** – Most stakeholders raised the importance of implementing prevention strategies for vulnerable cohorts, including older people, and those living in rural and remote areas. Specific preventive actions referenced by stakeholders included:
  - Developing nuanced health messaging for vulnerable cohorts that place them at higher risk during heatwaves or other climate events, such as those with specific health conditions like asthma and older Australians.
  - A First Nations academic institution recommended the establishment of First Nations-led community healing centres that can support whole communities before, during and after times of crisis, such floods or fires. These centres would provide safe places for whole communities in easily accessible and safe locations. For example, the Northern Rivers Community Healing Hub played a key role in supporting the local community after the recent floods.
- **Models of care** – Developing and standardising models of care that are environmentally sustainable would significantly improve emissions reduction. Stakeholders provided the following ideas to contribute to emissions reduction:
  - Expanding Hospital in the Home services and decentralising healthcare away from tertiary centres by adequately resourcing local health facilities to deliver appropriate care closer to home.
  - Increase the focus on community care which can reduce the pressure on hospitals, increases patient choice and satisfaction, and have low-carbon advantages. Implementing these models require clinical governance, assessment, and monitoring.
  - Embrace digital healthcare solutions. For example, reduce travel emissions and reduce paper waste by promoting electronic processes for patient medical records, prescriptions, data collection and communication.

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- Strengthen disease surveillance systems to detect and respond to climate-sensitive diseases, such as vector-borne and waterborne diseases. This includes improving data collection, analysis, and reporting mechanisms, enhancing communication channels between health authorities, and integrating climate and environmental data into surveillance systems for early detection and response.
- Many stakeholders made positive reference to a previously funded MedicineWise initiative, Choosing Wisely, which focused on supporting prescriber decisions and reducing low-value care.

2.2.4.3 New healthcare technology

- **Health Technology Assessments** – Multiple stakeholders referenced Health Technology Assessments (HTAs) within their written submissions, both as an area which needed reform to ensure environmental impact was a measurement factor and as an avenue to mandate the emission measurement and reporting, specifically:
  - Stakeholders highlighted how existing health technology assessment bodies (Therapeutic Goods Administration (TGA), Medical Services Advisory Committee (MSAC), Pharmaceutical Benefits Advisory Committee (PBAC)) could be used to mandate the measurement and reporting of emissions for new and existing healthcare technology. For example, implementing an Environmental Product Declaration.
  - HTAs can also support health system sustainability. Stakeholders referenced the opportunity to incentivise the pace at which sustainability innovations are adopted into models of care, for example, through modifications to existing evaluation frameworks to include consideration of societal impact (including environmental aspects) of medical technology introduced into the health system.
  - Activity level emission monitoring and product level measurement should be a focus.
  - The Strategy should commit to ensuring HTAs consider carbon emissions. Currently, these assessments focus on measuring the economic cost of new pharmaceuticals, medical devices, or model of care.
  - It was suggested the Strategy should consider proposing similar commitments to that of the UKs National Institute for Health and Care Excellence, to signal the measurement and capture of environmental impact of healthcare is a national priority.
- **Leverage existing technology to improve access and reduce emissions** – Most stakeholders identified the need to improve the use of technology to facilitate access to care, particularly those living in rural and remote areas, and reduce reliance on travel to health services, both of which contribute to emissions. Specific strategies include:



  - Expand the availability and use of telehealth services to reduce the need for in-person visits and associated carbon emissions from patient travel as well as improve access to healthcare. Provide training and support to healthcare providers to enable efficient and

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effective delivery of telehealth services. Stakeholders indicated there is a need for appropriate telehealth item numbers (including for phone consultations) which should be permanently embedded in the Medicare Benefits Schedule.

- Some stakeholders recommended measuring unnecessary staff and patient travel associated activities such as testing and screening and discussion of test results which could be replaced with telehealth rather than face-to-face appointments.
- Some stakeholders cautioned that while telehealth has the potential to reduce emissions, the real-time monitoring, operations of smart devices, and data storage in power data centres, also use energy and produce emissions.
- A medical peak body indicated that public hospital communication and links with general practitioners should be improved to minimise patient travel to large hospital centres by having care through their local general practice.
- Building interoperability into the design of all healthcare software and clinical information systems will reduce administrative burden for healthcare workers. By extension this will improve healthcare worker satisfaction, create system efficiencies, and reduce low-value care. Fostering integrated team-based care supported by shared data systems can also act to reduce transport emissions though reducing the need for patients to travel to multiple appointments across diverse locations.

- **Adopt artificial intelligence and new technologies –** Several stakeholders described how artificial intelligence and other new technologies could be used to reduce carbon emissions from low-value care and travel. Suggestions included:
  - The emergence of artificial intelligence options for autonomous analysis and reporting on tests could support carbon reduction initiatives and improve patient outcomes. It was suggested that there should be further exploration of how predictive artificial intelligence could also support a reduction in low-value care.
  - Consider the role of artificial intelligence to augment the reach of virtual telehealth meetings for staff, patients and their families; for example, through automated scheduling of check-ins.
  - Artificial intelligence remote monitoring, wearables and other technology should be introduced to give consumers the technology to manage their own health and reduce burden on our physical health systems. The Department and the Aged Care Quality and Safety Commission could lead this work.

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Case study – Virtual Care Models

The George Institute, in collaboration with Oxford University has developed SmartHealth Pregnancy, a low-cost, smartphone-based system used by female community health workers to identify pregnant and postpartum women with high-risk conditions (including heart disease, stroke and diabetes), refer them to primary health care and facilitate two-way communication between primary care and the community to ensure timely follow-up and adherence to medications and lifestyle advice. These types of tools can improve the quality of care in rural and remote communities and should be considered more widely.

2.2.4.4 Local community partnerships engagement and communication

- **Collaboration and engagement** – Collaborate with existing Indigenous governance bodies at national, regional, and local levels. This can include partnerships with Indigenous Health Leadership Councils, Land Councils, and other representative bodies. By working closely with these entities, the Strategy can ensure that Indigenous governance structures are respected, and decision-making processes are guided by Indigenous principles and protocols.
- **Awareness raising and planning** – Stakeholders offered a range of actions to support awareness raising, engagement and planning for climate change and its impacts. This includes the following:
    - Undertake place-based assessments of suitability of social and affordable housing relating to heat pressures, specifically for people with disability and prioritised based on their location in Australia.
    - Identify and decide on whether to close or withdraw services which will no longer be viable in climate or location.
    - Raise awareness among healthcare professionals, patients, and the public regarding the environmental impact of medications and the importance of sustainable medication practices. This can be through public health campaigns and education programs.
    - Increase health literacy so communities and individuals can understand the complex relationship between climate change and human health.
    - Establish communities of practice that engage with health professionals across the health system, including private providers to encourage climate health adaptation.
    - Improve collaboration between primary care providers and acute care providers.
    - Incorporate findings from previous reviews and draw on local initiatives. A key example in the NT is the ranger programs now rolling out across many communities to protect country and culture. Ranger programs draw on cultural and community knowledge as well as Western scientific expertise. Ranger programs can contribute to both mitigation of climate change (through burning to protect against uncontrolled bushfires and protecting habitat) and adaption (through environmental restoration and protection of vulnerable fauna and flora that are being impacted by climate change).

2.2.5 Medicine and gases

Questions from Consultation Paper

Q12	Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

Stakeholders shared detailed actions and avenues to reduce usage, wastage and leakage associated with various medicines and gases, highlighting the need for reform to change behaviours and incentivise lower carbon choices.

2.2.5.1 Reducing gas usage, wastage, and leakage

- **Reduce usage** – Stakeholders acknowledged the substantial decrease in the use of gases in the last few years however they noted there is still significant progress to be made. The following comments were provided:
    - Encourage midwives, obstetricians, anaesthetists, and patients to consider ways to reduce nitrous oxide use in birthing, noting that nitrous oxide is not a particularly effective labour analgesic.
    - Reduce the use and or ban the use of desflurane, as both the England and Scotland NHS have done. There was overwhelming support for the phase out and ultimately

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prohibiting the use of desflurane due to the significant emissions impact. Numerous Australian health services identified as having successfully implemented elimination plans.

- It was noted there is ongoing uncertainty as to whether bottled nitrous oxide has fewer fugitive emissions than piped alternatives. Stakeholders called for for further evidence and analysis to support adopting a low emissions option.
- Educate clinicians, prescribers, and anaesthetists on the carbon footprint of medicines and gases and encourage use of less environmentally damaging options where possible.
- Where necessary to prescribe, provide guidance on techniques to minimise waste and optimise dosing. There is space for both government and specialty College-based educational campaigns, promoted by the Strategy.
- It was noted that the Australian Commission for Safety and Quality in Health Care has drafted a Sustainable Healthcare Module that has recently undergone public consultation. This will become mandatory in the coming years.
- Nationwide campaigns are needed to support community education and awareness regarding prescribing of inhalers and what is deemed environmentally sustainable, stakeholders viewed consumers playing an integral role in use reduction. Noting, it will be important to consider unintended consequences, such as patients feeling guilt and denying treatment if they need a therapeutic with a higher environmental impact.
- Actively support the move away from pressurised metered dose inhalers – there are effective alternatives at every level for all patients able to use one. It was suggested, to transition to low-carbon inhaler use in community and healthcare settings.
- Stakeholders representing consumers with chronic asthma and lung disease raised a concern that actions proposed in the Consultation Paper regarding reducing dispensing and prescribing of pressurised metered dose inhalers does not recognise the need to consult with people with asthma, their carers, or peak bodies. Instead, it focuses on primary care providers, suggesting a top-down approach, rather than a consumer-centred approach.
- Governance surrounding use of medicines and gases could be strengthened – this could be owned by the Australian Commission on Safety and Quality in Health Care.

Strategies and reform identified to support this are further discussed in the following section Medicine and gas regulation and policy.

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Case Study *– Western Australia Country Health service*

Western Australia Country Health Service (WACHS) is nearing completion of phasing out the use of desflurane anaesthetic gas in WACHS theatres, saving 30 tonnes of CO^2 per month from entering the atmosphere (the equivalent of planting 1,200 trees each month). Identifying their working understanding of anaesthetics including rural and remote needs

Source: Government of Western Australia WA Country Health Service, WA Country Health Service - WACHS focuses on a greener more sustainable future, 2022

- **Reducing gas leakage –** Many stakeholders highlighted the significant component of emissions from healthcare usage of nitrous oxide, which is associated with gas leakage of piped systems, compared, its clinical use in obstetric pain relief, dentistry, and anaesthesia. Many called for reform and action to address this:
    - Encourage all new hospitals (except for obstetric and paediatric services) to avoid the installation of piped nitrous oxide. Stakeholders raised this is being promulgated from 2023 by the Australian Health Facility Guidelines where piped nitrous oxide is not a required standard.
    - Mandate nitrous oxide infrastructure management plans and national audits to ensure adequate monitoring, detection, and mitigation of leaks from the manifolds, outlets, or pipes.
    - Develop targets for hospitals with existing nitrous piped systems to work towards upgrading their nitrous oxide infrastructure to reduce leakage.
    - Develop a plan to progressively decommission nitrous piped systems in existing facilities and as a priority move to cylinder supply of nitrous.
    - Review of nitrous oxide stock management guidelines and practices and security.
- **Reducing gas wastage –** Stakeholders commented that effort should be placed on reducing wastage associated with unused and discarded gas cylinders and inhalers. Suggestions include:
    - Bulk nitrous oxide for hospital use is supplied in large cylinders, these are returned to suppliers with significant residual nitrous oxide as they cannot be fully emptied on the hospital manifolds due to pressure reduction in the cylinders. There is concern in the sector regarding a lack of assurance or verification from major suppliers of bulk nitrous oxide regarding the treatment of the remaining nitrous oxide. There must be changes to legislation to mandate this residual cylinder gas is captured and re-cycled and prevent major suppliers from venting residual cylinder gas to atmosphere.
    - One stakeholder representing consumers who have chronic asthma suggested piloting inhaler recycling, whereby unused gases from inhalers can be captured and reused.
    - Further investigation and research are needed into the lifespan of inhalers.
    - Promote anaesthetic gas capture and recycling, the technology now exists to capture and recycle both sevoflurane and desflurane.

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Ideas in Practice

One stakeholder flagged the inhaler recycling and recovery scheme by Kent Community Health, Complete the Cycle, as an example recycling scheme in the UK which could be leveraged in Australia to both reduce waste and greenhouse gases.

2.2.5.2 Medicine and gas regulation and policy

- **Medicare Benefits Schedule (MBS) linkage** – environmental considerations should be included in the MBS – it was proposed that the considerations of Medical Services Advisory Committee should take into consideration the environmental impact.
- **Pharmaceutical Benefits Scheme (PBS) incentives** – Many stakeholders highlighted the opportunity for the PBS to better align with the Strategy by providing benefits or subsidies for

prescription options that are “greener” in terms of carbon footprint. Some stakeholders provided examples of how this could work in practice:

- Preferencing the use of dry powder inhalers over pressurised metered dose inhalers by changing the current PBS restrictions to only prescribing pressurised metered dose inhalers when there is a need or via authority prescriptions. This would encourage prescribers commencing patients on a new inhaler to first try the more environmentally-friendly device.
- Specifically, a stakeholder noted a need for PBS reform rulings regarding the use for terbutaline dry powder inhalers (e.g Bricanyl) which are currently a restricted item and not easily prescribed unless the clinician assesses that a patient cannot coordinate an inhaler. However, a salbutamol metered dose inhaler is more carbon intensive than terbutaline.
- Some stakeholders viewed there should be no changes for patients who are already stable on a device that they can use, and from which they derive efficacy in prevention/relief of respiratory/asthma symptoms.
- Research into which patients clearly benefit from metered dose inhalers rather than dry powder inhalers should be incentivised. In addition, research into alternative propellants or delivery systems should be prioritised.
- The Department should announce a roadmap for delisting pressurised metered dose inhalers from the PBS.

- **Other mechanisms and incentives** – stakeholders provided additional suggestions regarding avenues to incentivise reduction and elimination of high emission medicine and gas practices, including:
  - The Australian Government should leverage health system funding agreements with state and territory governments to work towards reduction and phase out of high emissions gases.
  - Explore the development of ‘green tick’ (or some other accredited indication) displaying the carbon impact of prescribing decisions for example, sustainable anaesthetics choices, the use of sustainable medications and prescriptions in primary care (an example is the use of medical gases in anaesthesia or the use of metered dose inhalers in the management of asthma).
  - Include a requirement in the upcoming National Safety and Quality Health Service (NSQHS) Standards Sustainable Healthcare module for hospitals to be actively engaged in reducing their emissions associated with anaesthetic gases, inhalers, low-value prescribing and medication waste management.
  - Prescribing software should have warnings added regarding environmental harms and suggest alternative options.
  - The Department to work with medicines sponsors/manufacturers to address barriers that prevent the introduction of low-carbon products into the Australian market and use of low-carbon propellants in inhalers. For example, salbutamol dry powder inhalers are available in countries other than Australia.

2.2.5.3 Other considerations related to medicine and gases

- Some stakeholders expressed the Consultation Paper should have a broader focus on relevant medicines and gases, including:
  - A focus on all therapeutics, with medicines and gases a priority.
  - Expand and investigate the carbon footprint of pharmaceuticals.
  - Review and where possible reduce/eliminate use of Sulphur Hexafluoride out of healthcare.

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- A medical association stakeholder group called for a policy on iodinated contrast media, a substance used to delineate vessels and organs in diagnostic imaging examinations and radiotherapy planning - iodine is a carbon intensive and finite resource.
- A stakeholder also referenced the need for a specific target for phasing out natural gas from clinical settings. Besides its climate impacts, health impact assessments have identified indoor natural gas devices as posing a health risk.
- It was noted the production of oxygen has an environmental footprint, advising a more scientifically sound or optimised approach to the use of oxygen in healthcare would aid in reducing associated emissions. Highlighting that medical oxygen flow meters should be turned off when not in use to minimise waste.

2.2.6 Waste

Questions from Consultation Paper

Q13	Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

Stakeholders shared a range of views on how waste can better mitigate the impacts of climate change. The ideas that emerged from consultations focused around reducing waste from production, and recycling and reuse of materials.

2.2.6.1 Reducing waste

- **Single use products –** Many stakeholders highlighted the high prevalence of single-use items in healthcare. Many called for reform in this area:
  - Where infection control is not necessary, re-usable products should replace single-use products.
  - Where single-use items are necessary, hospitals and procurement teams should require a minimum proportion of single-use product packaging be from recycled materials. It was suggested up to 50% recycled materials for single-use product packaging.
  - Suppliers, manufacturers, and end users should all consider the entire product lifecycle for single-use products.
  - Single-use products identified for transition to re-usable products include cups, straws, packaging materials, scissors, forceps in suture packs made of steel, surgical drapes, cold gel packs, gowns, and personal protective equipment. It was highlighted that care must be taken that the re-use process does not generate more waste than single-use products.
  - The Department and state and territory health services should work with industry to move to re-usable products. The cost to implement these strategies should be considered.
  - Most stakeholders recognised the increased focus on infection control since the emergence of COVID-19. It was widely reported that this focus has increased waste across health and aged care settings. Many called for action to be taken to reduce waste resulting from infection control, particularly through changes to the culture around single-use products.

