AUSTRALIAN MEDICAL ASSOCIATION
(SOUTH AUSTRALIA) INC.
ABN 91 028 693 268

24 July 2023

Submission to the Australian Government in response to the release of the National Health and Climate Strategy – Consultation Paper

The Australian Medical Association in South Australia (AMA(SA)) welcomes the opportunity to provide feedback on the 'National Health and Climate Strategy – Consultation Paper'. The AMA at federal and state levels has over recent years repeatedly outlined its concerns about how climate change is affecting health, and how the health system is contributing to climate change. As recent natural disasters in this country and elsewhere have demonstrated, the changes to the climate of this planet are having enormous impacts on individuals and communities, including to their health in the short and longer term.

AMA(SA) Council commends the Australian Government on an approach that recommends action may be necessary 'on a prudent and precautionary basis in the face of uncertainty and incomplete information'.[1] However, in providing our comments on this Consultation Paper, we note that it focuses almost solely on reducing the impacts of the health system on climate change, and does not propose much-needed actions and policies needed to reduce the impacts of climate change on the health of individuals and communities. Recent floods and bushfires, including in South Australia, have shown that climate-related events have significant effects on the capacities of people and communities to be healthy and to maintain their efforts to reach health goals and objectives. Members of vulnerable groups, including First Nations peoples, are among those more likely to have their health and well-being affected by such events. Despite these impacts, the Consultation Paper does not establish policies and actions to prevent these outcomes.

AMA(SA) recommends that the immediate and long-term impacts on physical health, mental health, and the ability access services of emergencies such as the Riverland floods of late 2022 to early 2023 form a significant, additional section of the Strategy. For example, the mental health impacts of climate change and the growing understanding of 'climate anxiety', especially among younger people, are not mentioned in the document.

In addition, while the Consultation Paper states as its fourth Objective 'Health in All Policies', there is little in this Strategy to indicate what plans are in place to reflect climate change in public health policy or the policies of other sectors such as transport, building and construction, and agriculture and food production in reducing greenhouse gas emissions, and thereby contributing to a healthier environment.

As your Consultation Paper points out, the Australian health system must act 'to prepare for, and be ready to respond to, stresses and shocks from climate change'.[2] The AMA(SA) feedback to the Consultation Paper is drawn from AMA statements and input from members of AMA(SA) Council who provided feedback on the Consultation Paper. We also ask that you consider the comprehensive responses from the AMA and Doctors for the Environment Australia (DEA) in relation to initiatives to achieve the objectives in the Consultation Paper and the final strategy.

[1] National Health and Climate Strategy – Consultation Paper, page 6
[2] National Health and Climate Strategy – Consultation Paper, page 3

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AMA(SA) feedback

Vision and purpose

AMA(SA) fails to understand the overarching vision of the proposed Strategy. It appears that the strategy seeks to reduce the impacts of the health system on climate change but largely ignores the effect of climate change on Australians' health. If the Strategy is designed to achieve the former and ignore the latter, this should be clear in a strategic vision and purpose that are not included in the Consultation Paper.

Objectives

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

AMA(SA) Council agrees that the Strategy should include the proposed 'Objectives', but suggest the following amendments (AMA(SA) suggestions in italics):

> **Mitigation:** *Identify and audit the contributors the health system's contributors to greenhouse gas emissions and* accelerate the reduction of greenhouse gas emissions from the health system.

We also suggest adding a fifth Objective to those provided. Health care workers, patients and others involved in the health system can play an important role in reducing their own emissions and educating and influencing peers and family members. As such, a fifth Objective is offered.

> ***Engagement:*** *Encourage the participation of governments, institutions, health providers and staff, and patients and communities, in reducing the health system's greenhouse gas emissions.*

However, in examining the Objectives, we suggest 'Measurement' is an enabler rather than an objective: measurement and reporting of data and other information over time will provide the necessary evidence to gauge the status of greenhouse gas emissions and their impacts, outside and within the context of Strategy-related actions and reforms.

As such, we suggest the following be moved to the 'Enabler' section, with the alteration as indicated in italics.

> **Measurement:** Measure and report on health system greenhouse gas emissions at *specified, regular and repeated periods over time,* so progress in reducing emissions can be tracked and quantified.

Principles

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

AMA(SA) Council recognises and commends the emphasis within the Strategy on the climate-related health inequities imposed on and experienced by First Nations peoples, including through damage caused to the natural environment and the disconnection that may occur as a result. We support all efforts to seek and include First Nations voices and policies in designing and implementing strategies to combat, address and mitigate the impacts of climate change.

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We note that taking action on climate emissions in the health sector can yield numerous co-benefits for public health. Many of the strategies to reduce emissions, such as transitioning to renewable energy sources, improving energy efficiency, and adopting sustainable transportation, can also improve air quality, reduce pollution-related diseases, and enhance overall health outcomes. These actions can lead to cost savings in healthcare and improve the well-being of both patients and healthcare workers. However, if 'Tackling health inequities', 'Population health and prevention' and 'One Health' are to be 'Principles', underpinning the Strategy, we suggest the Strategy must focus more on impacts of climate change on health, as proposed above.

Mitigating health system greenhouse gas emissions

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

As clinicians, members of AMA(SA) Council agree that reducing greenhouse gas emissions aligns with the health profession's responsibility to 'first do no harm'.[3] We recognise that many of our day-to-day activities have contributed to greenhouse gas emissions and that now we are aware of this contribution, action must be taken to reduce our carbon footprint.

Many health care and service providers are committed to reducing their carbon footprints and are already implementing actions to help meet their targets. AMA(SA) Council appreciates these efforts, which are becoming more common as companies recognise that everyone has a role to play in battling climate change. Examples include:

- Establishing scope 1 and scope 2 reduction targets
- Commitment to a 'net-zero pathway'
- Embedding sustainability criteria in all procurement decisions
- Reducing waste to landfill
- Providing information to staff to encourage behaviours aligned with a 'every little bit count' approach to reducing the carbon footprint.

In considering mitigation tactics we note that some measures that will contribute to reducing our sector's carbon footprint are to overcome the impact of actions that we have undertaken for years or even decades, without considering their effect on the environment. Changing these behaviours – from switching off lights in unused areas to decreasing printing to minimising the volume of waste to landfill – will require education programs based on studies of climate-related outcomes of health activity and tailored to health workplaces ranging from large-scale public hospitals to sole-practitioner private consulting rooms.

However, as about 40 per cent of health system waste emanates from hospitals,[4] it is clear the public system, and the governments that manage them, have a major role in reducing the overall carbon footprint of the system, which was estimated at 7 per cent of Australia's total in 2018.[5]

[3] National Health and Climate Strategy – Consultation Paper, page 14
[4] Badrick, T., 'The role of laboratories in reducing the carbon footprint', *American Journal of Clinical Pathology*, Issue 3, September 2022, pages 322-324; https://DOI.org/10.1093/AJCP/AQAC056
[5] Malik, A., Lenzen, M., McAlister, Sc., and McGain, F., 'The carbon footprint of Australian health care', *The Lancet Planetary Health*, Vol 2, Issue 1, January 2018, pages e-27-e35; https://doi.org/10.1016/S2542-5196(17)30180-8

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Our members have provided recommendations in areas of practice that we suggest should be examined as potential areas of focus and action.

Medication and testing

Our members in private practice note that medication and tests (especially CT and MRI scans) are major contributors to their carbon footprint as well as adding to operational financial costs. Many tests are ordered out of habit or fear of consequences from senior colleagues or litigation.

For example, biopsies use energy and generate hazardous waste. A cultural change is required so clinicians do not order unnecessary specimen tests that require processing that generates CO2. The emergence of artificial intelligence (AI) options for analysing and reporting on tests is expected to support carbon reduction initiatives.

Members also report that duplication of investigations is not uncommon. One of the factors contributing to this is the difficulty some clinicians have in accessing the results of tests ordered by other practitioners. We recommend that clinicians can access My Health Record and other digital records to avoid repeating tests (and in the meantime reducing costs, streamlining patient care and improving health outcomes).

Sovereign capability

Reducing the carbon footprint of medication supplies by manufacturing medication in Australia would reduce carbon emissions related to the transport of such medications. The AMA has long called for more local production of medications, a concern exacerbated by shortages during and that have continued since pandemic lockdowns. Onshore manufacturing would help position Australia as an exporter of biomedical supplies, boost opportunities for collaboration with prestigious international research, biotech and pharmaceutical enterprises and enhance its reputation in this high-tech industry.

Waste

Members note that equipment such as single-use metal speculums, scissors, sponge holders and suturing sets are disposed of when they could be cleaned and re-used; changing this would require analysis of the environmental and other costs (including transport, disposal and staffing) of sterilisation compared with replacing after one use.

Similarly, an examination of the environmental cost of single-use gowns compared to cleaning cloth gowns may lead to a reduction in waste.

AMA(SA) Council suggests the food provided to medical patients should be healthy and attractive, thereby minimising waste while supporting health and wellbeing objectives. Sustainability objectives should also be considered when planning and providing food for visitors, such as from retail outlets.

Transport

Increasing rural and regional services would reduce travel-related carbon emissions. Telehealth is increasing the number of remote appointments, which should affect the carbon footprint. Since the pandemic, when the benefits of remote communication became obvious,

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more conferences and meetings are being staged remotely and members report increased awareness of the environmental cost of travel, particularly to interstate and international professional events.

Sonic Healthcare noted in its Sustainability Report 2022[6] that the most significant contributor to its Scope 1 emissions was the fuel used by fleet and courier vehicles. The report outlines the company's encouragement of the use of 'walking couriers' and 'cycling to work' initiatives. Replacing existing vehicles with hybrid and zero-emission vehicles over time will support carbon reduction objectives, while a reduction in unnecessary tests and increased access to test results (see above) would reduce the use of road vehicles.

Building and construction

AMA(SA) Council notes that the construction of major health facilities such as the new Women's and Children's Hospital in Adelaide provides opportunities to create sustainable sites that are purpose-designed and built to support environmental targets in electricity use, architecture and landscaping.

Energy

In the public system, where the workforce may not be as sensitive to budgets and costs as private practitioners and colleagues, significant consumers of lights and computers are 'left on' when they could be turned off (for example, when clinics are closed at night and when workers have vacated a treatment area). Movement-sensitive lighting and timing the operation of air conditioning are examples of innovations that could reduce energy consumption in this area.