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Ideas in Practice – Re-usable gowns

One stakeholder provided an example of their analysis on the consumption of single-use gowns against re-useable gowns in the hospital emergency department setting. The work found that one re-useable gown suitable for 100 wash cycles can replace approximately 90 single-use gowns. Over five years, 42% less CO_2 emissions are emitted with re-useable gowns. Ninety six percent less solid waste from re-useable gowns would also be saved (one tonne vs 28 tonnes). Despite this, re-useable gowns are more expensive per use. Collaboration should occur to determine who bears the cost for such an initiative.



Ideas in Practice – Recycling single use

A stakeholder group referenced a Tasmanian start-up GreenMed as an example of innovation to share with the sector. GreenMed is working to reduce the tonnes of waste from single-use plastics in hospitals by creating a closed-loop recycling program. Since launching in May GreenMed have saved more than 1,000 kilograms of plastic from ending up in landfill.

Source: New recycling trial targets 'shocking' amount of single-use plastics used by hospitals - ABC News

- **Food waste –** Many stakeholders recognised the large contribution food plays to overall wastage in healthcare – particularly in hospitals and residential aged care facilities. They stressed the need to divert food from landfill and find ways to reduce consumption of foods that create methane gas:
    - Sustainable patient food choices should be promoted by health and residential aged care facilities who should source food locally.
    - Health and residential aged care facilities can introduce demand-based ordering to minimise over-preparing and over-production of food and beverages.
    - All health and residential aged care facilities should introduce composting programs for food and other organic waste. This may require partnerships with suitably resourced organisations. Facility staff should be educated on appropriate segregation of organic waste.
    - Some suggestions were made that composting is the final step in food waste reduction. First, health and residential aged care facilities must consider reusing food scraps from preparation, donating food scraps to food recovery organisations, diverting food waste for animal feed, and using food waste for anaerobic energy production. Industry partnerships would be needed to achieve this.

- Food services in hospitals should complete regular aggregate food waste audits. These should measure food and food-related waste such as food packaging and plastic cutlery. Before mealtime (preparation waste) and after mealtime (plate waste), and waste from the plating line should be included. Where possible, auditing should occur over 14 days so that data is collected over a time series and not a single snapshot in time. This is seen by stakeholders as a key measure to reducing food waste.
- It was noted that an Australian National Food Wastage Roadmap exists that the Department can draw on for further approaches to reducing food waste.
- Stakeholders asserted that bioenzymes can be used to accelerate the decomposition of organic waste like food scraps and other biodegradable materials in health and residential aged care facilities. By breaking down waste more efficiently, bioenzymes can help reduce the production of methane.



- **Medicine and health product packaging –** Many stakeholders supported changes to packaging of medical and health products. Specific suggestions include:
  - The Department and health services should work with suppliers to explore packaging alternatives to reduce the use of plastic in medical supplies and equipment. Packaging standards also need to be developed and applied across the healthcare and residential aged care sectors. This should include reduced plastic wrap for freight.
  - Many stakeholders called for the Department to work with the TGA to review packaging and information requirements for medicines to reduce packaging waste. For example, medication bottles are often partially filled. Reform could occur here to optimise bottle size and reduce packaging materials.
  - Incentives could be designed to encourage consumers to return medication bottles to pharmacies for decontamination and reuse. It was suggested some of this responsibility could fall to pharmaceutical companies.
  - Health and residential aged care facilities should encourage suppliers to minimise packaging, use recycled and recyclable materials through procurement processes.
  - Stakeholders highlighted that the Australian Packaging Covenant Organisation has released a target of 100% recyclable packaging by 2025. While driving innovation, this target is not being achieved in health and aged care. A longer-term vision and better coordination and collaboration around essential packaging material streams are needed.

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- Stakeholders repeatedly referenced the *Choosing Wisely Australia*® initiative that partners with Australia's health professional colleges, societies, and associations to have conversations about tests, treatments, and procedures where evidence shows they provide no benefit or, in some cases, lead to harm. An increasing number of quality improvement projects and activities are underway across the country that are building capacity for the spread and scale of *Choosing Wisely*. These projects are locally led and adapted to address issues that are a priority for that setting. Implementation is supported by a growing array of toolkits that are available.



Disability Sector Perspective

According to disability sector stakeholders, measures focused on reducing waste from medicine and medical devices should be conscious that people with disability may feel guilty or anxious that these resources may contribute to climate impacts. There is a risk that this will further marginalise people in already tough financial positions. The Department should give this strong consideration.

- **Dispensing practices –** Stakeholders generally agreed that there is a culture of over-dispensing across Australia's health and aged care systems. Some stakeholders representing the views of professionals in the pharmaceutical industry and other groups provided further commentary in this area:
  - The Department should use policy levers and collaborate with industry to reduce over-prescribing and dispensing. Surplus prescribing leads to stockpiling and expiry of unused medicine that need to be disposed of. The practice of providing medicine samples that are often not used should also be reviewed. The right levers can help change prescribing and dispensing culture.
  - Data generated from technology solutions such as automated dispensing cabinets and dispensing robots can be used to reduce medication wastage at a ward or hospital-wide level. Bespoke software programs may be used to present the data in a form that is understandable to pharmacy staff and hospital stakeholders. Reports from these data can be used proactively to reduce waste.
  - Nicotine vaping products accessible via medical prescription and pharmacies should be disposed of correctly to avoid environmental harms. The Department and state and territory health services should develop a wastage plan for nicotine vaping products.
  - Regulatory agencies should develop national evidence-based protocols for administration of medicines that support reducing waste, such as oral use over intravenous use where clinically indicated.

2.2.6.2 Recycling and reusing

- **Recycling literacy and capacity –** Many stakeholders highlighted that awareness of correct recycling and re-use practice is needed to help reduce waste. This applies to the entire health and aged care systems, including clinicians, providers, and patients. Stakeholders reported that more policy and legislative action is needed to embed recycling and re-use at all levels. The following was raised:
  - The Department, industry and state and territory health services should develop and deliver education campaigns and informative materials for staff, patients and visitors on correct recycling and re-use practice, such as correct segregation.

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  - Health and residential aged care facilities need support to build recycling and re-use space.

- **Minimising co-mingling of waste –** Stakeholders commented that effort should be placed on reducing the prevalence of waste co-mingling. Some stakeholders provided details on how they would like to see this work in practice:
  - Hospitals and residential aged care facilities should be designed and modified to include more appropriate dock space and utility rooms to facilitate better processing of multiple waste streams. In particular, dock space requires more room for balers and baled product storage, or additional compactors. Facilities should develop approaches to reducing dock traffic.
  - Currently, common approaches to reducing co-mingling focus on bulk science waste. A more holistic approach to reducing co-mingling should be taken.
- **Mandating sector-wide requirements for recycling practices –** Stakeholders generally agreed that there should be mandated recycling requirements in the health and aged care sectors. Targets can leverage existing programs and policies initiated by state and territory health services, and the Commonwealth Government. Some stakeholders further expanded on this, including:
  - The Department should establish clear recycling targets, reporting pathways and requirements across the National healthcare system for everything that has recycling potential.
  - While some stakeholders advocated for mandatory recycling targets, others suggested that private industry should self-regulate with government support.
- **Specific approaches** – Several stakeholders provided specific approaches that could be undertaken to work towards better recycling and re-use practices. Key ideas included:
  - New and existing "take back" programs can be leveraged to encourage recycling and re-use. This can be further supported through the development of levers in the procurement process. One stakeholder provided an example of a private hospital provider recycling PVC IV bags and masks by handing back to a specialist recycling firm.

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Aged Care Perspective

Stakeholders representing the aged care sector highlighted that with appropriate support, residential aged care facilities should establish comprehensive recycling systems for common waste streams, such as paper, plastic, glass and metal. Further research should be performed on recycling batteries, medical equipment and other medical waste items. This should also be applied to health care facilities.

  - Asset sharing should be encouraged between LHNs and charities. One LHN highlighted its work repurposing internal assets and streamlining medical donations to external charities through an online marketplace. The marketplace has created a seamless and efficient way of repurposing.
  - One stakeholder representing consumers who have chronic asthma suggested piloting inhaler recycling. This is discussed further in Medicine and gases.
  - There should be increased awareness on how to recycle in-home consumables such as aids for people with disability.

Ideas in Practice – Chemotherapy medication cooling packaging

One stakeholder representing private industry asserted that companies are actively investing in environmental and sustainability and health departments should work with them to introduce new solutions. The stakeholder reported that one of the most wide-reaching medication-related initiatives was to reduce the high volume of bubble wrap, ice packs and plastics used to maintain chemotherapy medicines at the correct temperature. An environmentally responsible solution was developed to use packaging produced from 100% sheep's waste wool.

- Consideration could be given to applying antibiotic and opioid stewardship models to other medicines to reduce over-prescription and reviewing validity of use-by dates to reduce waste.
- Fund local incineration and recycling facilities to limit the transport of pharmaceutical and contaminated waste.

Case study

One stakeholder described an initiative that rescues unused medical supplies and equipment, delivering it to underserved communities around the world. Around 80 to 90% of what they receive is unexpired and unused. The stakeholder stated that a substantial portion of this is due to stockpiling of supplies and equipment in case of supply chain interruption. That has included critical personal protective equipment (PPE) supplies. Onshore manufacture may be one approach to reducing the need for stockpiling, thus reducing waste production. This can also include pharmaceuticals.

2.2.7 Supply chain

Questions from Consultation Paper

Q11	Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?
Q18	What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

The supply chain in the health and aged care sectors involves the planning, sourcing, manufacturing, delivery and disposal of medical supplies, equipment, pharmaceuticals, and other resources needed to support care delivery. There are many opportunities to reduce the impact of these processes on climate change. Stakeholders focused suggestions around four key areas,

including reducing supplier impact, supply chain governance and regulation, manufacturing and supply chain incentives, and critical resource security.

2.2.7.1 Reducing supplier climate impact

- **Product stewardship and circular economy** – Many stakeholders highlighted the need for the health and aged care sectors to adopt product stewardship and circular economy principles. Stakeholders perceived that design, production, importation, selling, use and disposal of health and aged care products is a shared responsibility of all involved. The following was raised:
    - Increasing the transparency of supply chains is important. A greater understanding of the complexity, resilience and vulnerability by end users could produce better resource stewardship. Currently, the end user bears too much responsibility for sustainable processing and disposal of products. Building the cost of sustainable product lifecycle management into product stewardship will help consumers make informed choices.
    - The Department should work with the broader Commonwealth Government to introduce new product stewardship legislation to embed this practice more deeply into health and aged care. A stakeholder suggested one option could be to legislate that medicines and consumables report their emissions impact and give consumers a choice to pick a lower carbon option. This will work towards changing supplier behaviour as more consumers elect for more sustainable options.
    - The substantial purchasing power of health services and providers was emphasised by stakeholders. This power can be leveraged to encourage adoption of product stewardship and circular economy by requiring demonstration of these principles as a component of procurement. Additionally, greater weight should be given to suppliers that demonstrate more robust product stewardship and circular economy practices.
    - It was suggested expanding the health and aged care products on the *Minister's Priority List* for product stewardship. It was noted that plastics have recently been added to this list.
    - Industry-wide reform should occur in collaboration with the Department to align product design with circular economy principles. This will embed sustainability into the product lifecycle.
    - The Department should encourage the health and aged care systems to adopt a circular economy approach through 'buy local' procurement and promotion of reusing and redistributing resources (including furniture, information and communications technology equipment, and medical equipment).
- **Baseline data collection of supplier climate impact –** Many stakeholders stressed the importance of establishing an evidence-based starting point for measuring and tracking the environmental performance of suppliers. Approaches suggested by stakeholders include:
    - The Department should establish the mechanisms required for collecting baseline emissions data from suppliers. These emissions can be monitored, and suppliers should regularly report progress against reduction targets. These data can also be used to identify "emission hotspots" and prioritise areas for action accordingly.
    - Some stakeholders asserted that a standardised international method for assessing the quantifiable effects on the environment of a service or product from the extraction of materials up to the end-of-life. Lifecycle assessments provide a common basis for consistent, robust, and quality-assured lifecycle data, methods, and assessments. The outcomes of these eco-design programs may include new packaging options that no longer include hard-to-recycle materials, such as blister packs, a shift to recycled or more easily recyclable materials, and a reduction in overall packaging size and weight.
- **Reducing need for cold chain medicines –** Some stakeholders highlighted Australia's heavy reliance on medicines requiring cold chain transportation. Better inventory management was recommended to minimise cold chain transportation and exploring shared distribution networks

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or centralised hubs for improved efficiency. The Department and state and territory health services should collaborate with logistics providers and suppliers to identify opportunities for efficiency improvements. It was recognised that better cold chain practices will reduce spoilage and waste.

2.2.7.2 Supply chain governance and regulation

- **Sustainable procurement practices –** Numerous stakeholders called for policies and regulation that will lead to adoption of more sustainable procurement practices. It was noted that the WHO recommends governments influence suppliers to adopt sustainable supply chain processes; however, views on the approach to achieving this is varied. While most stakeholders advocated for mandatory procurement requirements, others expressed that regulation should be minimal and sustainable practices should instead be encouraged through incentives. Discussion from stakeholders included:
    - Strong support was generally noted on mandated nationally consistent procurement standards. Purchasing agents should consider factors such as energy efficiency, recycled content, and carbon footprint when making purchasing decisions. Supplier assessments for environmental sustainability should regularly be conducted and follow a standard framework. Procurement standards may also minimise anti-competition market effects.
    - Mandatory measurement and reporting were recommended for private sector emissions. This stakeholder held the view that private providers will not shift behaviour without policy change.
    - To support changing procurement practices, suppliers should be more transparent with information on sustainable procurement practices
    - Some stakeholders asserted that regulation of procurement practices could impact the competitiveness of private industry and act as a disincentive. It was viewed that stakeholders may respond better to training and incentives that reward industry for sustainable procurement practices.
    - Several stakeholders suggested that Australia looks to the NHS and to the *UN's Sustainable Procurement Plan* for guidance of supply chain governance and regulation. They cited several actions from the NHS's *Net Zero Roadmap* (which were also described in the Consultation Paper), including:
        — From April 2022: all NHS procurements will include a minimum 10% net zero and social value weighting.
        — From April 2023, all NHS contracts over £5 million require suppliers to publish an emissions reduction plan for scope 1, scope 2 and a subset of scope 3 emissions. From April 2024, this requirement will be extended to cover all procurements irrespective of value.
        — From April 2027, all NHS suppliers will be required to publish targets and emissions for all emissions in scope of the NHS net zero commitment – including those produced internationally.
        — From April 2028: new requirements will be introduced overseeing the provision of carbon foot printing for individual products supplied to the NHS. The NHS will work with suppliers and regulators to determine the scope and methodology.
        — From 2030: suppliers will only be able to qualify for NHS contracts if they can demonstrate their progress through published progress reports and continued carbon emissions reporting through the Evergreen sustainable supplier assessment.

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2.2.7.3 Manufacturing and supply chain incentives

- **General discussion on manufacturing and supply chain incentives –** There was broad stakeholder sentiment that incentives will be important for adopting environmentally-sustainable behaviours. Stakeholders described was these incentives could be including:
    - Specific incentives that may have a substantial impact on manufacturer and supplier behaviour could include those targeting solar panel manufacturing and energy agreements with 100% renewable energy wholesalers.
    - Governments should consider approaches to incentivise public health and aged care providers and industry to pay a premium for products that come in multi-packs or with a lower carbon footprint, backed by lifecycle assessments tracing back to the third supplier.
    - Governments should look at where cost barriers are prohibiting the uptake of climate-friendly practices and target these areas.
    - Ensuring environmentally sustainable medicines are accessible and affordable for patients will be key to ensuring their use. The TGA and Pharmaceutical Benefits Advisory Committee should be consulted as Australia moves to more local pharmaceutical capabilities to ensure that environmental sustainability is a consideration when approving medicines to be registered in Australia and subsidised by the Pharmaceutical Benefits Scheme.
    - Australia's patenting system should be updated to reflect local production and supply of medications.