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 working well?*
    b. *What actions should the Strategy consider to support delivery?*

Education is an important factor in galvanising the health sector workforce to support institutional efforts to reduce the carbon footprint. However, the efforts of individuals within the workforce of any institution or enterprise must be supported with the resources and institutional will to achieve expressed targets and objectives. In addition, workers must feel they are supported in taking the time to meet environmental targets, if this involves additional effort and/or behavioural change, and understand they can seek advice and assistance if required.

However, as mentioned above, the health sector cannot achieve any targets alone; its ability to do so involves collaboration with other sectors such as transport, building and construction, and agriculture and food production, that are also wanting to achieve similar goals.

[6] Sonic Healthcare Ltd 2022

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In relation to the ‘research’ enabler, AMA(SA) Council suggests that ongoing research to a greater degree that is currently underway is necessary to explore and record the impacts of the health sector on climate change, and vice versa. For example, there should be work underway now to record the immediate and long-term effects of bushfires, floods and other disasters on individuals, communities, and their health services.

In addition, as noted above, we suggest that ‘measurement’ is an enabler rather than an ‘objective’, while ‘engagement’ is both an objective of any new strategy as well as an enabler to support its success.

Other comments

AMA(SA) Council suggests the health sector also has a role to play in modelling behaviour for other sectors to follow. The system and its workforce can inspire and drive change across other industries. By demonstrating a commitment to reducing climate emissions in healthcare facilities, hospitals, and other health-related institutions, the Australian Government can support the health system in setting an example for other sectors to follow. This can encourage a broader transition towards sustainability and drive national emission reduction.

In South Australia, AMA(SA) has been advocating for some time for a Sustainability Unit within the Department of Health (SA Health). However, we are also aware that such an entity would have limited oversight of activity within the private health system and recommend that any action on a national scale include and emphasise the role of private providers in reducing our carbon footprint.

In conclusion, AMA(SA) Council submits that addressing the climate emissions of the health sector is crucial for protecting public health, achieving emission reduction targets, setting an example for other industries, improving resilience to climate change impacts, and fulfilling international commitments. Strengthening the resilience of the health system to respond to the health impacts of climate change will require increased education and training, increased funding and resourcing and must include pandemic and natural disaster responses. The Australian Government has an important role in driving this transition towards a low-carbon and sustainable healthcare system. However, as noted above, the reforms outlined in this document are focused on minimising the impact of the health sector on climate change and do little to examine or address the impacts of climate change on health. We look forward to consideration of these factors in subsequent strategy documents.

Yours sincerely



Associate Professor Peter Subramaniam

Vice President
AMA(SA)

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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.

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What is your organisation?
Western Australia Country Health Service
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☒ 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)
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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

Please accept the following submission from Ms Annie Scanlon, Senior Regional Physiotherapist Cancer Services and Senior Physiotherapist at Broome Hospital, and Dr Pallas Mareyo, Senior Rural Generalist and DMO at Broome Hospital. We are both WACHS Kimberley employees, working at Broome Health Service and across other Kimberley WACHS sites. We hope to submit this as informal representatives of our region and Health Service.

As senior clinicians working in the Kimberley Region of WA, we are increasingly concerned by the impact we are seeing in relation to climate change and are very wary of the worsening influence this will have on our vulnerable population. We in the Kimberley are familiar with the effects of flooding, heat, bushfires, cyclones and other extreme weather events; the fragility of energy, food and water supply and challenges to timely and appropriate health access due to remoteness, disadvantages in literacy, and other important social determinants of health. We see the effects of climate change already negatively impacting on our efforts to address these issues, both now and into the future. We yearn to work for a health service that holds climate and sustainability at the core of all its work, and greatly welcome every effort made to improve the National Health System's capacity to minimise our detrimental contribution to this process, ***as a matter of urgency***. We strongly encourage the Department of Health and Aged Care to develop the Framework further ***with BOLD and AMBITIOUS targets*** across all areas; and seek to request that ***Rural and Remote areas*** are not left to later stages of the plan, but are included as a priority.

We thank the Department of Health and Aged Care for the opportunity to provide feedback on this critical area of effort. We value the chance to informally represent our vast and diverse community, and we take care to recognise the Aboriginal Leaders of our region. We hope to see a swift response and an effective, considered change at all levels of the health system and to see broad implementation of health in all policies. Please see below our submission, with priority areas listed below as most pressing to our unique and precious area and people.

1. How could these objectives be improved to better support the vision of the Strategy?
We support the concept of Health in all areas. We encourage DHAC to be broad and ambitious in its aims, with terminology such as 'accelerate the reduction' being considered inadequate.
2. How could these principles be improved to better inform the objectives of the Strategy?
Regarding point #2: in the setting of Climate Justice, including a focus on 'heavy users' and embedding expectations and limitations on energy use and pressure on resources to enable high-use area management should be considered. Regarding point #4: Concept of 'One Health' is supported, and should be expanded. Regarding point #6: detail regarding mechanisms would be welcomed. Agencies will need to be required to collaborate and incorporate environmental considerations
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
We have unequivocal support for the inclusion of all 3 scopes; and also for the inclusion of offshore contributions in a meaningful way. Excluding Scope 3 would render this Framework totally inadequate.

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?
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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?
-

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?
We would recommend the Global Green and Healthy Hospital's Climate Impact Checkup Tool. We reiterate the absolute necessity to include Scope 3 emissions in this process. ACCREDITATION is a potent mechanism for healthcare. We would recommend exploration of methods through which all these targets may be set, monitored and reported on across the country
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
We support all efforts to achieve granular information, given the significant number of small health sites and initiatives that would currently fall well under any reporting requirements. ALL activities of the National Health System need to be included. We strongly support the necessity for Scope 3 inclusion in all reporting.

Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
Food Organics and Garden Organics (FOGO) must be included. Energy should be an individual focus. We would add that offsetting, not a focus of this Framework Draft, should remain of lowest priority and only considered in areas where all other options for emission-mitigation are totally impossible.
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?
This is an area of the Framework where we would particularly recommend significantly more bold and ambitious targets. - NET ZERO and Gas-free Buildings *within an ambitious time frame*, for both new developments at all levels and any renovations; with a view to removing all gas-dependence and transitioning to a near-complete renewable energy source for all healthcare facilities across the country.

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- We would add, and with hands-on experience in remote healthcare management and living, that reliance on diesel generators is no longer necessary and should not be included in this Framework.
- Bold and ambitious targets for freshwater use need to be set, including requirements for ongoing maintenance and monitoring.

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

We strongly support setting clear and ambitious targets for dramatically minimising the contribution of health-related travel and transport to emissions. Living remotely, we see initiatives such as Telehealth as a helpful option, but it is far from universally applicable, and ongoing patient and staff transport will always be required. We recommend DHAC take a strong position on recommending national fuel efficiency standards, 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.

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

We reiterate our strong support for Scope 3 emissions inclusion in any National effort.

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

We call for a National commitment for the *elimination* of desflurane. This is informed by our working understanding of anaesthetics including rural and remote needs; supported by ANZCA (Australian and New Zealand College of Anaesthetists); and following the successful implementation of near-finalised elimination within the WA Country Health Service.
We strongly support DHAC to set clear and strict requirements for analysis of safe and non-leaking gas supply systems in all healthcare facilities, in particular for nitrous oxide.

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

We would suggest that 'encouraging' services to improve their waste management is inadequate for a Framework of this significance.

We would like to see a commitment to the *elimination of all single use metals and plastics within healthcare*. While this may not practicably be achievable, we believe that only in such a bold ideological setting will we be able to address the overwhelming and increasing carbon footprint of single use items.
We call for a nation-wide move to the *re-establishment of re-processable items in all areas of healthcare.*
We recognise that this will require a review of the weighting applied to issues related to Infection Control. We see Infection Control as an extremely important element in the provision of safe healthcare, but infection control considerations will need to be reviewed and not overly or inappropriately weighted against the overwhelming existing and increasing emerging evidence that single use items are causing global illness and suffering.
We recognise that this will require a significant re-investment in such areas as CSSDs and laundries, and will require the corresponding care for ongoing improvement in water and energy use, which will be concurrent with the rest of the Framework.

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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?

We recommend working with the various health and medical organisations already working in this area, in particular the Royal Australian College of Physicians. Included in this would be a recommendation to overtly support the empowerment of the junior workforce in such initiatives as the 'Green Ward Round'; and to encourage Health Services to actively seek input and support ideas developed by the younger sector within the workforce.

We commend DHAC on its inclusion of *population education strategies* around the importance of lean service delivery to minimise healthcare's negative environmental impact and to promote global health and wellbeing. This cannot be left to the individual clinician to explain, or it will surely fail as an effort.

We recommend that these population education strategies be broad-reaching, bold and clear in their efforts, in the vein of the most successful population health strategies in recent history (such as safe sex campaigning).

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

We support DHAC's efforts to fully include the private health sector in any and all plans and requirements for environmental sustainability, including in setting and reporting of robust and ambitious targets.

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?

We would recommend both, wherever possible. The climate crisis is the most significant threat to our health and wellbeing this century, and should be prioritised as such. Careful planning must not be discarded, however we believe that there is no greater priority than this within our health system at present.

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

Rapid review and implementation of plans to revert to reuseable instruments and linens within all departments in health services, with a mirrored focus on eliminating or dramatically reducing single use plastics and metals.

Establishing clear recycling targets, reporting, pathways and requirements across the National Healthcare system for everything that has recycling potential.

Setting bold and clear targets for renewable energy targets for all healthcare facilities.

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Setting bold and clear targets for electric vehicle strategies for all healthcare facilities, including active federal facilitation in specific form (for example financial support for rapid expansion of e-scooter/e-bike and EV charging capacity at all health care facilities) Support the immediate review and move to implement Environmentally Sustainable Healthcare teaching into all health-related learning programmes (medical, nursing, allied health, midwifery etc).

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?
Do not leave Rural and Remote elements for 'later'. Rural and Remote communities, including Aboriginal and Torres Strait Islander communities, are recognisably disadvantaged at baseline across all health markers. We will suffer disproportionate impacts of climate change, both directly and indirectly. I urge DHAC not to place action in these locations for a later stage in any Strategy, but to maintain efforts at the forefront of any policy.
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?
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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?
-
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
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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?
We strongly welcome a Health in all Policies approach as an urgent measure. A Health in All Policies approach would be beneficial in all areas, but particularly in the areas of agriculture and food policy, and energy policy. Agricultural policy continues to focus on increased food production at the expense of environmental degradation. Agricultural policy could be used as a lever to improve the nutritional value of food and improved environmental stewardship for the future generations.
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?