2.2.7.4 Critical resource security

- **Supply chain resilience for emergency preparedness –** Many stakeholders expressed concerns over supply chain vulnerabilities to emergency situations, particularly for people living in rural and remote areas. Stakeholders asserted that supply chain vulnerabilities are likely to increase as extreme weather events due to climate change increase. Critical resources likely to be affected include water, food, medicines, and vaccines. The following was discussed:
    - A "food miles" concept could be introduced into supply chain practice of health institutions. A peak body representing clinicians reported that its members have seen a substantial reduction in small local farms due to land rezoning to residential. Transporting critical resources instead increases emissions from large haul transport and risk to critical resource supply during extreme weather and pandemics.
    - The Department should look to state and territory governments on lessons learned on supply chain disruptions from COVID-19 to better prepare for future climate-related disruptions.
    - Australia should reduce its reliance on imports for critical resources and should look to bolster local manufacturing, production and cultivation. One stakeholder from the medical field called for a comprehensive medicine supply strategy, including domestic manufacturing, to help ensure supply of critical medicines in Australia.
    - Health services in local rural and remote communities should plan to transition to electric energy and local energy storage to enhance security. This will allow services to function when issues occur in another region. If energy supply is disrupted in one area, health services in nearby locations can still operate using localised storage. This point was emphasised by aged care stakeholders.
    - Prioritise adaptation actions to ensure access to safe drinking water, promote sustainable water management practices, enhance food security measures, and support agricultural resilience to climate change.
    - Australia should diversify away using single sources or regions to supply critical resources. By having multiple suppliers and distribution channels, health and aged care can quickly adapt and respond to changing circumstances due to extreme events.

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First Nations Perspective

One stakeholder asserted that supporting the leadership of First Nations communities around land management ensures that traditional food sources are protected. Additionally, engaging First Nations people to educate the broader Australian community about growing and eating traditional foods will contribute to reducing food insecurity as foods endemic to the local area are grown and eaten in a sustainable way.

Case study

One state and territory health service described several occasions of water shortages impacting its health services. In one instance, one health clinic could not operate until a new water source was found. Another health service could not expand its renal services because there was not enough water available to support this service. The stakeholder stressed that water insecurity is already impacting rural and remote communities.

2.2.8 Emergency response

Questions from Consultation Paper

Q19	Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: What are the key considerations in developing a methodology? How should their development draw on work already undertaken, for example at the state and territory level, or internationally? What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
Q20	Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from
Q21	What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

Discussion around emergency response considerations focused on adaptation. Within this, four key areas for action emerged from discussions, including planning, prevention and preparedness, response, and recovery and review.

2.2.8.1 Planning

- **Vulnerability and climate risk assessments –** Many stakeholders asserted that substantial work is needed to introduce robust and Nationally-consistent vulnerability and risk assessments into standard practice, and then plan responses from these accordingly. Some stakeholders commented on how this may look:
    - A national health vulnerability assessment guideline would ensure consistency and comparable outcomes between jurisdictions and regions, with each jurisdiction and region delivering its own tailored vulnerability assessment.
    - The ability to conduct vulnerability and risk assessments requires climate risk profiling in each jurisdiction and or region to identify climate risks.
    - Ideally an Australian climate health risk assessment should build on existing work and be undertaken in parallel with risk assessments in other sectors (particularly where there are interdependencies, such as built environment, agriculture, transport, energy, and water).
    - Regarding methodology, nationally consistent vulnerability and risk assessments should include several considerations, including:
        — current health status and health impacts
        — demographic and socio-economic data
        — climate projections
        — exposure assessment
        — assessment of adaptive capacity.
    - The need for a comprehensive assessment of regional or community vulnerability to sub-standard air quality secondary to climate change was recommended in particular. This should involve analysing historical air quality data, climate projections, and identifying vulnerable populations and areas.
    - Predictive climate modelling in vulnerability assessments should also be a mandatory inclusion to determine structural design and location of new hospitals, health centres, climate refuges and other infrastructure related investments.
    - Vulnerability and risk assessments should be used to develop effective risk communication and health messaging strategies. This will ensure the dissemination of accurate and accessible information. This information can include guidance on conveying the health risks of climate change, promoting behaviour change, and addressing public concerns related to climate-related health impacts. It is noted that the Department of Climate Change, Energy, the Environment and Water recently received $28 million to develop Australia's first climate risk assessment over two years from 2023.

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First Nations Perspective

One stakeholder asserted that National vulnerability planning should be co-designed by the people it is aiming to protect, such as Torres Strait Islander communities who are at risk of land and cultural loss because of rising sea levels. Design should draw on First Nations peoples' cultural knowledge and practice in relation to health and wellbeing, and include First Nations youth.



Disability Sector Perspective

Stakeholders representing the interests of the disability sector highlighted that people with disability should also be consulted in vulnerability planning. According to these stakeholders, people with disability are particularly vulnerable the extreme events and warrant specific measures to assist them.

- **Community engagement in planning –** Many stakeholders advocated for community engagement in planning, preparedness, and prevention of climate-related emergencies. Based on stakeholder feedback, this will build both awareness and adaptive capacity.
- **Mapping and awareness of vulnerable communities –** As a component of vulnerability assessments, many stakeholders cited the need for vulnerable community mapping as part of emergency response planning. This would enable response agencies to adopt a data-driven approach to prioritising responses according to need and vulnerability. Vulnerable community members could include older people, people with a disability and people who are homeless. Emergency response planning for vulnerable communities should include planning for the provision of emergency supplies such as generators, fuel, water, and food. Additionally:
    - Governments and health services should plan for how health and aged care will be delivered in the future as people move away from metropolitan areas.
    - PHNs and LHNs should collaborate to resource adequate numbers of community nurses to monitor vulnerable community members during identified risk events.
- **Funding and supporting local adaptation planning –** Many stakeholders, particularly those representing the interests of rural and remote communities, advocated for support in undertaking adaptation planning. Many highlighted that health services, PHNs, LHNs and other agencies are already under-resourced in carrying out public health and healthcare functions. Many may not have capacity to plan for climate adaptation as a dedicated activity. Stakeholder feedback included:
    - The Department should develop and mandate health service adaptation plans standards. These could be introduced in the *Australian Council of Healthcare Standards* and included as a performance measure in the *National Healthcare Reform Agreement*. Targets should cover both community and health service adaptation. A nationally consistent process should contribute to supporting adaptation planning; however, the Department should provide adequate funding though PHNs and LHNs.

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- Stakeholders highlighted the importance of integrated and inclusive planning processes that engage primary care providers (as well as PHNs) and aged care providers. It is important that these groups are included to ensure plans are feasible and that services on the ground are aware of their roles and responsibilities.
- Multiple criteria should be considered in a standard framework, such as health impact, vulnerability, cost, feasibility, equity, and social acceptability. Decision support tools such as multi-criteria decision analysis should be used to assess trade-offs and facilitate decision-making. The Department should engage stakeholders to collectively determine priority actions based on shared values and goals.



First Nations Perspective

One stakeholder representing the interests of First Nations people asserted that local ACCHOs and Aboriginal medical services should receive dedicated funding to develop adaptation plans, including the funding of specific roles within organisations to do this. According to other stakeholders, First Nations communities already face substantial burden in overcoming many other inequities, so dedicated support to help adapt to climate change is essential.



Ideas in Practice – Adaptation planning tools

Stakeholders supported the use of existing tools to help develop robust adaptation planning. Some tools include:

- *Queensland Climate Risk Strategy and Adaptation* guides.
- *Human Health and Wellbeing Climate Change Adaptation Plan for Queensland.*
- *NSW Climate Risk Ready Program.*
- *Victorian Health and Human Services Climate Adaptation plan.*
- Resources from the World Health Organization, such as the *Protecting Health from Climate Change: Vulnerability and Adaptation Assessment .*
- *Sydney North Health Network Climate and Health Strategy.*

- **Coordinated PHN and LHN and other agency planning –** Many stakeholders stressed the importance of more coordinated planning between PHNs, LHNs, emergency agencies and NACCHO affiliate organisations. Further discussion included:
  - The Department should develop KPIs around coordination and collaboration between PHNs, LHNs and NACCHO affiliate organisations. PHNs and LHNs should undertake

more integrated community needs assessment and service planning but should be supported to do so.

- Substantial work and planning are needed to overcome political barriers in this area.
- The Department should draw on the successes of the Commonwealth *National Strategy for Disaster Resilience*.
- Increased weather and climate volatility changes the nature of planning for aeromedical service demand, such as more reliance on rotary wing aircraft over fixed wing aircraft. Stakeholders again highlighted the importance of integrated multidisciplinary planning that includes aeromedical organisations to determine the resources required for meeting changing aeromedical service demand. This should include funding.

2.2.8.2 Prevention & Preparedness

- **Surge workforce capacity –** Establishing surge capacity in health and aged care was seen by stakeholders as a crucial mechanism to prepare for extreme climate events. Stakeholders maintained that a surge workforce is essential to adapting and responding effectively to shifting demands and patient volumes and disruption of workforce supply during extreme events, ensuring continuity of care. Further discussion included:
  - Other areas of focus should include hospital emergency departments, First Nations communities and recipients of disability care in the community. Agencies should work closely with PHNs, ACCHOs and LHNs to support these areas.
  - State and territory governments should be responsible for funding and developing hospital surge workforces, while the Department and Commonwealth Government should focus on primary, aged and disability care.
  - It was reported that experience from similar programs indicates success is dependent on support and training at the jurisdictional level. This could be applied from remote First Nations communities to multicultural metropolitan settings.



- **Scenario exercises and community training –** It was widely agreed that performing response exercises, community disaster training, and community awareness on disaster preparedness is another critical action in better preparing for climate change extremes. Many stakeholders provided details on what this should involve:
  - Agencies should collaborate to facilitate regional, multi-district workshops including future local climate scenario planning exercises. This should involve primary care, emergency services, hospitals, First Nations leaders, the disability sector and aged care facilities – among others.
  - It was suggested that the Department, in collaboration with state and territory health services, should establish a National Disaster Planning Day. This would involve exercises and training for communities to develop a household multi-hazard plan – similar to fire plans developed in consultation with rural fire services. The day would encourage individuals and families to develop a shared resource to plan for climate

hazards in their area. This will encourage community activation as part of broader adaptation efforts.

- Others advocated for enhancing emergency response protocols by developing and testing emergency response plans to strengthen coordination between healthcare facilities, emergency services, and public health agencies. There should be a focus on vulnerable populations.
- Many stakeholders called for community engagement and education, including public awareness campaigns on climate-related health risks available preventive measures. This could include information on heatwave safety, promoting vector control practices, encouraging sustainable behaviours, and raising awareness about the links between climate change and health. According to stakeholders, health agencies should engage with community organisations, schools, and local leaders to foster behaviour change and build resilience at the community level.
- Health agencies should provide training and capacity building programs for healthcare professionals to enhance their knowledge and skills in addressing climate-related health risks. This includes education on recognising and managing climate-related health conditions, such as heat-related illnesses, respiratory diseases, and vector-borne diseases. Training can also cover the incorporation of climate change considerations into clinical practice and public health strategies.
- Some stakeholders representing the education sector asserted that training and education for all healthcare professionals must be included in undergraduate degrees to prepare the workforce for future climate challenges. Further learning will give healthcare professionals the skills and knowledge to set achievable targets and to make effective changes to help mitigate extreme weather events and incremental climate change.
- Stakeholders representing the interests of child and infant mental health advocated for the establishment and progression of a National Infant & Child Disaster Mental Health Advisory Committee. This committee could provide policy, operational guidance, and advice regarding the needs of infants, children, and young people in the event of disasters.

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Aged Care Perspective

According to some aged care stakeholders, the department should create a dedicated program to increase emergency-resilience of aged care facilities. This should include robust facility planning, staff training and incident response and recovery exercises specific to residential and at-home aged care providers.



Ideas in Practice –
Community resilience training

One PHN described a community wellbeing and resilience activity involving community carers and responders network. The PHN has provided funding to train 400 community carers and responders across its catchment area, supporting greater crisis prevention, preparedness, response and recovery at the community level. Program participants receive 3 days of free training, including self-care, disaster resilience community building, emergency communications, food, water and energy security. Participants also receive a full day of first aid training and psychological first aid training. The program has been well-received in the community.

- **Improved surveillance and forecasting systems –** Many stakeholders also called for improved ability to detect and respond to climate-sensitive diseases like vector-borne and water borne disease, and extreme weather events. Further discussion included:
    - Surveillance and forecasting systems need to include improved data collection, analysis, and reporting mechanisms, enhancing communication channels between health authorities, and integrated climate and environmental data into surveillance systems for early detection and response.
    - More accurate public health messaging should also facilitate preparation and planning for health system surge capacity.
    - There needs to be clear governance processes, strategic allocation of resources and flexibility in their distribution across departments and administrative boundaries.
    - It was suggested that this should be a priority adaptation action for the next 12 to 24 months. This can allow health systems to plan for periods of increased patient intake and allocate staffing accordingly.
- **Other prevention and preparedness discussion**
    - A stakeholder representing the interests of the pharmaceutical industry and several other stakeholders asserted that primary care records are often disrupted during emergencies and restoring access to primary care is a key aspect of recovery. Patient records are a key part of restoring primary care. Measures such as incentives to shift to cloud-based, more resilient formats is essential.
    - It was observed that, in the recent *Strengthening Australia's Pandemic Preparedness* report by the CSIRO, Australia should introduce Nationally coordinated investments in science and technology that can provide a wider range of complementary preparedness and response approaches. These could significantly reduce the economic, social, and indirect health costs associated with unplanned policy formulation.

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First Nations Perspective

Some stakeholders suggested that the health and aged care sector should work with other agencies to incorporate First Nations practices around fire management that are led by community, such as Firesticks Alliance Indigenous Corporation. Using the techniques of cultural burning, bushfire disasters can be reduced and healthy landscapes can help to support healthy communities.

2.2.8.3 Response

- **Availability of emergency funding –** Several stakeholders stressed the importance of having prompt and transparent access to funding when needed during emergency events. This was particularly pertinent for vulnerable populations. They suggested the Department coordinates relevant agencies to reform funding procedures to create easier access to funding required during emergencies.
- **Ensuring continued access to services –** Many stakeholders acknowledged widespread service disruption resulting from recent extreme weather events and the COVID-19 pandemic. This is highlighted areas where emergency responses could improve in the future to ensure service continuity. Stakeholders identified the following:
    - Consumers can access three-day emergency supply of some prescription medicines. This needs to be made clearer to consumers, particularly in the lead up to, or in the wake of, a natural disaster.
    - Using self-nominated volunteer members of the rural doctors workforce or from rural responder support groups would ensure that there are highly skilled and experienced practitioners available to respond and assist in mitigating any delays in retrieval services.
    - Services such as the CRANAplus Bush Support Line12 (which provides high-quality, free confidential 24/7 telephone support and is open to all health workers and their families in rural, remote, and isolated communities) should be promoted and supported, alongside specific training and support for in-person services to assist frontline healthcare teams working in disaster and emergency response.



Disability Sector Perspective

A stakeholder representing the interests of people with disability asserted that people with disability are often more vulnerable in an emergency event and there needs to be appropriate support to ensure their health and wellbeing, including continuity of supports and assistive aids. They asked for the Department to establish a central agency that can answer questions and support people with disabilities in crisis situations. The agency would also ensure that communications being distributed during a crisis are accessible and explore avenues to guarantee the message get to all.

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Disability Sector Perspective

It was also heard that the National Disability Insurance Scheme and other welfare payments for people with disability are inadequate in the event of an emergency to cover costs associated with loss of supplies, additional transport and emergency accommodation. The Department should work with the National Disability Insurance Agency to establish processes that ensure people with disability receive timely emergency funding during disasters and other emergency events.

Ideas in Practice – *Emergency responder network*

One stakeholder provided an example of an emergency responder network operating in South Australia. The Rural Emergency Responder Network is a network of specially trained South Australian Rural GPs that attend out-of-hospital emergencies in partnership with the SA Ambulance Service and the MedStar retrieval service. Rural Emergency Responder Network doctors are linked to the SA Ambulance Service communications network allowing, them to be called to life threatening incidents in regional South Australia. These doctors commit to maintaining relevant emergency skills. They are equipped by SA County Health and operate within a formal clinical governance structure. Variants of this model could be adopted by other State jurisdictions.

Ideas in Practice – *Access to medication*

Another stakeholder provided an example from NSW. When access to GP visits was limited due to recent weather events in Central NSW, an initiative was enacted where consumers were able to access their routine medication without a prescription. This ensured continued access to medications despite the limited access to GPs. Other stakeholders also highlighted that 60-day prescriptions will assist with continued access in the future.

- **Response coordination –** It was noted that PHNs can also support healthcare providers and staff during a natural disaster by guiding emergency response protocols, resource allocation, and ensuring continuity of care. There is also capacity for PHNs to hold local information and training

sessions for primary care providers likely to be involved in providing emergency/disaster-related services. Many stakeholders emphasised that a nationally consistent approach is likely to be most efficient and will aid in disaster response when a region unaffected by a disaster may be called on to assist an affected region. Further comment was made on a consistent approach to emergency responses:

- Stakeholders representing the interests of consumers living in rural and remote areas recommended that a National and regional emergency and disaster response be reviewed as one immediate health system adaptation action. This should include the involvement of rural and remote doctors.