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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?
We welcome the points in Enabler 1, 2 and 3, and generally as above encourage bold and ambitious goals in all areas. More accountability needs to be included in Enabler 1. Inclusion of the impacts of climate change on health as part of the teaching curriculum for various health colleges needs to be mandated, not just encouraged. Climate change impacts every area of our lives and will continue to do so. Not including the impacts of climate change on health in health training curriculums is negligent and it is the responsibility of the government to require training in this area for our future health workforce.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
25b: Scholarships for training; active support for health service employers to promote and facilitate employee education in the area

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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Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

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Respondent details

What is your name?
[redacted], Head of Policy and Advocacy
What is your email address?
[redacted]
What is your organisation?
The Society of Hospital Pharmacists of Australia (SHPA) The Society of Hospital Pharmacists of Australia (SHPA) is the national, professional organisation for the 6,100+ Hospital Pharmacists, and their Hospital Pharmacist Intern and Hospital Pharmacy Technician colleagues working across Australia's health system, advocating for their pivotal role improving the safety and quality of medicines use. Embedded in multidisciplinary medical teams and equipped with exceptional medicines management expertise, SHPA members are progressive advocates for clinical excellence, committed to evidence-based practice and passionate about patient care. We welcome the establishment of a National Health and Climate Strategy to support healthcare sector stakeholders and healthcare practitioners to reduce our carbon footprint wherever possible, and support a more sustainable healthcare sector that continues to meet the needs of Australians.
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)
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Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider

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☐ 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

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
Not applicable.
2. How could these principles be improved to better inform the objectives of the Strategy?
Not applicable.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
Not applicable.
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?
Not applicable.
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?
Not applicable.

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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?
SHPA's Pharmacy Forecast Australia 2022[i], a strategic thought leadership piece on emerging trends and phenomena forecasted to impact pharmacy practice and the health of Australian patients, designated one of the six themes to be on environmental sustainability to gauge what pharmacy leaders thought about how our sector would respond to its impacts and measures to address it. Climate and Health Alliance also partnered with SHPA to provide a partner perspective on the environmental sustainability theme. SHPA also collaborates with other organisations in advocating for environmental sustainability, with recent endorsement provided to Doctors for the Environment Australia's (DEA) GreenCollege Guidelines and Net Zero Emissions Report, which outlines an interim emission reduction target for the Australian healthcare sector of 80% by 2030 and net zero emissions by 2040.[ii]
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
Not applicable.

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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?
Not applicable.
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?
Not applicable.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
Not applicable.
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
See question 12, 'Domestic manufacturing of medicines'.
12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?
Environmental sustainability in pharmacy curriculums As explored in Pharmacy Forecast Australia 2022[ii], half of all respondents thought it likely that all pharmacy university degrees will incorporate carbon literacy and environmental sustainability in their curriculums by 2027. This will enable future pharmacists to foster an environmentally educated and informed workforce, capable of taking a leadership role in ensuring the manufacture, supply and prescribing of medicines is as sustainable as possible. Paper-free pharmacy departments While steps have been made toward reducing paper in hospital systems with electronic medical records and prescribing, a large proportion of day-to-day pharmacy duties remain paper-based through generation of paper labels and printed patient information leaflets. QR codes to provide this information electronically can assist in reducing the impact of this. In addition, medication deliveries often arrive at the pharmacy department with extraneous packaging, such as wrapping and package inserts, adding to overall waste. Manufacturers will need to assess their products to remove unnecessary packaging and have measures in place that do not comprise the integrity or viability of the medication. Electronic devices like smartphones, tablets and desktop computers can also be used as evidence of receipts of medication across the hospital system, further reducing paper usage. In hospital inpatient settings, the use of innovative health information technology has been introduced to achieve a closed loop medication management system using barcode scanning. At the bedside, barcode technology can be used in real time to verify a patient's identity before medication administration and to capture the care provider administering

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the medication. Bedside verification of medications allows nurses to check and document the medication administration to reduce administration errors.

The majority of recommended reference texts that pharmacists and healthcare staff refer to are available online, negating the need for paper and providing information that is more frequently updated than paper texts, often at a lower cost. Through the use of technology, pharmacy departments can reduce their paper volume, so that the future may see paper-free departments as potentially achievable.

Domestic manufacturing of medicines

To offset the 71% of healthcare greenhouse gas emissions resulting from the supply chain, which encompasses production, transport, use and disposal of goods and services used in healthcare[iii], preference for locally made medicines to reduce the supply chain carbon footprint should be considered.

The government's National Reconstruction Fund (NRF)[iv] will target investment towards areas such as renewables, low emissions technologies and medical science. The government has identified $1.5 billion of the NRF's $15 billion for medical manufacturing, with local medicines manufacturing anticipated to be a key part of this.