First Nations Perspective

Some stakeholders suggested that the healthcare and aged care sector should work with other agencies to incorporate First Nations practices around fire management that are led by community, such as Firesticks Alliance Indigenous Corporation. Using the techniques of cultural burning, bushfire disasters can reduce fire risk and promote healthy landscapes that can help to support healthy communities.



Disability Sector Perspective

A stakeholder representing the interests of people with disability expressed that there is a need to ensure people with disability are supported with a decision-making model to make plans in critical situations and then have a mechanism for support people to enact and coordinate these plans.

- **Effective emergency communication –** Many stakeholders emphasised that effective communication is critical during emergency events. It was acknowledged that often communications system fail during extreme events, so work must be performed to overcome these barriers to communication. Additional, stakeholders discussed:
  - Procedures should be established to promote two-way communication during emergency events, not just one-way communication.
  - There is latent capacity within communities. Emergency agencies and health departments should leverage this during emergency events.
  - Health sector responses should include warnings for high pollution or poor air quality, information on masks and respiratory protection, access and egress, and dedicated places for refuge.

2.2.8.4 Recovery and review

- **Continued access to healthcare and critical resource for displaced populations –** Some stakeholders urged the Department to develop approaches to ensuring people displaced by extreme weather events have access to their routine medical care (such as chronic conditions), as well as critical resources like food, water, and shelter. It was suggested that each PHN have an action plan to provide for displaced populations.

- **Regeneration of Australia's biodiversity –** Some stakeholders called for ecological knowledge of Traditional Owners and Indigenous Rangers to be combined with scientific and firefighting knowledge as part of post-fires regenerative work to preserve and re-populate species and habitat. This was seen as culturally important for First Nations peoples. It was suggested that relevant agencies should work with Traditional Owners to evaluate legal protections for landscapes identified as significant fire refuge areas for biodiversity and threatened species as part of restoration and preservation priorities.
- **Mental health support –** There was widespread stakeholder recognition that extreme weather events can impact the mental health of both the effected community and healthcare workers. Stakeholders broadly called for more support in protecting the mental health of citizens during and after an event. Additional discussion included:
    - The Department could look to the *National Disaster Mental Health and Wellbeing Framework* for approaches to protecting mental health.
    - Use of the *Community Trauma Toolkit* that supports the capacity of workforces to respond to the mental health needs of infants, children, and families in the context of disasters and community trauma. This tool has been positively received and has become a popular tool among healthcare workers.
- **Review emergency response –** Some stakeholders called for plans to be established to review all aspects of an emergency response. It is important to review processes before an event, and not just in hindsight after there have been opportunities for mistakes. Another stakeholder suggested that communities should design and participate in community resilience training and be supported and empowered to develop climate health recovery plans.

2.2.9 Health and wellbeing impacts

Questions from Consultation Paper

Q18	What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

Stakeholders widely expressed concern about the increasing severity of the impacts of climate change on health and wellbeing. These impacts include infectious diseases, mental health, chronic disease and heat-related illnesses, as well as food and water insecurity. The effects of extreme weather events and the resilience of communities to climate and health impacts were also raised.

2.2.9.1 Vector-borne, water-borne and zoonotic diseases

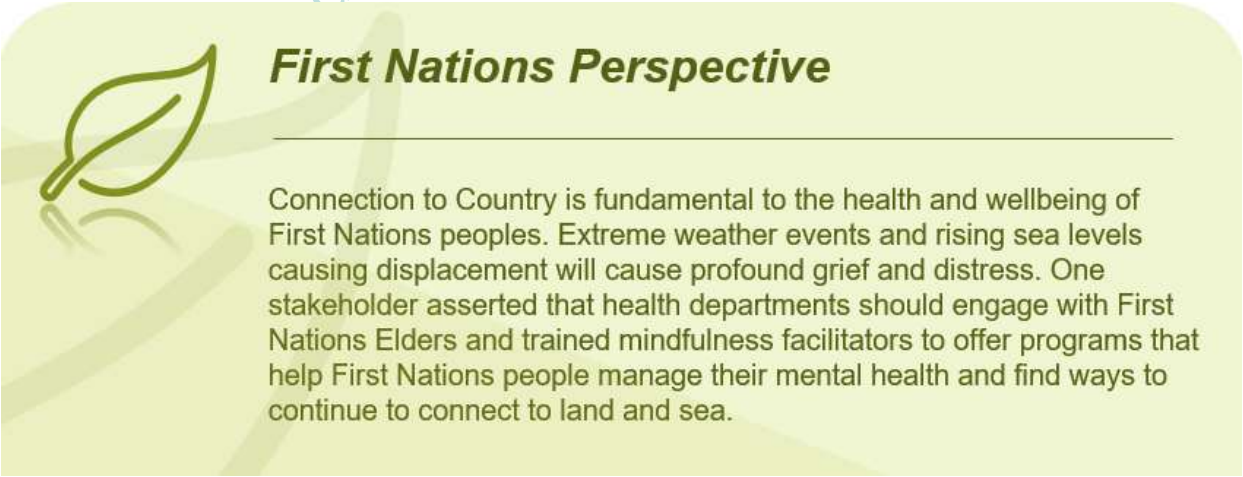
- **Disease mapping –** Stakeholders asserted that more knowledge is required of diseases that may emerge or become more significant due to climate change. By performing disease mapping, health departments may obtain a better understanding of the geographical zones in Australia that are most susceptible, and plan public health adaption measures accordingly. Based on stakeholder feedback, this should be a priority of the Department. It was suggested that more funding is needed to develop a consistent National approach to mosquito surveillance.
- **Priority diseases –** Several stakeholders highlighted specific diseases that should be closely monitored as the impacts of climate change continue to increase. Priority diseases include:
    - H5N1 influenza
    - Japanese encephalitis
    - Murray Valley encephalitis
    - Malaria
    - Aedes Albopictus

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- **Other diseases –** While the above diseases are not exhaustive of all diseases that the Department of health should prioritise, they are a good starting point. Stakeholders suggested performing further research into existing and emerging diseases, which may form part of the remit of the Australian Centre for Disease Control (CDC).
- **Child and young person susceptibility –** Some stakeholders highlighted that children are more likely to experience severe symptoms from vector-borne diseases and respiratory illnesses and that the Department should plan to address these.
- **Strengthened biosecurity to protect against threats –** Australia remains at risk of a range of tropical diseases if new vectors are introduced. Top of the list is the mosquito Aedes Albopictus which is a vector for dengue and other viruses. Stakeholders emphasised the growing need for more stringent biosecurity protection measures.
- **Biosecurity and wildlife health –** Based on stakeholder feedback, without better protective measures against biosecurity and threats from wildlife, Australia is left more vulnerable to existing and new infectious diseases spreading in Australia. While the One Health principle has been discussed earlier, the following was discussed in the context of infectious disease management:
    - Given the current and growing importance of wildlife in public health disease risk, there is a need for high-level incorporation of wildlife expertise and data into public health strategies. It was suggested that the Department take a strategic approach similar to WHO for predicting, detecting, and controlling these infections through an integrated and interdisciplinary approach between animal and human health.
    - The Department should work with other parts of the Commonwealth Government to support and provide aid to regional neighbours to control vector-borne diseases. This will increase the overall effectiveness of disease prevention in Australia.

2.2.9.2 Mental health

- **Mental health roadmap –** Stakeholders called for the Department to create a roadmap for how mental health will be equitably embedded within all health and climate initiatives, including appropriate representation of reference groups and advisory committees. Many stakeholders highlighted the increasing emergence of eco- or climate-anxiety, which should be addressed in any planning around the worsening impacts of climate change in Australia.
    - This will require increased accessibility to mental health databases that can be linked with the multiple available environmental databases.



- **Health professional awareness, education, and capacity building –** There was widespread support from stakeholders to raise awareness among health professionals of mental ill-health related to climate change. More awareness and training will better equip health professionals to

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recognise, prepare for, and respond to mental health impacts of climate change. Further stakeholder feedback included:

- Climate change education should be embedded in training for mental health response, particularly acknowledging the increase in mental health presentations during and immediately following periods of heat.
- Health Departments should introduce micro-credentialing for the health workforce (including nursing and allied health professionals) to support climate change-related mental health.
- The *National Disaster Mental Health and Wellbeing Framework*, currently implemented by state and territory education systems should be considered.

- **Access to mental health services, including for health professionals –** Many stakeholders stressed the impact of extreme weather events on consumers and mental health professionals. They asserted that it is important for health Departments to take action to support health professional mental health. Discussion included:
  - The Department should expand access to mental health and substance abuse services, particularly in rural and remote areas.
  - Health Departments should develop and roll out health and climate impact assessments for patient care, which should include mental health and wellbeing scores. It was noted that a Climate and Health Alliance survey collecting data on mental health should inform the development of this.
  - A National case study of the 2019 to 2020 bushfires found that rural and remote mental health practitioners in areas affected by bushfires reported experiencing the same traumas and challenges as their patients. Many were unable to take a break to look after their own wellbeing.
  - Stakeholders called out that paramedics in particular need support to adjust to the personal and psychological impacts of climate change. Mental ill-health is highly prevalence across paramedicine. To support paramedics, access to mental health services and resources needs to be a top priority.
  - Young people are particularly vulnerable to mental ill-health related to climate change and need to be prioritised as they carry a higher burden of existential risk. Many young people have experienced climate-induced trauma from climate-driven events such as floods, storms, bushfires, and drought.
- **Research on mental health and climate change –** Stakeholders broadly called for more research on mental health and climate change.
  - Robust and routine evaluation of mental health and psychosocial support programs and policy are currently lacking and require substantial commitment and investment.
  - A better understanding of the sustained and long-term mental health consequences of incremental climate change will equip decision makers with a better understanding of where and how to invest in mental health infrastructure and resources.
  - There is strong value in developing a standardised set of mental health indicators to facilitate benchmarking across jurisdictions. This can build on preliminary work already completed. The establishment of a national reference group for determining these indicators would be useful.
  - Greater investment in cross-disciplinary climate change and mental health research activities will further improve the evidence base to better understand mental health, wellbeing and substance use trends, identify risk factors and vulnerabilities, and support Australian communities in the face of climate events.

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2.2.9.3 Chronic diseases



First Nations Perspective

Stakeholders widely called for more support for chronic disease prevention and care in First Nations peoples, particularly those living in rural and remote areas. Further discussion included:

- Emission reduction strategies should have a strong focus on improving upstream social determinants of health, which are a major driver of preventable disease and presentations to primary care and hospitals.
- Providing climate resilient and adequate housing will reduce complications of heat stress (especially in a population with high rates of chronic disease, which lowers tolerance to heat stress). It will also reduce overcrowding and related burden of disease like Group A Streptococcal infection (and its major complications including rheumatic heart disease), chronic ear infections and hearing loss, tuberculosis, and crusted scabies.
- A National Nutrition Strategy should include a focus on rural and remote First Nations food security, with particular care and consideration applied to cultural dietary practices.

- **Climate change and chronic disease management –** Many stakeholders commented that increasing temperatures, air pollution and heat waves put individuals and communities at higher risk for chronic conditions including cardiovascular disease, diabetes, asthma, and kidney disease. Stakeholders provided a mix of actions related to health promotion to support chronic disease management:
    - The Commonwealth Government should introduce a GP item number for a patient climate risk assessment. The care plan for this could have an element of heat wave and fire management planning. As well as providing a GP incentive, this provides an opportunity to educate patients on their vulnerability to the impacts of climate change. Two levels of climate health risk assessments were highlighted, including health risks that come directly from climate events, and health risks that come from infrastructure, transport and communities.
    - The Department should develop and implement a National Nutrition Strategy addressing the entire food system to reduce emissions, increase resilience and provide sustainable, reliable sources of nutritious food. This strategy should include a focus on rural and remote First Nations food security, with particular care and consideration applied to cultural dietary practices. Good nutrition was highlighted as being important in both prevention and recovery from chronic disease.
    - There is a national curriculum, but states and territories administer their own education. The Department should develop and roll out heath education related to climate change. Rural and remote communities have seen a reduction in alcohol consumption because of the national education campaigns occurring in schools, and there should be something similar for climate and health.

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2.2.9.4 Heat and associated impacts

- **National heat and health plan –** Many stakeholders called for the Department to develop a coordinated heat and health plan. According to stakeholders, a heat and health strategy should consider the unique impact of heat on health on First Nations health, disability and aged care, people living in rural and remote settings, primary care and young people. Many stakeholders acknowledged that heat is one of the most substantial environmental factors that negatively impacts people with chronic disease.



Aged Care Perspective

One stakeholder highlighted that research shows an increasing impact of heat on chronic disease in residential and aged care. Despite this, the impacts of heat stress are not currently considered in aged care home care assessment. A stakeholder suggested a National heat strategy should include a dedicated aged care focus. Another stakeholder suggested that this should include a plan to review aged care home modification packages and how inclusions can be added to help reduce impacts of heat on chronic disease, such as including renewable-powered heating and cooling systems that are excluded from the Home Care Packages Program Manual.

- **Heat mapping** – Many stakeholders asserted that heat and vulnerable community mapping should be performed by health departments. According to stakeholders, this may be the responsibility of PHNs and LHNs, and coordinated by the Department as well as state and territory health services. Heat mapping could be used to develop action plans for at-risk communities.
- **Heat awareness –** Several stakeholders called for community education on the dangers of heat and humidity. Although some communities, particularly First Nations communities are adept in dealing with extreme climate, many people may not be aware of the risks of heat to those with chronic disease.
- **Work health and safety –** It was acknowledged that climate change will have serious occupational safety implications for those exposed to heat at work. This could include health and aged care workers such as paramedics, at-home aged care staff, community healthcare workers, and staff working in rural and remote areas. It could also include other occupations such as construction workers and delivery drivers. Relevant health departments should work with safe work agencies and peak bodies to develop strategies and protocols for dealing with heat and other extreme elements in the workplace. For example, stop-work measures might be put in place when a designated high temperature is reached.
- **Other heat considerations –** Stakeholders made other general comments on the risk of heat and health:
    - Children are more vulnerable to temperature extremes and heatwaves than adults, as they are less able to regulate body temperature.
    - PHNs and LHNs should help implement hot weather plans for people with existing health conditions to ensure they are aware of how to take care of their health and can cope during different events. There should be public alert systems for hot weather events, similar to fires, to allow community members to be informed and prepared. This could include reminders that it is going to be hot, to drink more, stay inside, and reschedule appointments. Workforce and technology capacity should be developed to facilitate this.

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- The current modelling on the health effects of heat is conservative and does not consider the cost savings of prevention. Risk modelling is required and needs to consider the public health impact of more than a 2 degree increase in global temperatures.

Disability Sector Perspective

A stakeholder representing the interests of people with disability highlighted that some people with disability are limited in what they can do to deal with extreme heat and cold. Heating and cooling systems are often the best measure for this group. The stakeholder called for financial support to adequately provide heating and cooling systems across the disability sector to reduce burden on the individual.

2.2.9.5 Food and water security

- **Food and water security strategy –** Many stakeholders highlighted that food and water insecurity should be a focus of health agencies, particularly in rural and remote communities. Some stakeholders provided further commentary on how health agencies could prevent and mitigate the prevalence of food and water insecurity. Discussion included:
  - A food and water security strategy must use a Health in All Policies approach by promoting food systems that meet people's health needs and expansion of local First Nations food knowledge and production.

First Nations Perspective

According to one stakeholder, food insecurity is further reinforced in remote First Nations communities by the ongoing impacts of colonisation and other systemic challenges such as land availability, employment, digital connectivity, climate change, energy, power, water and housing security.

Existing health disparities and the close bond with traditional lands exacerbate the impact of climate change for First Nations peoples. Climate change threatens productivity of local horticultural crops and availability of traditional food sources for First Nations communities due to extinctions, biodiversity loss and impacts on animal and plant distributions.

  - The disparity of food and water security between regional, rural, and remote towns compared to metropolitan areas was highlighted. According to stakeholders, this disparity is driven by a range of factors such as reduced economic opportunity, extreme climates, and inadequate infrastructure.
  - To help tackle water shortages, there should be strategic planning options and mapping of the worst hit communities. Available research and work in this area is currently not adequate to understand the issues in adequate detail and plan for water shortages accordingly.

- To help overcome food shortages, there should be licencing of remote stores to ensure they always stock foods. The Department should consider that high cost is a consistent issue for food supply in remote stores. There are also logistical challenges with transport. A stakeholder stated that in the NT where food and water insecurity is prevalent, there has been limited actions despite three Senate enquiries into food insecurity.
- Disruption to local food production and supply chains by heat, drought, flood, fire, or pests is under-recognised and result in several impacts: reduced agricultural production, reduced food availability, reduced quality and nutritional value, food spoilage, water poisoning, water scarcity and contamination. Approaches to dealing with these impacts in the face of climate change should be developed.
- Loss of locally sourced foods could mean changes to subsistence practices and communities becoming more reliant on store foods that can be of poor quality, unreliable and expensive in rural and remote areas due to transportation and storage costs.
- During the wet and cyclone season, remote stores look to hold larger inventories to prepare for the possibility of missed shipments. This must be balanced against the shelf life, particularly for perishable goods.
- Stores in remote communities should be considered essential services and provided with funding to ensure they can provide healthy food at reasonable prices and are resilient to weather events and power outages. Stores should have adequate storage and supplies to support communities cut off from outside supplies by extreme events. This will require government funding.
- Diversification of crops should be encouraged, along with reduced food waste and improved equity in access to food and community gardens.
- The food system should rely more on locally grown vegetable food and not mass-produced animal products on deforested land.

2.2.9.6 Community resilience to changing health and wellbeing impacts

- **Resilient communities are important for mental health and wellbeing –** Many stakeholders highlighted the importance of greater community capacity building to buffer against poor mental health and wellbeing effects from extreme weather events due to climate change. Stakeholders reported:
  - Proactive investment in 'cohesive communities' is helpful to build resilience after climate-related disasters. The Department should take a preventative and health promotion approach to mental health and wellbeing that equips each community with networks of people with skills, such as psychological first aid and peer support. The Strategy should consider these initiatives to increase the capacities of communities to anticipate their climate risks and reduce impacts on health and wellbeing inequities in their communities.
  - Stakeholders agreed that greater community emotional and psychological resilience is needed for health workers, individuals, and communities to deal with the distress due to climate change. Stakeholders supported the establishment of a dedicated research fund to identify resilience strategies.
  - Stakeholders also referred to community resilience as building the capacity of priority populations (including people with disability, older people, and First Nations peoples and culturally and linguistically diverse communities) by ensuring community programs are available, accessible, affordable, and culturally safe.
  - A stakeholder representing the interests of arts and culture highlighted that arts and culture plays an important role in developing community resilience to climate change and addressing the trauma caused by extreme weather events. The stakeholder referenced research that highlights how creative recovery has the capacity to mitigate disaster impacts and the disempowerment that results from the stresses and strains of natural disasters, through its unique ability to build long-lasting community resilience, wellbeing and local capacity for disaster preparedness, response and recovery. The body provided

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the example of the Centre for Reworlding which helps foster creative thinking in climate emergency-related disaster response.

2.2.10 Health in All Policies

Questions from Consultation Paper

Q22	What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
Q23	What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Stakeholders strongly encouraged the Department to implement a Health in All Policies approach to ensuring climate and health outcomes are be embedded across the whole of government response to climate change. The approach was noted as a means support initiatives that reduce emissions and improve population health. The priority policy areas and approaches to achieving Health in all Policies are discussed below.

2.2.10.1 Health in All Policies priority areas

- **Energy policy and cessation of fossil fuel projects –** Many stakeholders called for no new fossil fuel projects to be initiated in Australia and current energy production from fossil fuels to be transitioned to renewable energy sources as quickly as possible. Stakeholders cited evidence indicating substantial health implications associated with energy policy decisions. Many stakeholders asserted that continuing approval of fossil fuel projects substantially limits the impact the health and aged sector can have on mitigating and adapting to the effects of climate change. Additionally, it was suggested that the Commonwealth Government should further its work on committing to no nuclear energy in Australia. It was highlighted that some key connections of health and aged care to energy policy include:
    - Gas and coal pollute the air, leading to increased incidence of asthma and other respiratory diseases.
    - Climate change results in heatwaves, increasing the incidence of heat and cardiovascular illness.
    - Increased incidence of natural disasters and insecure housing directly influences the social determinants of health (the social determinants of health are discussed more later).
- **Finance policy –** Stakeholders reported that the Commonwealth Government operates in financial and cost silos whereas an integrated approach is needed to interconnect policies and funding. Many stakeholders also called for ceasing fossil fuel subsidies and removing current requirements to demonstrate savings in specific areas, rather than in relation to overall Federal Budget costings, including health and healthcare.
- **Housing policy –** Many stakeholders viewed that current funding for safe, fit-for-purpose and environmentally sustainable is inadequate to achieve the goals of the Strategy indicated in the Consultation Paper. It was recommended that there should be:
    - Consistent sustainable infrastructure goals.
    - A requirement that essential infrastructure like public transport is within a reasonable distance of new housing developments.

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- Consistent guidelines on procurement of resources for building housing.
- Regulations on the environmental impact of housing in its intended location.
- Better legislation on energy-efficient and climate-resilient housing designs.

- **Transport policy –** Stakeholders called for the Department to work with other sectors to help transition the transport sector's reliance on fossil fuels. This includes policies to develop electrified public transport and active transport infrastructure such as walkable streets and bike-friendly lanes, accessible public transportation networks, and safe infrastructure for active travel. These measures have the potential to reduce air pollution, increase physical activity, and improve cardiovascular and respiratory health.
- **Food and agriculture policy –** Stakeholders highlighted that the Department should work with other Commonwealth Departments to improve agriculture production, transport and storage. It was heard that food choices, particularly the meat industry, have a significant impact on health outcomes and climate change.

First Nations Perspective

Traditional food sources in Australia are often low emissions options. Investment into and support for the Aboriginal and Torres Strait Islander led development of a traditional food sources economy would benefit Aboriginal and Torres Strait Islander health and wellbeing, and would have broader benefits for the whole population, as well as reducing emissions.

- **Urban planning and green infrastructure –** Stakeholders cited that health considerations should be brought further into urban planning, particularly through promotion of developing green infrastructure and urban green spaces. Stakeholders recommended the Department support the development of green spaces, urban forests, and green roofs that enhance air quality, regulate temperature, and promote physical activity. These measures contribute to both climate change adaptation and improved health outcomes.
- **Defence policy –** It was heard that defence operations, and associated supply chains including transportation should be undertaken with a health lens. Some stakeholders were of the view that the Department should work more closely with Defence ensure it contributes to Health in All Policies.
- **Education –** Stakeholders elucidated how Health in All Policies could incorporate health promotion and education initiatives into school and university curricula including the medical school curriculum. The purpose of these initiatives would be to raise awareness about the health

First Nations Perspective

Stakeholders reported that a Health in all Policies approach should address ongoing inequities faced by First Nations communities due to the continuing impacts of colonisation on culture, social and health outcomes. Siloed policy efforts, fragmented funding, and lack of First Nations involvement in decision-making have further impacted poorly on health outcomes.

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impacts of climate change, promote sustainable lifestyles and climate-friendly practices as well as build resilience. Public campaigns, formal education programs, and community activities could further raise awareness.

2.2.10.2 Social determinants of health

- **Embedding the social determinants of health into Health in All Policies –** Stakeholders widely called for the social determinants of health to be embedded within the Health in All Policies approach. They suggested Health in All Policies should advocate for policies that reduce health inequities, improve housing conditions, enhance access to healthcare in vulnerable communities, and support social safety nets to reduce the health impacts of climate change on disadvantaged populations.

2.2.10.3 Other approaches to Health in All Policies

- **Remit of the Australian CDC –** Stakeholders asserted that an Australian CDC would be a powerful tool in facilitating any Health in all Policies approaches. The Commonwealth Government was encouraged to build the Australian CDC with strong consideration of the Strategy, as the functions of pandemic preparedness, prevention of communicable diseases and climate change health effects require many of the same considerations and resources. Stakeholders highlighted that the Australian CDC workforce will need to have a diverse range of expertise for emergency response and regular surveillance tasks. They stated that the Australian CDC would need experts in public health, medicine, veterinary medicine, social science, engineering, immunology, etymology, ecology, environmental health, and economics, among other areas.
- **Specific actions promoting Health in All Policies –** Several stakeholders provided input on potential actions the Department and relevant agencies could undertake to ensure a Health in All Policies approach to climate change. These included:
    - Establish a clear mandate for Health in All Policies in addition to being a strategic objective for health systems. Health in All Policies should be a formal directive mandated across all policy areas, highlighting specific policy domains where attention and collaboration with health is warranted.
    - The Commonwealth Minister for Health and Aged Care should be included in the membership of the Net Zero Cabinet Committee.
    - All Cabinet decisions should require a statement to be prepared outlining the expected impacts of the decision on commitments to reduce emissions and build resilience.
    - A Health in All Policies approach should align with the Commonwealth Government's *Measuring What Matters* framework, which aims to capture a range of factors that influence wellbeing, including the natural environment and climate change. These factors are guided but the Framework's five key wellbeing themes, including healthy, secure, sustainable, cohesive and prosperous. Many stakeholders shared this view.
    - Embed children's climate-related health needs in all economic, and social policy design, addressing child-critical social services, social protection, built environment planning, and whole-of-government policymaking processes.

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Where to from here?



3 Where to from here?

As this work enters the Strategy development phase, focus will turn to iteration and finessing of the insights gained to date, Strategy development will be informed by:

- Workshop summary reports.
- Extracts generated from thematic analysis of long-form submissions, stakeholder surveys and workshops. These extracts have been grouped separately by question in the survey and by themes identified during the analysis process.
- A register / tool of recommended actions identified during workshops that can be organised by key themes and sub-themes, responsible agency, by sector and by objective seen in the Consultation Paper.
- The summary generated in this report.
- Additional targeted stakeholder consultations.

Additional consultations held concurrently with drafting of the Strategy will form Phase 2 of this work.

3.1 Phase 2 targeted consultations

Phase 1 has seen stakeholder input from a broad range of backgrounds, locations, industries, and sectors with the deliberate intention of obtaining a diverse range of views on health and climate change. While some consultations during Phase 1 included sector-specific engagement, Phase 2 will focus on targeted consultations with specific industries and interest groups, for example Medical Technology providers as highlighted during Phase 1 activity.

Phase 2 consultation will involve roundtable-style/interview consultations. Consultations with targeted stakeholders will ensure that actions and nuances are appropriate for specific cohorts and considered appropriately in the Strategy. These discussions are designed to build and elaborate on ideas discovered during Phase 1.

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Appendices



4 Appendices

4.1 Appendix A: Additional Consultation Paper questions analysis

For ease of reference, the below provides specific callouts and analysis against the Consultation Paper questions which are not directly linked to a report section, noting the majority of these actions and comments have been previously highlighted and covered across various sections of the report.

Questions from Consultation Paper

Q8	What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
	Stakeholders suggested the following additional focus areas for emission reduction: • Food and beverages/ food waste emissions/ food production. • Emissions from other import countries. • Include a focus on social determinants. • Expand the scope of mitigation strategies beyond the health system. • Energy should be included as a standalone focus area. • Waste should be renamed to 'Sustainable resource use, circular healthcare and sustainable healthcare waste management'. • Decarbonising clinical trials. • Low-value care. • Consider splitting 'prevention' and 'optimising models of care' – both viewed as key and could be tagged as separate focus areas. Consider moving to the top of the list to increase focus and prioritisation. • Other pollutants – i.e., water and soil. It was suggested the Strategy include a high-level rationale explaining why each of the focus areas has been selected.
Q15	What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
	As highlighted throughout the thematic analysis, stakeholders have provided various suggestions regarding involvement of private providers within emission reduction efforts. Specific responses to this question include: • **Collaborative partnerships** – Foster collaborative partnerships with private providers by establishing formal agreements or memorandums of understanding. These partnerships can outline shared goals, responsibilities, and commitments regarding emissions reduction. Encourage private providers to actively participate in developing and implementing emission reduction strategies. • **Governance arrangements** – Establish a governance mechanism (such as a working group) that specifically focuses on both categories of private providers (individual health practitioners and private health organisations), to disseminate good practice from the public health system, and to set emissions reduction expectations on private providers.

- **Education and capacity building** – Raise awareness and provide education regarding the importance of reducing emissions into the future. Offer training and capacity-building programs to enhance their sustainable practices and help private providers develop measures to reduce emissions.
- **Sharing best practices** – Share successful case studies and best practices from within the health sector, highlighting examples of emissions reduction efforts undertaken by private providers. This can inspire and motivate other private providers to follow suit and adopt similar practices.
- **Technical assistance and guidance** – Offer technical assistance, guidance, and resources to support private providers in their emissions reduction efforts. This can include sharing toolkits, conducting energy audits, providing expertise on sustainable infrastructure upgrades, and offering training on energy-efficient practices.
- **Funding and financial incentives** – Fund providers to provide sustainable healthcare in their own settings, especially through reducing low-value care, and explore other opportunities for incentives to encourage private providers to invest in emissions reduction initiatives. This can involve grants, tax credits, or other financial mechanisms that reward and recognise their efforts to reduce greenhouse gas emissions.
- **Medicare Benefits Schedule** – Implement financial incentives within the Medicare Benefits Schedule (MBS) billing system to discourage low-value, high-carbon healthcare practices and encourage high-value, sustainable healthcare options
- **Recognition and certification** – Acknowledge private providers for their efforts in emissions reduction and sustainable practices and provide certifications to enhance the reputation of these private health providers. Encourage private providers to explore green building certifications and sustainable building design principles to enhance the energy and resource efficiency of their facilities
- **Clear legislation, regulation, and policy** – Provide the opportunity for organisations to choose the most sustainable options, and where appropriate, have supporting legislative enablers. Ensure Government policy to report emissions and provide financial incentives either punitive or provide funding to adopt more carbon conscious alternatives.
- **Sustainability commitment** – Private providers can make a commitment to sustainability by integrating environmental considerations into their mission, vision, and values. Establishing sustainability goals and targets, developing sustainability policies and strategies, and allocating resources for their implementation.
- **National guidelines and regulations** – require all health service providers to adhere to minimum standards of sustainability and emissions reductions across Australia.
- **Primary Health Networks** - Engage Primary Health Networks (PHNs) to provide education and training to local private GPs/allied health professionals on how they can reduce their emissions reduction efforts.
- **Professional bodies** - Reach private providers via professional organisations and their awareness and education avenues and communication channels.
- **Energy Efficiency ratings -** Mandate increased energy efficiency standards for all health service or aged care buildings to reduce emissions and increase heatwave resilience.
- **Accreditation standards** – Mandate involvement and adherence to a set of standards as a condition of accreditation and licencing. Private providers are

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	significant in Australia's healthcare landscape and reducing emissions by private providers will be essential to contribute to overall reductions in the sector. • **Collaboration and engagement** – Multiple private provider stakeholders expressed the desire greater engagement with government particularly in relation to issues of measurement, reporting and accountability. This would also offer opportunity to gather views and experiences could indicate current initiatives and potential opportunities in the private sector. • **Tools for baselining activity** - Provide tools to assist private providers in obtaining a baseline of their emissions and information on simple strategies which can be adopted without additional cost or with minimal cost and the impact such strategies make - e.g., use of power, water, travel, purchasing decisions, using existing recycling options. • **Clear role and ownership** – It is important to make clear to the industry their role in mitigation and adaptation. Highlight the contributions of the private sector to emissions and the obligations to mitigation. Some of the large private funds are good examples of what can be done and how it can be good for the private sector. • **Fiduciary responsibility** – it is essential to increase awareness among health executives and boards regarding their fiduciary responsibility and the potential personal liability they may face if climate risks are not considered in their strategic and operational plans. • **Do no harm** – Reminder that reducing greenhouse gas emissions aligns with all health professionals' responsibility to do no harm – this could be a powerful approach to take when raising awareness among private providers of their responsibility to reduce greenhouse gas emissions.
Q16	Where should the Strategy prioritise its emissions reduction efforts? • How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas? • Which of the six sources of emissions discussed above (on pages 13 to 18) are the highest priorities for action?
	Stakeholders provided insights regarding their views on prioritising emissions and relevant considerations when doing so, including: • That the prioritisation of these sources may vary based on specific circumstances, regional considerations, and the goals of the Strategy. • Most stakeholders stated the Strategy should prioritise areas where emissions are the highest, some noting even if these are more challenging to reduce. Noting some stakeholder did disagree with prioritising and did not support action areas competing for importance. • General support for immediate and coordinated action to reduce emissions where possible, however prioritisation of efforts should be informed by best practice. • The Strategy should also consider co-benefits and health impacts associated with emissions reduction efforts. Prioritise actions that not only reduce emissions but also yield additional benefits. • It was suggested the Strategy adopt a two-pronged approach to effectively address emissions reduction within the health system. Firstly, identify areas that

fall under the health system's control, focusing on those that offer the most significant environmental impact per investment (the "biggest bang for buck"). Then, target areas with the highest emissions, pursuing a "revolutionary" approach to effect transformative changes. Concurrently, the second prong of the Strategy should involve identifying sectors with the highest emissions, even if they present greater challenges for reduction. In these areas, we will embrace an "evolutionary" approach, gradually implementing sustainable practices to achieve meaningful progress over time.