Comprehensive pharmaceutical waste programs in hospitals

The COVID-19 pandemic response has also increased the amount of waste sent to landfill from healthcare, such as personal protective equipment, rapid antigen tests and vaccine paraphernalia. Pharmaceutical waste may include the drug substance, the container in which it was packaged, and accessories used for administration, such as administration tubing.
Pressurised metered-dose inhalers (pMDIs) are a significant contributor to greenhouse gas emissions. Reducing pMDI prescriptions when appropriate could have a meaningful environmental impact, especially as alternate inhalers with lower carbon impact are available. [v] Pharmacists can play a key role in advising on appropriate treatments that balance the best possible outcomes for patients as well as lowering carbon impact. In addition, the proper disposal of these inhalers can reduce carbon dioxide emissions.[iv]

Inventory and distribution solutions

In some Australian hospitals, technology solutions such as automated dispensing cabinets (ADCs) and dispensing robots are already in place. The data generated from these systems can be used to reduce medication wastage at a ward or hospital-wide level. Specialised or bespoke software programs may be utilised to present the data in a form that is understandable to pharmacy staff and hospital stakeholders. Reports from this data can be used proactively to reduce waste. For example, reporting on medications expiring within a particular future timeframe can be used to redistribute medications from low to high use areas. Data can also be used to note trends of medication use hospital-wide and increase or reduce stock levels accordingly. Programs can be designed to convert inventory levels from robots and ADCs into standard ward stock medication orders saving time and paper in comparison to manual ordering.
At a federal level, a proposed National Medicines Traceability Framework (NMTF) has undergone consultation during 2022. This framework will aim to track medicines more closely to improve efficiency of the supply chain and reduce wastage, among other aims.

Development of an 'Improving environmental sustainability in pharmacy and pharmaceutical industries national strategy'

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To help deliver on the National Medicines Policy's (NMP) central pillar focused on building a sustainable medicines industry, SHPA recommends establishing a pharmacy and pharmacy industry aligned environmental strategy to develop key objectives, aims and goals to improve sustainability, mitigate and reduce the known environmental impacts from the pharmacy and pharmaceutical industry. This will support the Australian Government in realising their commitment to reduce emissions by 43% below 2005 levels by 2030 and reach net zero emissions by 2050.
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?
Not applicable.
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?
Not applicable.
15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
Not applicable.
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?
Not applicable.
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
Not applicable.

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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?
Not applicable.
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?
Not applicable.

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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?
Not applicable.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Not applicable.

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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?
Not applicable.
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?
Not applicable.

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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?
For Enabler 1: Workforce, leadership and training, SHPA believes it is appropriate to encourage medical colleges and other education and training institutions to ensure the impacts of climate change on health form part of the training curriculum for all health care professionals. As outlined above, SHPA believes that embedding environmental sustainability into undergraduate curriculums, will enable future pharmacists to foster an environmentally educated and informed workforce, capable of taking a leadership role in ensuring the manufacture, supply and prescribing of medicines is as sustainable as possible. However, without appropriate funding and policies in place to facilitate the effective implementation of the Strategy, this measure may not lead to hospitals, clinics and aged care facilities undertaking the necessary systematic changes to tackle climate change. Consideration must be given to the setting of clear and achievable targets, and incentivising healthcare facilities to work towards attaining them. Regarding Enabler 2: Research, SHPA believes that further data must be collected on the impact of inappropriate prescribing poor medicines management on climate change. This evidence could inform workforce required to target these interventions such as deprescribing and pharmacist-led medication reviews. Enabler 3 would require empowering consumers to understand the environmental impact of wastage of medicines as well as the importance of regularly reviewing medications, both of which are key roles of pharmacists.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
Not applicable.

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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References

[i] The Society of Hospital Pharmacists of Australia. Pharmacy Forecast Australia 2022. (2022). Available at: https://shpa.org.au/publicassets/36f9b509-04fc-ec11-9106-00505696223b/Pharmacy%20Forecast%20Australia%202022%20Full%20Report.pdf?4d171d0a-84fd-ec11-9106-00505696223b

[ii] Doctors for the Environment Australia. (2022). Net zero carbon emissions: responsibilities, pathways and opportunities for Australia's healthcare sector. Available at: https://www.dea.org.au/wp-content/uploads/2020/12/DEA-Net-Zero-report_v11.pdf

[iii] Health Care Without Harm. (2019). Health care's climate footprint. Accessed at: https://noharm-global.org/sites/default/files/documents-files/5961/ HealthCaresClimateFootprint_092319.pdf

[iv] Australian Government. Department of Industry, Science and Resources. (2022). National Reconstruction Fund: diversifying and transforming Australia's industry and economy. Available at: https://www.industry.gov.au/news/national-reconstruction-fund-diversifying-and-transforming-australias-industry-and-economy

[v] Woodcock A., Janson C., Rees J., Frith L., Löfdahl M., Moore A., Hedberg M., Leather D. (2022). Effects of switching from a metered dose inhaler to a dry powder inhaler on climate emissions and asthma control: post-hoc analysis. Thorax. 2022 Dec;77(12):1187-1192. doi: 10.1136/thoraxjnl-2021-218088. Epub 2022 Feb 7. PMID: 35131893; PMCID: PMC9685707.

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The Pharmacy Guild of Australia

SUBMISSION

National Health and Climate Strategy Consultation

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Date 24 July 2023

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INTRODUCTION

The Pharmacy Guild of Australia (the Guild) is the national peak organisation representing community pharmacy. It supports community pharmacy in its role of delivering quality health outcomes for all Australians. It strives to promote, maintain, and support community pharmacies as the appropriate providers of primary healthcare to the community through optimum therapeutic use of medicines, medicines management and related services.

Community pharmacies are the most frequently accessed and most accessible health destination, with over 428 million individual patient visits annually and many pharmacies open after-hours, including on weekends.[1] This makes community pharmacy an integral part of the primary health care system.