- To identify priorities for emissions reduction it is necessary first to build an emissions baseline that can be monitored and reported on over time.
- A research institute stakeholder further suggested development of a marginal abatement cost curve (MACC) for emissions reduction opportunities in the healthcare system. It is recommended that following the development of an emissions baseline and MACC for the healthcare system, these form part of a decarbonisation plan for the sector.
- Some stakeholders expressed there may be benefit in the national Strategy prioritising actions where the Federal government has most direct control or where it can leverage combined purchasing power of all jurisdictions to maximum effect.
- Others noted the Strategy should focus on numerous quick wins in the first 12 months to generate momentum, demonstrate positive progress and inspire broad action across the health sector.
- It was raised by numerous stakeholders that once the Strategy is developed, an implementation plan coupled with funding should be rolled out and acted upon.

Prioritisation of emission sources

Over one third of survey respondents (36%, n=30) ranked the built environment and facilities emissions sources as the highest priority for reduction efforts.

This was followed by 27% (n=22) of respondents ranking prevention and optimising models of care as the highest priority (aligning with commentary provided in written submissions regarding its prioritisation) and approximately 18% (n=15) ranking waste as the highest priority. See Figure 8 for a breakdown of stakeholder views on highest priority emissions sources, noting 83 respondents provided an answer to the highest priority emission source survey question.

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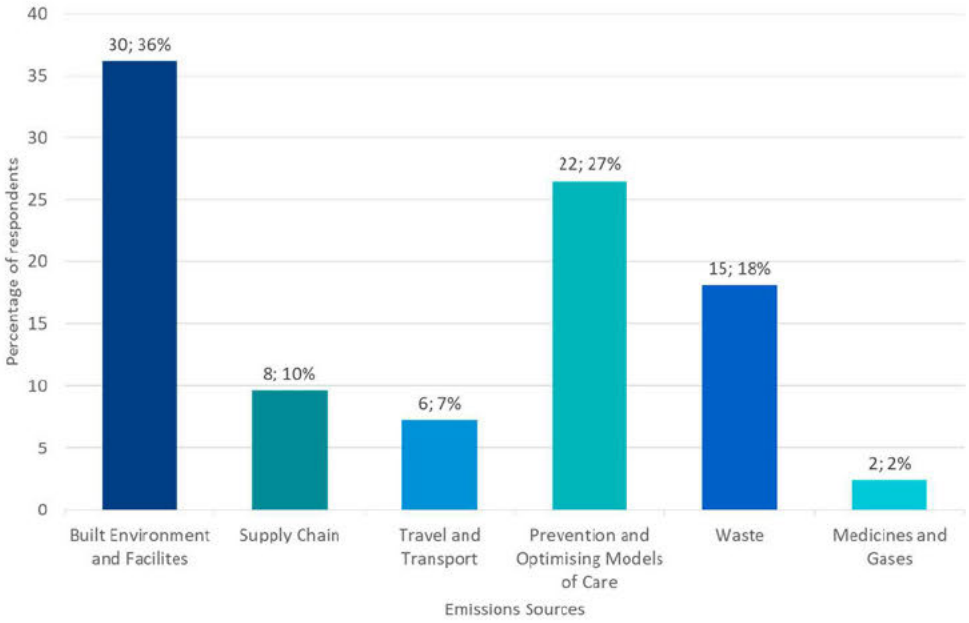


Figure 8 Highest priority for action on emission sources

The top two highest ranked priorities align with verbal feedback received during consultations, often highlighting the need to focus on preventative action, optimising alternative models of care and built environment reform and action.

The below figure 9 provides further breakdown of ranking and prioritisation of emission sources across the six focus areas. With approximately 40 respondents ranking built environment and facilities as priority one or two, and approximately 30 respondents ranking prevention and optimising models of care as priority one or two.

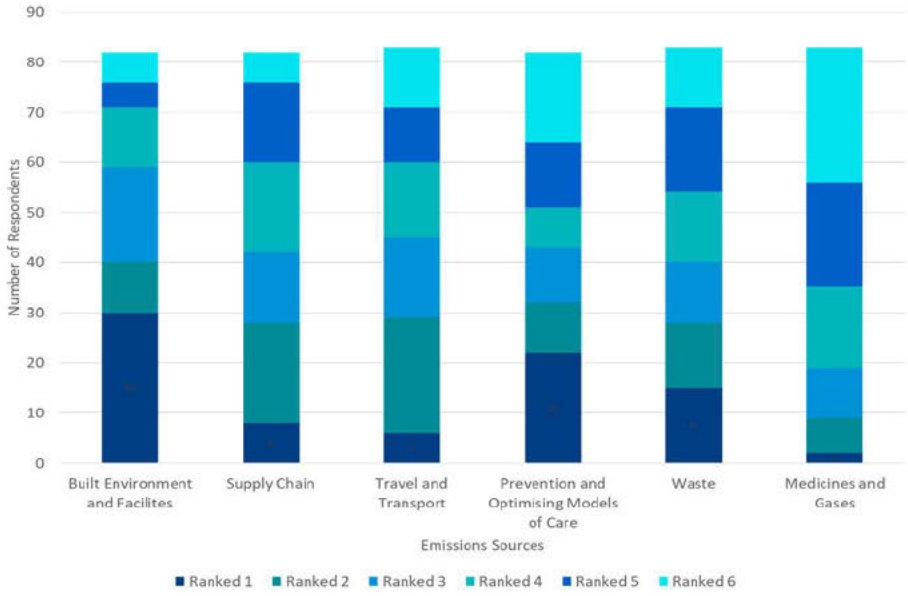


Figure 9 Ranking of priority for action on emissions sources

Q17	What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Stakeholders provided 'quick wins' to be prioritised for delivery over the short term, including but not limited to:

- Implement a Sustainability Development Unit in every hospital, health service or health district.
- Rapid phase out of fossil fuel projects, no new projects, and no expansion of existing projects; and reduction fossil fuel exports.
- Commit funding for the establishment and operation of an Aboriginal and Torres Strat Islander Coalition on Health and climate, or like body.
- Join WHO's Alliance for Transformative Action on Climate and Health
- Embed climate and health into existing Ministerial and senior official health Australian and States and Territories governance mechanisms.
- Commission modelling on the costs of inaction, to serve as a benchmark.
- Publish an implementation plan/route map.
- Publish a monitoring and evaluation framework.
- Establish a small-scale innovation grant program for frontline clinicians.
- Expand/align environmental reporting requirements for the health system beyond scope of National Greenhouse and Energy Reporting (NGER) and National Pollutant Inventory (NPI) - refer to Financial Reporting Direction 24 (FRD24) in Victoria.

Education and awareness

- Education and awareness to healthcare workers - the immediate review and move to implement Environmentally Sustainable Healthcare teaching into all health-related learning programmes.
- Encourage peak bodies to introduce CPD points related to sustainability in healthcare.
- Launch behaviour change campaigns to raise awareness and encourage sustainable practices among healthcare staff, patients, and the broader community.
- For example, develop a campaign targeting healthcare providers and professionals, analogous to a cancer screening campaign, on the environmental impact of low-value care and the environmental co-benefits of reducing it.

Built Environment and facilities

- The Commonwealth could provide short-term and low-cost support to encourage the remaining states, which are less mature in their sustainability journey, to pilot National Australian Built Environment Rating System (NABERS) in their hospital sites and begin setting annual improvement targets.
- The Commonwealth could help facilitate an agreement for all states to commit to certify, disclose and set portfolio-improvement targets by 2025 and 2030 using NABERS.
- Advocate for no fossil-fuel use in new healthcare facilities (Canberra Hospital Expansion, Women's and Children's Hospital in Adelaide and proposed Melton Hospital in Victoria demonstrate possibility), with associated funding provided.

- Prioritise the replacement of fossil-fuel plant and equipment where practical.
- Legislate all new builds (residential and commercial) to be gas-free as supported by the Healthy Futures open letter to the Victorian Government.
- Installation of solar power, for primary healthcare and for remote households, to reduce power insecurity and emissions as well as indirect emissions related to health presentations.
- Electrification of hospitals and healthcare centres.
- Create national standards for sustainable health services; tangible for hospitals to utilise to guide their actions and practice moving forward.
- Identify and implement energy efficiency measures in healthcare facilities
- Conduct carbon footprint assessments within healthcare facilities to identify emissions hotspots and prioritise mitigation efforts.
- Install LED lighting, improved insulation at all health facilities.
- Introduce mandatory disclosure of building energy performance when sold and leased, by 2025.
- Mandate minimum energy efficiency performance standards for rental properties, by 2025.
- Phase out use of gas in existing homes and ban gas in new homes.
- Developing policies to support the electrification of transport fleets and healthcare facilities and the supply of 100% renewable energy.
- Phase out wood heaters from ACT suburbs through the establishment of a target date for the replacement of wood heaters with electric alternatives in all ACT suburbs (excluding rural areas), as has been done for fossil-fuel gas.
- Introduce mandatory labelling explaining the health risks associated with wood heater usage at point of sale for both wood heaters and firewood in ACT

Travel and transport

- Development of National Fuel Efficiency Standard.
- Ensure adequate end of trip facilities.
- Support and incentivise lower carbon travel options.

Supply chain

- Development of roadmap to reduce supply chain emissions in healthcare.
- Develop and implement sustainable procurement guidelines that prioritise environmentally friendly products and suppliers with low-carbon footprints.

Medicine and Gases

- Remove desflurane from public hospital formularies to discourage its use.
- Mandate public reporting of emissions from volatile anaesthetic gases and nitrous oxide from all healthcare facilities.
- Prohibit the venting of residual nitrous oxide, from ‘near empty’ cylinders, to the atmosphere.
- Invest in technological program for better pharmacy stock management.
- Implement a nitrous oxide mitigation strategy for all hospitals.
- Ceasing the supply of piped nitrous oxide in any facility which does not offer obstetric or paediatric services (converting to cylinder supply where necessary).

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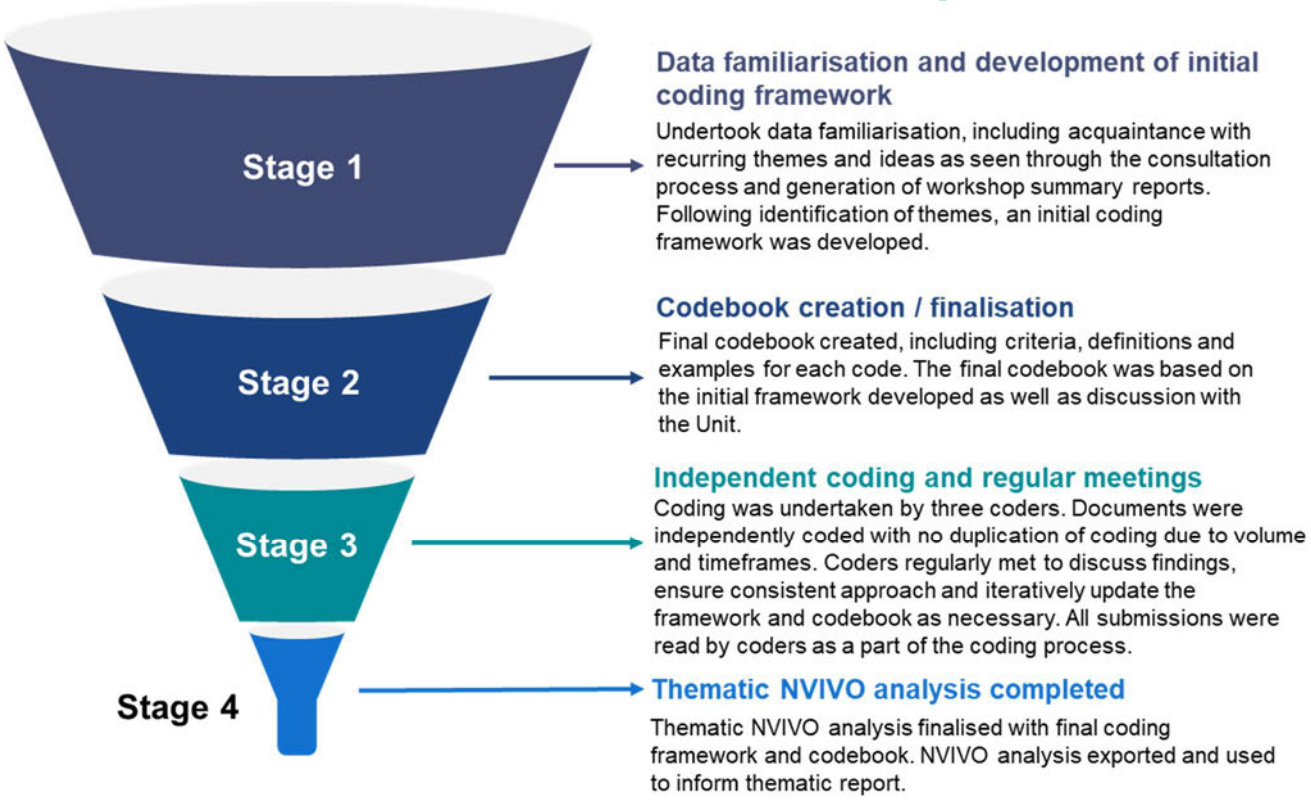
	• Monitoring, detection, and mitigation of nitrous oxide infrastructure leaks. • Encouraging alternative sources of analgesia where appropriate. • Switching patients from metered dose inhalers to dry powder inhalers where clinically appropriate. • Further development and adequate funding of the Choosing Wisely program. • Move forward with TGA approval of anaesthetic gas capture and recycling • Working with the TGA to review packaging and information requirements (including extension of use by dates) for medicines to reduce both waste and carbon emissions. **Waste** • Implementation of mandatory food waste audits in all Australian hospitals. • Reduction and re-direction of hospital food waste away from landfill. • Implement policy to preference reusable over single use products where possible. • Reducing paper waste by increasing use of digital health solutions. • Provide research funding to undertake a comprehensive process-based lifecycle inventory (stocktake) of commonly used reusable and single use medical equipment and emulate this process for pharmaceuticals. **Prevention and Optimising models of care** • Increased focus and funding for health prevention. • Telehealth expansion - Accelerate the adoption and expansion of telehealth services, enabling healthcare providers to deliver care remotely and reduce the need for physical travel. • 'Out of Hospital Care' model aims to support patient wellbeing to reduce the length of their hospital stay in the comfort of their own home. • Incentivise change to behaviours and clinical practice through MBS items and subsidies. • Develop electronic processes for patient communication. • Review existing health services and models of care, including telehealth and 'hospital in the home' programs, to understand their potential to contribute to emissions reductions. • Develop a 5-year plan to increase the investment in preventative health. Conduct a cost benefit analysis and evaluation of the impact of this approach
Q23	What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?
	Responses to this question are considered within each of the relevant sections under 2.2 Consultation Topics.

4.2 Appendix B: NVIVO approach

NVIVO is a software program designed for qualitative data analysis. It is a standard tool used in academic research and was used analyse written submissions and survey responses from the National Health and Climate Strategy Consultation Hub as well as workshop summary reports. NVIVO acts as an organising, managing, and analysing tool for text and image-based data and was developed by QSR International. It provides a robust way to synthesise large amounts of qualitative evidence.

It is important to note that NVIVO does not replace researcher analysis. Instead, it complements and aids the analysis process by allowing users or "coders" to create and apply codes to specific sections of the data, which represent concepts, themes, patterns, or ideas. These codes help in categorising and organising the data for analysis. NVIVO is not a tool that uses artificial intelligence and requires manual coding of text and image-based data.

The basic approach and methodology to NVIVO thematic analysis is summarised in the diagram below.



Stage 1 – data familiarisation and development of initial coding framework

Stage 1 involved familiarisation with the data and development of an initial coding framework. This included identification of recurring themes and ideas as seen through the consultation process and generation of workshop summary reports. Following identification of themes, an initial coding framework was developed.

Stage 2 – codebook creation / finalisation

Following discussion with the Unit and further assessment of the themes already identified the final coding framework was developed. The framework was inputted into NVIVO to create the codebook

which would be used for all analysis. The codebook included criteria, definitions, and examples of each code to ensure coding by researchers would follow a consistent approach.

Stage 3 – independent coding and regular meetings

In Stage 3, three coders undertook coding. Prior to commencing coding, the coders familiarised themselves with the codebook and held a meeting to discuss the approach to ensure consistency of coding. Upon commencing coding, the coders met regularly to discuss findings, ensure the approach remained consistent and iteratively update the framework and codebook based on emerging themes.

A key part of the coding process included coders reading all submissions. This included written submissions and survey responses. Due to the volume of submissions and timeframes, submissions were only read and coded by one researcher.

A total of **166 written submissions** were analysed during the coding process. Of these submissions, **three were unable to be coded** in NVIVO due to being incompatible with the software's text-based output. Nevertheless the submissions that were incompatible for coding were read and perspectives included in the final thematic report.

Alongside the long form submissions, a total of **103 survey responses** were analysed during the coding process. **One additional survey was unable to be coded** as the content was assessed to be inappropriate and irrelevant to the development of the National Health and Climate Strategy.

Stage 4 – thematic NVIVO analysis completed

Stage 4 saw the completion of all NVIVO thematic analysis. Upon completion, the NVIVO analysis was exported into Word format. Prior to exporting, all NVIVO coding was independently reviewed by team members who were not involved in the coding process to ensure accurate and consistent coding had occurred.