As the health effects of climate change become more prevalent, it is important to mitigate the impact of the health system on climate change to protect public health into the future. Of Australia's total carbon footprint, 6-7% is attributed to health care.[2] If Australia is to meet desired emissions reduction targets, the health system needs to act to mitigate greenhouse gas emissions.

Additionally, the health system needs to build resilience to climate change to ensure it can adapt and function under stress. Many of the solutions for reducing emissions also contribute to resilience, therefore mitigation and resilience are intertwined.

The development of the first National Health and Climate Strategy is a welcome and necessary step to achieving a more climate conscious and resilient health system, and the Guild is pleased to have the opportunity to provide feedback.

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[1] Vital-Facts-April-2023.pdf (guild.org.au)

[2] The carbon footprint of Australian health care - The Lancet Planetary Health

Consultation Questions

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
The vision of the Strategy is to protect the health and wellbeing of Australians from the impacts of climate change by reducing health system contributions to greenhouse gas emissions and building resilience across the health system. The objectives are: 1. **Measurement:** measure and report on health system greenhouse gas emissions, so progress in reducing emissions can be tracked and quantified. 2. **Mitigation:** Accelerate the reduction of greenhouse gas emissions from the health system 3. **Adaptation:** Strengthen the resilience of the health system and communities to anticipate and respond to the health impacts of climate change 4. **Health in All Policies:** Maximise the synergies between good climate policy and public health policy by working across policy areas to lessen the impact of climate change on the social and cultural determinants of health and wellbeing. The objectives broadly cover the high-level areas of action that would support the vision of the Strategy. Objective 4 (Health in All Policies) should also include working across climate and public health policy areas to lessen the impacts of the health system on climate change.
2. How could these principles be improved to better inform the objectives of the Strategy?
The principles are considered appropriate.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
The Strategy should include all three greenhouse gas emission scopes (scopes 1, 2, and 3). The reason for this recommendation is that the Strategy encompasses a broad range of stakeholders covering all facets of the health system, including policy makers. Having a broad range of stakeholders enables emissions to be influenced and controlled in different ways. For example, it is more practical for the health system to have an immediate impact on scope 1 and 2 emissions, as they have greater control over these emissions and can look inwardly at their practices to contribute to reducing emissions. It is generally considered more challenging for organisations to quantify and reduce scope 3 emissions[3], as these are indirect emissions often controlled by other organisations or individuals. Scope 3 emissions is an area in which government policy may be able to facilitate emission reduction by considering health and climate in all policies. For example, governments may be able to reduce scope 3 health system emissions through policies that looks at public transportation network and infrastructure planning to support health system employees commuting to work on electrified public transport. The Strategy could incorporate clear targets for emissions in a similar way to the NHS England'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 has the ability to influence.[4]

[3] Tackling the Scope 3 challenge (pwc.com.au)

[4] B1728-delivering-a-net-zero-nhs-july-2022.pdf (england.nhs.uk)

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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?
The Strategy should draw upon the research being conducted by the Lowitja Institute and the Healthy Environments and Lives (HEAL) network. The Lowitja Institute is an Aboriginal and Torres Strait Islander community controlled health research institute[5], whilst the HEAL network is a coalition of investigators and organisations[6]. The Lowitja Institute has published a discussion paper on *Climate Change and Aboriginal and Torres Strait Islander Health*[7] which covers similar themes to that of the Strategy, but in the context of Aboriginal and Torres Strait Islander health. The HEAL network covers a wide range of research themes that would be of value to the development of the Strategy as a whole. More specific to First Nations knowledge is the Indigenous Knowledge Systems research.[8] In addition to the above, the Strategy should ensure it aligns with the Closing the Gap National Agreement.[9]
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 Department should make it a priority to consult with First Nations representatives, including seeking their essential input into the Strategy and its implementation, and this should be embedded within the Strategy's ongoing review requirements. One forum that may be utilised is the Closing the Gap Campaign Steering Committee, which covers a broad range of stakeholders within the health system.[10]

Proposed Objectives 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?
No comment.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
No comment.

[5] About | Lowitja Institute
[6] Landing page - HEAL Network
[7] Climate in health (lowitja.org.au)
[8] Research Themes - HEAL Network
[9] Home | Closing the Gap
[10] Close the Gap: Indigenous Health Campaign | Australian Human Rights Commission

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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?

The need to reduce greenhouse gas emissions from the health system, and areas of action to achieve this, have been widely investigated/researched and documented. The proposed areas of focus for the Strategy are broadly consistent with areas of intervention identified internationally for health system emissions reduction.[11,12,13] We consider the proposed focus areas to be sufficient.

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?

Already proposed to the Department is designing the built environment and facilities for increased durability/lifespan. As an extension of this action, the Strategy should incorporate policy levers to ensure leases for healthcare facilities or businesses, such as pharmacies, do not mandate renovations or refits at unnecessary intervals, i.e., before assets have reached the end of their usable lifespan.

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

Action 2.2.1 in this focus area should be more ambitious. Achieving success in this area is unlikely if the feasibility relies on existing technology and infrastructure. The action should include a focus on identifying and making use of policy levers to acquire/procure the required technology and infrastructure to support adoption of electric and zero emissions vehicles.

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

Interpreting the emissions footprint and sustainability of pharmaceuticals should not be the responsibility of individual business, as this will be too onerous for small business and may lead to differing interpretations. As such, there should be an action for pharmaceutical companies to report on the carbon footprint of individual medicines, and for this and sustainability of supply to be considered during the health technology assessment process.