The reviewed findings from NVIVO were used to inform the final thematic report alongside the insights gathered from the workshop consultation process.

Limitations and barriers

The use of NVIVO for thematic analysis allowed for a robust and comprehensive approach, however, there were some limitations and barriers. These can be viewed below alongside the mitigation strategies that were implemented to reduce their impact.

Barrier / Limitation	Mitigation Strategy
Multiple coders were undertaking analysis independently which may have resulted in variances in how submissions were coded.	Coders followed a consistent framework and met regularly to reduce inconsistencies.
Storage of NVIVO files on local drives made collaboration between coders more difficult as 'live' updates could not be seen.	Coders met regularly to discuss findings and common themes emerging. Upon completion, the merging function was used to create one NVIVO file.
Documents (long form submissions and surveys) were only coded by one coder given the volume of submissions that required coding during a relatively short timeframe.	All NVIVO coding was independently reviewed by team members who were not involved in the coding process to ensure accurate and consistent coding had occurred. As necessary, recoding occurred in line with reviewer feedback.

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NVIVO requires a licence, meaning those without a licence can only view coded documents through the Word extracts rather than directly in the software.	Extensive NVIVO extracts were developed to ensure those without an NVIVO licence could view analysis and coding. Original documents were centrally stored with a consistent naming convention to ensure submissions can be easily referred to as necessary.
Coding cannot be changed without access to an NVIVO licence.	NVIVO extracts were exported in Word format to allow text to be shifted between codes as necessary by those without an NVIVO licence.

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4.3 Appendix C: List of all individuals that participated in workshops

Organisation	[redacted]	[redacted]
Health Consumers Queensland	[redacted]	[redacted]
Children's Health Queensland Hospital and Health Service	[redacted]	[redacted]
West Moreton Health	[redacted]	[redacted]
Metro North Health	[redacted]	[redacted]
Queensland Health	[redacted]	[redacted]
Institute for Urban Indigenous Health	[redacted]	[redacted]
Australian Medical Association (QLD)	[redacted]	[redacted]
Metro North Health	[redacted]	[redacted]
HealthDirect Australia	[redacted]	[redacted]
Mater Hospitals	[redacted]	[redacted]
QIMR Berghofer Medical Research Institute	[redacted]	[redacted]
Mental Health in Climate Change Research Network, University of Queensland	[redacted]	[redacted]
Queensland Health	[redacted]	[redacted]
School of Public Health, University of Queensland	[redacted]	[redacted]
Queensland Health	[redacted]	[redacted]
Queensland Health	[redacted]	[redacted]
CAHA	[redacted]	[redacted]
Lung Foundation	[redacted]	[redacted]
Queensland Nurses & Midwives' Union	[redacted]	[redacted]
Griffith University	[redacted]	[redacted]
University of Queensland	[redacted]	[redacted]
St Vincent's Health Australia	[redacted]	[redacted]
Queensland Health	[redacted]	[redacted]
Australian Medical Association (TAS)	[redacted]	[redacted]

Sweet Communication	[redacted]	[redacted]
Statewide Health and Environmental Sustainability Committee	[redacted]	[redacted]
Statewide Health and Environmental Sustainability Committee	[redacted]	[redacted]
University of Tasmania	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
Menzies Institute	[redacted]	[redacted]
Australian Association of Practice Managers *	[redacted]	[redacted]
Royal Melbourne Health*	[redacted]	[redacted]
Monash Department of Clinical Epidemiology	[redacted]	[redacted]
Royal Australasian College of Surgeons	[redacted]	[redacted]
University of Melbourne	[redacted]	[redacted]
Australian College of Rural and Remote Medicine	[redacted]	[redacted]
HealthShare Victoria	[redacted]	[redacted]
Healthscope	[redacted]	[redacted]
Climate Change Adaptation Lab, La Trobe University	[redacted]	[redacted]
Department of Health Victoria	[redacted]	[redacted]
Climate and Health Alliance (CAHA)	[redacted]	[redacted]
Department of Health Victoria	[redacted]	[redacted]
Department of Health Victoria	[redacted]	[redacted]
Australian Chronic Disease Prevention Alliance	[redacted]	[redacted]
Melbourne School of Population and Global Health	[redacted]	[redacted]
Public Health Association of Australia Victoria	[redacted]	[redacted]

Orygen	[redacted]	[redacted]
The Royal Australian and New Zealand College of Psychiatrists (RANZCP) [head office]	[redacted]	[redacted]
Northern Territory PHN	[redacted]	[redacted]
Aboriginal Resource and Development Services	[redacted]	[redacted]
Northern Territory Mental Health Coalition (NTMHC)	[redacted]	[redacted]
Department of Infrastructure, Planning and Logistics	[redacted]	[redacted]
NT Department of Health	[redacted]	[redacted]
NT Department of Health	[redacted]	[redacted]
NT Department of Health	[redacted]	[redacted]
NT Department of Health	[redacted]	[redacted]
HART JCU	[redacted]	[redacted]
Cairns and Hinterland Hospital and Health Service	[redacted]	[redacted]
FNQROC	[redacted]	[redacted]
Animal Management In Rural And Remote Indigenous Communities	[redacted]	[redacted]
James Cook University	[redacted]	[redacted]
Royal Flying Doctor Service Queensland	[redacted]	[redacted]
Cairns and Far North Environment Centre	[redacted]	[redacted]
Queensland Department of Health	[redacted]	[redacted]
JCU HAART QLD Health	[redacted]	[redacted]
GP in Cairns and DEA member	[redacted]	[redacted]
Deparrtment of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts	[redacted]	[redacted]
Community Climate Activist	[redacted]	[redacted]
NSW Health	[redacted]	[redacted]

St Vincent's Health Network Sydney	[redacted]	[redacted]
Council on the Ageing (COTA)	[redacted]	[redacted]
Pharmacy Guild	[redacted]	[redacted]
Australian Nursing & Midwifery Federation	[redacted]	[redacted]
Australian Commission on Safety and Quality in Health Care	[redacted]	[redacted]
College of Intensive Care Medicine	[redacted]	[redacted]
Australian Society of Anaesthetists	[redacted]	[redacted]
HealthDirect Australia	[redacted]	[redacted]
University of Sydney	[redacted]	[redacted]
Ramsay Health Care	[redacted]	[redacted]
CareFlight	[redacted]	[redacted]
Australian College of Midwives	[redacted]	[redacted]
Australian Medical Association (NSW)	[redacted]	[redacted]
Health Consumers NSW	[redacted]	[redacted]
NSW Department of Health	[redacted]	[redacted]
NSW Ministry of Health	[redacted]	[redacted]
ACRRM	[redacted]	[redacted]
DEA	[redacted]	[redacted]
Institute for Sustainable Futures (UTS)	[redacted]	[redacted]
Australian Medical Students' Association	[redacted]	[redacted]
The Australian Institute of Health Innovation (AIHI) and the Partnership Centre for Health System Sustainability (PCHSS), Macquarie University	[redacted]	[redacted]
Australasian Epidemiological Association	[redacted]	[redacted]

ACOSS	[redacted]	[redacted]
Asthma Australia	[redacted]	[redacted]
Sweltering Cities	[redacted]	[redacted]
Australian Youth Climate Coalition	[redacted]	[redacted]
Climate and Health Alliance	[redacted]	[redacted]
Australian Institute of Health Innovation - Macquarie	[redacted]	[redacted]
South Western Sydney LHD	[redacted]	[redacted]
Sydney Children's Hospital Network	[redacted]	[redacted]
Doctors for the Environment	[redacted]	[redacted]
NSLHD's inaugural Planetary Health Manager	[redacted]	[redacted]
AYCC	[redacted]	[redacted]
Friend of CAHA	[redacted]	[redacted]
UNSW	[redacted]	[redacted]
DEA NSW	[redacted]	[redacted]
Aruma	[redacted]	[redacted]
Inclusion Australia	[redacted]	[redacted]
Blind Citizens Australia	[redacted]	[redacted]
Life without Barriers	[redacted]	[redacted]
People with Disability Australia	[redacted]	[redacted]
Disability Advocacy Network Australia	[redacted]	[redacted]
Anglicare Southern Queensland	[redacted]	[redacted]
Carinity	[redacted]	[redacted]
Catholic Health Australia	[redacted]	[redacted]

Aged and Community Care Providers Association	[redacted]	[redacted]
Australian Association of Gerontology	[redacted]	[redacted]
Bethanie	[redacted]	[redacted]
Catholic Health Australia	[redacted]	[redacted]
Baptcare	[redacted]	[redacted]
Baptist Care NSW/ACT/VIC	[redacted]	[redacted]
Young People in Nursing Homes National Alliance	[redacted]	[redacted]
Environmental Health Australia*	[redacted]	[redacted]
Australasian College for Emergency Medicine	[redacted]	[redacted]
South Australian Council of Social Service (SACOSS)*	[redacted]	[redacted]e
Council of the Ageing SA	[redacted]	[redacted]
Council of Ambulance Authorities	[redacted]	[redacted]
Conservation Council of South Australia	[redacted]	[redacted]
Women's and Children's Health	[redacted]	[redacted]
Department for Health and Wellbeing*	[redacted]	[redacted]
Adapt West	[redacted]	[redacted]
University of Adelaide	[redacted]	[redacted]
University of Adelaide	[redacted]	[redacted]
LGA	[redacted]	[redacted]
LGA	[redacted]	[redacted]
Doctors for the Environment Australia	[redacted]	[redacted]
Department for Health and Wellbeing – CCEGG	[redacted]	[redacted]
Department for Health and Wellbeing	[redacted]	[redacted]

[redacted]	[redacted]	[redacted]
Adapt West	[redacted]	[redacted]
SA Govt	[redacted]	[redacted]
SA Govt	[redacted]	[redacted]
SA Govt	[redacted]	[redacted]
SA Govt	[redacted]	[redacted]
SA Govt	[redacted]	[redacted]
Australian College of Midwives	[redacted]	[redacted]
North Coast PHN	[redacted]	[redacted]
Adelaide PHN	[redacted]	[redacted]
National Rural Health Alliance (NRHA)	[redacted]	[redacted]
Australian Health Promotion Association	[redacted]	[redacted]
Nepean Blue Mountains PHN	[redacted]	[redacted]
Western Victoria PHN	[redacted]	[redacted]
Pharmacy Guild	[redacted]	[redacted]
Western Sydney PHN	[redacted]	[redacted]
Australian College of Rural and Remote Medicine	[redacted]	[redacted]
Royal Australian College of General Practitioners	[redacted]	[redacted]
North Western Melbourne PHN	[redacted]	[redacted]
Australian Medical Association	[redacted]	[redacted]
Gippsland PHN	[redacted]	[redacted]
Northern Territory PHN	[redacted]	[redacted]
Capital Health Network ACT	[redacted]	[redacted]

South Eastern Melbourne PHN	[redacted]	[redacted]
Tasmania PHN	[redacted]	[redacted]
DoHAC	[redacted]	[redacted]
DoHAC	[redacted]	[redacted]
Royal Australian and New Zealand College of Obstetricians and Gynaecologists	[redacted]	[redacted]
Department of Health TAS	[redacted]	[redacted]
Australasian College of Paramedicine	[redacted]	[redacted]
Catholic Health Australia	[redacted]	[redacted]
Royal Australasian College of Physicians	[redacted]	[redacted]
University of Tasmania	[redacted]	[redacted]
UTS	[redacted]	[redacted]
Statewide Health and Environmental Sustainability Committee	[redacted]	[redacted]
Australian Injury Prevention Network	[redacted]	[redacted]
Communicable Diseases Network Australia	[redacted]	[redacted]
Department of Health TAS	[redacted]	[redacted]
Psychology for a Safe Climate	[redacted]	[redacted]

4.4 Appendix D: List of all organisations and/or individuals that made formal submissions analysed in this report

Long Response Submissions

Name of Organisation (if applicable)	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Institute for Integrated Economic Research Australia	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Gippsland PHN	[redacted]
Women's Health Goulburn North East	[redacted]
[redacted]	[redacted]
Medical Association for Prevention of War (Australia)	[redacted]
Sydney Children's Hospital Network	[redacted]
[redacted]	[redacted]
Name of Organisation (if applicable)	[redacted]

Health and Wellbeing Queensland	[redacted]
ARC Centre of Excellence for Climate Extremes	[redacted]
[redacted]	[redacted]
Community Industry Group	[redacted]
Royal Flying Doctors Service QLD	[redacted]
[redacted]	[redacted]
DEA	[redacted]
[redacted]	[redacted]
MTAA	[redacted]
Lung Foundation	[redacted]
Healthy Housing Unit at the University of Melbourne	[redacted]
Royal Australian and New Zealand College of Ophthalmologists	[redacted]
Australian Association of Gerontology	[redacted]
Northern Sydney Local Health District	[redacted]
RANZCOG	[redacted]

Western Sydney Health Alliance	[redacted]
Australian Healthcare and Hospital Association	[redacted]
Health Support Services (Health Service Provider in WA)	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Wiser Healthcare	[redacted]
Healthy Futures	[redacted]
[redacted]	[redacted]
HEAL Network	[redacted]
Women with Disabilities Australia	[redacted]
Australian Association of Psychologists	[redacted]
[redacted]	[redacted]
Institute of Physical Activity and Nutrition, Deakin University	[redacted]
Psychology for a Safe Climate	[redacted]
[redacted]	[redacted]
AMA (SA)	[redacted]
Western Australia Country Health Service	[redacted]

Society of Hospital Pharmacists of Australia	[redacted]
Pharmacy Guild of Australia	[redacted]
WentWest	[redacted]
Western Australian Department of Health's Sustainable Development Unit	[redacted]
Environmental Defenders Office	[redacted]
[redacted]	[redacted]
Food for Health Alliance	[redacted]
ACRRM	[redacted]
Australian Medical Students' Association	[redacted]
[redacted]	[redacted]
NHAA	[redacted]
HealthWISE	[redacted]
AMA Victoria	[redacted]
[redacted]	[redacted]
South Western Sydney LHD	[redacted]
Your Community Health	[redacted]
Healthy Liveable Cities Lab at the Centre for Urban Research, RMIT University	[redacted]

Optometry Australia	[redacted]
Health Consumers Council of WA, Health Consumers NSW and Health Consumers QLD	[redacted]
COTA	[redacted]
Roche Products Pty Limited	[redacted]
Newtown Climate	[redacted]
Lowitja Institute	[redacted]
Medicines Australia	[redacted]
Sax Institute	[redacted]
[redacted]	[redacted]
FPDN Australia	[redacted]
[redacted]	[redacted]
Pharmaceutical Society of Australia	[redacted]
Green Building Council of Australia	[redacted]
Centre for Safe Air	[redacted]
University of Melbourne	[redacted]
Research Australia	[redacted]
Australian Nursing and Midwifery Federation	[redacted]
Asthma Australia	[redacted]
[redacted]	[redacted]
Sanofi	[redacted]

NABERS	[redacted]
Royal Australian and New Zealand College of Psychiatrists	[redacted]
Royal Flying Doctors Service VIC	[redacted]
Orygen	[redacted]
Thoracic Society of Australia and New Zealand	Policy and Advocacy Team
Winnunga Nimmityjah	[redacted]
Western Health	[redacted]
CoHousing Australia	[redacted]
CAHA	[redacted]
Croakey Health Media	[redacted]
[redacted]	[redacted]
Environmental Health Australia	[redacted]
Australian College of Nursing AND Australian Primary Healthcare Nursing Association AND Climate Action Nurses Organisation	[redacted]
Private Healthcare Australia	[redacted]
Bushfire Survivors for Climate Action	[redacted]
Council of Academic Public	

Health Institute Australasia	
Australian Institute of Health Innovation	[redacted]
Healthy North Coast	[redacted]
Better Streets	[redacted]
Australian Academy of Technological Sciences & Engineering	[redacted]
National Rural Health Alliance	[redacted]
AMA	[redacted]
[redacted]	[redacted]
Monash Sustainable Development Institute	[redacted]
Health Care Consumers' Association for the Climate and Health Strategy	[redacted]
The George Institute for Global Health	[redacted]
Public Health Association of Australia	[redacted]
Ramsay Health Care Australia	[redacted]
Emerging Minds National Workforce Centre for Child Mental Health	[redacted]
ANU Planetary Health Equity Hothouse	[redacted]

Matilda Centre for Research in Mental Health and Substance Use	[redacted]
AIHW	[redacted]
Australian Health Promotion Association	[redacted]
Living Streets Canberra	[redacted]
[redacted]	[redacted]
CSIRO	[redacted]
Anglicare Australia	[redacted]
Dieticians Australia	[redacted]
Western Victoria PHN	[redacted]
Healthscope	[redacted]
ACEM	[redacted]
HSV	[redacted]
Climate, Society and Environment Research Centre at UTS	[redacted]
Medtronic	[redacted]
[redacted]	[redacted]
Services for Australian Rural and Remote Allied Health	[redacted]
Australasian College of Dermatologists	[redacted]
Coucil on the Ageing	[redacted]

Australian Academy of Science	[redacted]
Aboriginal Medical Services Alliance Northern Territory	[redacted]
Complementary Medicines Australia	[redacted]
Australian Podiatry Association	[redacted]
Department of Health Victoria	[redacted]
National Emergency Management Agency	[redacted]
Disability Advocacy Network Australia	[redacted]
Australian and New Zealand College of Anaesthetists Environmental Sustainability Network	[redacted]
The Royal Children's Hospital Melbourne	[redacted]
Indigenous Allied Health Australia	[redacted]
Aged & Community Care Providers Association	[redacted]
La Trobe University	[redacted]
Australian Psychological Society	[redacted]
Australian Council of Social Services	[redacted]
Sydney North Health Network	[redacted]
Central Australian Aboriginal Congress	[redacted]
NT Health	[redacted]
College of Intensive Care Medicine	[redacted]
Australian Society of Anaesthetists	[redacted]
Australian Indigenous Doctors' Association	[redacted]
Australian Sustainable Built Environment Council	[redacted]
Climate Change Authority	[redacted]
Uniting Care Queensland	[redacted]
Royal Australasian College of Surgeons	[redacted]
UNICEF Australia	[redacted]
Royal Australian College of General Practitioners	[redacted]
Wildlife Health Australia	[redacted]
Catholic Health Australia	[redacted]
Monash Health	[redacted]
[redacted]	[redacted]
Australia Council for the Arts	[redacted]

Northern New South Wales Local Health District	[redacted]
Mental Health and Climate Change Research Network, The University of Queensland	[redacted]
Australian College of Midwives	[redacted]
South Australia Health	[redacted]

Survey Response Submissions

Name of Organisation (if applicable)	[redacted]
[redacted]	[redacted]
Mercy Health	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]

Name of Organisation (if applicable)	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]


Peninsula Health
Injury Matters
Sweltering Cities

The Australian Academy of Health and Medical Sciences	
[redacted]	
[redacted]	[redacted]
[redacted]	[redacted]
Grampians Public Health Unit	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Australian Glass and Window Association	[redacted]
Cancer Council Australia	[redacted]
[redacted]	[redacted]
Breastfeeding Advocacy Australia	[redacted]
Gippsland Alliance for Climate Action	[redacted]
Australasian College of Paramedicine	[redacted]

South East Councils Climate Change Alliance	[redacted]
Beyond Zero Emissions	[redacted]
[redacted]	[redacted]
Australian Private Hospital Association	[redacted]
[redacted]	[redacted]
Private Healthcare Australia	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

Response ID ANON-Z8H4-8VDF-6

Submitted to National Health and Climate Strategy - Consultation
Submitted on 2023-06-08 09:17:41

Introduction

1 What is your name?

Name:
[redacted]

2 What is your email address?

Email:
[redacted]

3 What is your organisation?

Organisation:
Mercy Health

4 Do you identify as Aboriginal and/or Torres Strait Islander?

[redacted]

5 Have you read and agreed to the privacy statement?

Have you read and agreed to the privacy statement?:
Yes

Broad Strategy Questions

6 Do these objectives (below) support the vision of the Strategy?

Yes

If no, please provide detail how these objectives could be improved:

7 Do these principles (below) inform the objectives of the Strategy?

Yes

If no, please provide detail how these principles could be improved:

First Nations Focused

8 What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon?

Please outline the existing First Nations policies, initiatives, expertise, knowledge and practices that the Strategy should align with. :

Not qualified to respond - please consult with First Nations reps.

9 What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people, to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Please outline the governance forums that should be utilised to facilitate co-design of the Strategy with First Nations people:

Not qualified to respond - please consult with First Nations reps.

Measurement and Reduction of Greenhouse Gases

10 Is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

Your organisation's existing or planned initiatives to measure and report health system emissions and/or energy use in Australia.:

Yes, we have measured Mercy Health's full baseline carbon footprint across Scopes 1, 2 and 3.
This work had significant learnings for our organisation (and other organisations), including identification of hot spots, and carbon profiles for our health

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services and aged care divisions.
Key findings included the burden of building energy, especially electricity (Scope 2), the emissions associated with Food and Catering in Aged Care, and the relative size of emissions associated with our Aged Care division, compared to Health Services - which was a revelation.
Where possible we utilised the categorisation matrix developed by the National Health Services, UK. The worked demonstrated significant differences in the carbon profile of our organisation to the NHS, suggesting that Australian services require further robust carbon footprint measurement to allow for consideration in our context.
A net zero trajectory tool has been developed to inform an evidence based pathway, on the basis of the carbon footprint learnings. The work is pending publication.

11 What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Additional data and information required to support targeted emissions reduction efforts within health and aged care.:

Detailed carbon inventories are required. Little is known about Aged Care and associated emissions. Mercy Health has a full profile; but no local comparators with which to benchmark. In Health Services, there are a lot of assumptions made about the NHS, the Australian Health Care carbon footprint (Malik et al, 2019), and other national health system footprints. These assumptions however, require testing in our fragmented health and aged care systems - context is fundamental, and Mercy Health's work has shown that some assumptions re carbon impost categories, at least for our organisation, were false.

Private Providers

12 What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Involvement of private providers in the Strategy's emissions reduction efforts. :

Build the strategic case. Require measurement and reporting. Mercy Health has an innovative, future facing, transformative approach to addressing climate change and associated social justice issues. Our Caring for People and Planet strategy is based on three key tenants: Sustainable Models of Care, Climate Change and Ethical and Social Responsibility. Addressing these issues is the responsibility of every person in the organisation. The dialogue needs to be one of personal responsibility; with the tone set by organisational leaders. Peak bodies could help more; e.g. Australian Private Hospital Association. Catholic Health Australia has a Net Zero working group.

Mitigation

13 Please rank the below six sources of emissions in highest priority for action, 1 is the highest priority, 6 is the lowest priority.

Ranking of emissions priorities - Built environment and facilities (including energy and water):
1

Ranking of emissions priorities - Travel and transport:
5

Ranking of emissions priorities - Supply chain:
3

Ranking of emissions priorities - Medicines and gases:
4

Ranking of emissions priorities - Waste:
6

Ranking of emissions priorities - Prevention and optimising models of care:
2

14 Which specific actions should be considered to reduce greenhouse gas emissions from the health system?

Specific actions to reduce greenhouse gas emissions from the health system.:

1. 100% renewable electricity for all health and aged care service providers asap - as soon as the supply is available - with government support for the transition.
2. All new builds 100% electric
3. Significant investment in upskilling of all levels of health and aged care staff re carbon literacy and numeracy
4. Investment in prevention and sustainable models of care.
5. As per Modern Slavery, all procurement contract for the sector should have 'green' weighting and inclusions in tenders and contracts.
6. Attention to desflurane (phase out) and nitrous oxide (leaks in particular; alternatives as available / clinically appropriate) and Metered Dose Inhaler (alternatives as available / clinically appropriate) to combat the significant emissions associated with these potent gases, where there is, in most cases a viable alternative.
7. Move asap to electric vehicles, electric buses, trains, etc. This is an issue larger than health - the entire Australian fleet needs to green asap. The enormous emissions associated with (unnecessary) air travel across this country is dire.
8. Waste is important on a number of levels, not the least of which is related to staff engagement and activism in their workplaces. However, the enormous amount of sustainability professional expertise directed to waste in health services in particular could be better utilised targeting higher

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emission profile imposts to squash carbon footprints 'harder and faster' than the modest emissions associated with waste.

Adaptation

15 What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy?

Health impacts, risks and vulnerabilities that should be prioritised for adaptation action through the Strategy:

Localised approaches - what is required in rural / remote NT is not the same as urban Melbourne or Sydney.

16 What immediate, high-priority actions are required in the next 12 to 24 months to enable the health system to respond to the impacts of climate change on health and wellbeing, and reduce the severity of these impacts?

High-priority actions required to enable the health system to respond to the impacts of climate change on health and reduce the severity of these impacts.:

Start measuring carbon footprints - holding a mirror up to what is actually going on, and then utilising that evidence base to inform next steps; rather than 'guessing', 'assuming', etc. Localised solutions that are tailored to context is required.

Health in All Policies

17 What actions are needed outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing?

Actions required outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing.:

A strong and ambitious national emissions reduction strategy / effort - with all sectors called to account immediately. The UK has been very successful with this approach. Australians need to reduce personal carbon footprint - which is nearly double that of the UK - it needs a cultural and political shift in mindset and urgency.

Enablers

18 In your view, are these the right enablers to inform the objectives of the Strategy? If not, please detail how they could be improved or amended.

Yes

If no, please provide details on how the enablers could be improved or amended.:

19 For each of the above enablers please detail what is working well and how the Strategy could support delivery?

Please detail for each of the enabler what is working well and how the Strategy could support delivery. :

1. Workforce. Needs to be extended from suggested emphasis on training / colleges, etc - which will mainly pick up new graduates. Need to focus on current leaders and clinicians in health and aged care also. Decision makers require carbon literacy and numeracy upskilling immediately. Needs various approaches - e.g. professional development, post grad courses, etc. Models in the UK - e.g Centre of Sustainable Health Care offer a model.
2. Research. Yes, a scan useful. Is this for formal research. Are there other forms to explore? And health and climate - but what of how health services implement sustainability from a systems / organisation perspective - is this covered int he health and climate domain - or it is something else?
3. Communication. Yes, Australia needs to raise the bar on public conversation and personal and business action of climate.
4. Collaboration. Yes, but acknowledge that this is very challenging with our devolved and fragmented structures for health and aged care.
5. Monitoring. Yes, mechanisms also needed so that all health and aged care providers (public and private) responsible to measure and submit data. Need to ensure all are mandated to accept responsibility here.

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Response ID ANON-Z8H4-8V32-1

Submitted to National Health and Climate Strategy - Consultation
Submitted on 2023-06-14 10:33:04

Introduction

1 What is your name?

Name:
[redacted]

2 What is your email address?

Email:
[redacted]

3 What is your organisation?

Organisation:
The Royal Flying Doctor Service Qld Section

4 Do you identify as Aboriginal and/or Torres Strait Islander?

[redacted]

5 Have you read and agreed to the privacy statement?

Have you read and agreed to the privacy statement?:
Yes

Broad Strategy Questions

6 Do these objectives (below) support the vision of the Strategy?

Yes

If no, please provide detail how these objectives could be improved:

7 Do these principles (below) inform the objectives of the Strategy?

Yes

If no, please provide detail how these principles could be improved:

First Nations Focused

8 What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon?

Please outline the existing First Nations policies, initiatives, expertise, knowledge and practices that the Strategy should align with. :

9 What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people, to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Please outline the governance forums that should be utilised to facilitate co-design of the Strategy with First Nations people:

Measurement and Reduction of Greenhouse Gases

10 Is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

Your organisation's existing or planned initiatives to measure and report health system emissions and/or energy use in Australia.:

The RFDS Qld has completed a carbon footprint across all our bases and operations. we are currently reviewing this in line with building a climate risk master plan and sustainability strategy. We are keenly reviewing Sustainable Aviation Fuels and investigating a target for this.

11 What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Additional data and information required to support targeted emissions reduction efforts within health and aged care.:

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Private Providers

12 What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Involvement of private providers in the Strategy's emissions reduction efforts. :

This is a Global and National issue. I believe that government entities like Health can certainly lead in this endeavour and share their learnings across all the Health industry. A joint approach across Qld will make significant change.

Mitigation

13 Please rank the below six sources of emissions in highest priority for action, 1 is the highest priority, 6 is the lowest priority.

Ranking of emissions priorities - Built environment and facilities (including energy and water):
3

Ranking of emissions priorities - Travel and transport:
1

Ranking of emissions priorities - Supply chain:
4

Ranking of emissions priorities - Medicines and gases:
5

Ranking of emissions priorities - Waste:
2

Ranking of emissions priorities - Prevention and optimising models of care:
6

14 Which specific actions should be considered to reduce greenhouse gas emissions from the health system?

Specific actions to reduce greenhouse gas emissions from the health system.:

At the moment sustainable fuels are in its infancy in Australia compared to globally. A lot of these are being imported from overseas at a high cost. Government intervention is required to ensure sustainable fuels are developed locally and cost effective. Vehicle fleets and helicopter and aircraft fleets for medical retrievals have a heavy impact on the emissions levels in health.

Adaptation

15 What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy?

Health impacts, risks and vulnerabilities that should be prioritised for adaptation action through the Strategy:

Given the vast rural aspects of Qld and Australia climate change is going to impact farming across the country. there will be significant mental health concerns for those working in this industry as temperature rises, water becomes harder and more expensive to come by and crops and livestock have lower yields. mental health support will be a large condsideration.

16 What immediate, high-priority actions are required in the next 12 to 24 months to enable the health system to respond to the impacts of climate change on health and wellbeing, and reduce the severity of these impacts?

High-priority actions required to enable the health system to respond to the impacts of climate change on health and reduce the severity of these impacts.:

Health in All Policies

17 What actions are needed outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing?

Actions required outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing.:

Sustainable fuels is across a majority of industry. removal of fossil fuels will make a large impact in a relatively short space of time.

Enablers

18 In your view, are these the right enablers to inform the objectives of the Strategy? If not, please detail how they could be improved or amended.

Yes

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If no, please provide details on how the enablers could be improved or amended.:

19 For each of the above enablers please detail what is working well and how the Strategy could support delivery?

Please detail for each of the enabler what is working well and how the Strategy could support delivery. :

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Response ID ANON-Z8H4-8VUW-8

Submitted to National Health and Climate Strategy - Consultation
Submitted on 2023-07-04 16:11:29

Introduction

1 What is your name?

Name:
[redacted]

2 What is your email address?

Email:
[redacted]

3 What is your organisation?

Organisation:
Campbelltown City Council

4 Do you identify as Aboriginal and/or Torres Strait Islander?

[redacted]

5 Have you read and agreed to the privacy statement?

Have you read and agreed to the privacy statement?:
Yes

Broad Strategy Questions

6 Do these objectives (below) support the vision of the Strategy?

No, please detail below.

If no, please provide detail how these objectives could be improved:

Need community preparedness (and awareness) outcomes to prepare community for impacts of climate change

7 Do these principles (below) inform the objectives of the Strategy?

Yes

If no, please provide detail how these principles could be improved:

First Nations Focused

8 What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon?

Please outline the existing First Nations policies, initiatives, expertise, knowledge and practices that the Strategy should align with. :

9 What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people, to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Please outline the governance forums that should be utilised to facilitate co-design of the Strategy with First Nations people:

Measurement and Reduction of Greenhouse Gases

10 Is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

Your organisation's existing or planned initiatives to measure and report health system emissions and/or energy use in Australia.:

Yes - We have net zero targets and wellbeing outcomes

11 What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

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Additional data and information required to support targeted emissions reduction efforts within health and aged care.:

Private Providers

12 What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Involvement of private providers in the Strategy's emissions reduction efforts. :

1. Net Zero targets and 100% Renewable Energy

Mitigation

13 Please rank the below six sources of emissions in highest priority for action, 1 is the highest priority, 6 is the lowest priority.

Ranking of emissions priorities - Built environment and facilities (including energy and water):
1

Ranking of emissions priorities - Travel and transport:
4

Ranking of emissions priorities - Supply chain:
2

Ranking of emissions priorities - Medicines and gases:
6

Ranking of emissions priorities - Waste:
3

Ranking of emissions priorities - Prevention and optimising models of care:
5

14 Which specific actions should be considered to reduce greenhouse gas emissions from the health system?

Specific actions to reduce greenhouse gas emissions from the health system.:

Purchasing 100% renewable energy, buildings with ESD outcomes and waste

Adaptation

15 What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy?

Health impacts, risks and vulnerabilities that should be prioritised for adaptation action through the Strategy:

Do heat mapping and vulnerable community mapping and then target at risk communities

16 What immediate, high-priority actions are required in the next 12 to 24 months to enable the health system to respond to the impacts of climate change on health and wellbeing, and reduce the severity of these impacts?

High-priority actions required to enable the health system to respond to the impacts of climate change on health and reduce the severity of these impacts.:

100% RE, waste management, vulnerable communities and heat mapping assessments

Health in All Policies

17 What actions are needed outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing?

Actions required outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing.:

Net Zero targets and actions to enable this including 100% renewable energy

Enablers

18 In your view, are these the right enablers to inform the objectives of the Strategy? If not, please detail how they could be improved or amended.

No, please detail below.

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If no, please provide details on how the enablers could be improved or amended.:
Co-design with the community - go to communities at risk and ask what they need

19 For each of the above enablers please detail what is working well and how the Strategy could support delivery?

Please detail for each of the enabler what is working well and how the Strategy could support delivery. :

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