For example, the emissions footprint for pharmaceuticals may be considered by either the Therapeutic Goods Administration during the registration process or the Pharmaceutical Benefits Advisory Committee when making recommendations for PBS listing.

In addition to these parameters being considered during the health technology assessment pathway, there should be reporting for medicines already available in the Australian market to support medical practitioners wishing to make more environmentally friendly prescribing choices.

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[11] Toward a Net-Zero Health Care System: Actions to Reduce Greenhouse Gas Emissions | NEJM Catalyst

[12] B1728-delivering-a-net-zero-nhs-july-2022.pdf (england.nhs.uk)

[13] Green Office Toolkit - May 10th, 2023 (greenhealthcare.ca)

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

In addition to the actions already proposed to the Department, this focus area should include a specific action for 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; understanding the reason for this may enable development of policies to address the issue.

In the UK, the use of lower carbon propellants and alternatives has been identified as imperative to achieving emission reduction targets of metered-dose inhalers, A number of associated actions to help achieve this include 'supporting the innovation in and use of lower carbon propellants and alternatives' and development of options to support and incentivise the uptake of low carbon inhalers.[14] Under action area 2.4.3 *Work with key stakeholders in primary care to reduce prescribing and dispensing of pressurised metered dose inhalers, where clinically appropriate*, we suggest inclusion of specifics action to the same effect.

The development of this focus area should also draw on work done in this space by the International Pharmaceutical Aerosol Consortium on Regulation and Science.[15]

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

There are several actions related to pharmaceutical waste that could be considers in this focus area, particularly actions to reduce medicine wastage, inappropriate disposal of medicines, and medicine packaging challenges that contribute to an inability to recycle.

Medicines wastage occurs in many healthcare and non-healthcare settings including hospitals, pharmacies, general practice, residential care and in the home. It is an issue of the healthcare system and society as a whole and as such needs to be addressed in a holistic manner. There should be actions in this area to use policy levers to reduce oversupply/unnecessary supply of pharmaceuticals (prescribing and dispensing) which leads to stockpiling and subsequent expiry of unused medicine that need to be disposed of; this action should also encompass medicine samples supplied to prescribers, which often expiry without having been used.

Inappropriate disposal of medicine can contaminate the environment when untreated wastewater is discharged into waterways.[16] Improving public awareness of, and encouraging, the responsible disposal of medicines to reduce environmental impacts should be included as a specific action area. Additionally, identification of greener disposal initiatives should be a priority to reduce emissions produced by the current need to incinerate waste.

The consultation paper does not include any discussion on pharmaceutical packaging, however currently internal blister packaging in medicine boxes is a combination of foil and plastic which present a challenge for recycling or reprocessing. There should be an action to investigation and consider alternatives for internal blister packaging; or introduce effective recycling streams for pharmaceutical blister packaging.

There should also be an action to work with industry to implement manufacturing of reusable devices. For example, the manufacturers of Spiriva® soft mist inhalers enable the inhaler device to be reused and the medicine cartridge to be replaced.

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[14] B1728-delivering-a-net-zero-nhs-july-2022.pdf (england.nhs.uk)

[15] Home | IPAC-RS (ipacrs.org)

[16] Pharmaceuticals are present in almost all the world's rivers | World Economic Forum (weforum.org)

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?

It has already been proposed to the Department that the Strategy consider action to 'encourage greater social prescribing and patient education for preventive lifestyle change.'. Encouraging greater social prescribing is a relatively easy action to complete but may not increase participation in social prescribing, which is the outcome the action should be aiming to achieve. To achieve this, there needs to be a sub-action to increase social prescribing participation by investigating and addressing reasons or barriers that contribute to low participation rates/engagement with services to which the patient is referred.

It has been identified within this focus area to explore opportunities to shift models of care from acute care to primary care and self-care. Making healthcare more accessible close to where people live may help achieve this. As such, this focus area should include specific action to identify and make use of policy levers to enable all healthcare professionals to work to their full scope of practice.

Digital health solutions, such as telehealth, have been identified as an area of action to investigate as a way to reduce emissions. Any assessment of these solutions must ensure patient safety and care outcomes are not being compromised, particularly with an increase in the use of artificial intelligence.

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

Private providers within the health system are often time-poor due to many competing priorities coupled with ongoing workforce shortages. Developing clear, simply guidance or toolkits[17] for ways to reduce emissions that cover both generic and specific focus areas for different healthcare settings will make it easier for private providers to become involved. Incentives and initiatives to support implementation and changes in business operations would also help involvement of private providers by reducing costs barriers.

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?

16a: The Strategy is aiming to establish a three-year plan of action.[18] To balance competing priorities, it may be appropriate for the focus over the three years to shift from one emissions scope to another (e.g., direct to indirect, or lowest to highest).

16b: The priorities for action should be data driven, taking into consideration the emissions footprint of each source and predicted timeframes to complete actions.

[17] Green Office Toolkit - May 10th, 2023 (greenhealthcare.ca)

[18] Australia's first National Health and Climate Strategy kicks off | Health Portfolio Ministers and Aged Care

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

Some possible 'quick wins' include:

- Switching to green energy sources where available roof space allows for solar panels to be installed.
- Reducing paper waste by increasing use of digital health solutions.
- Reducing use of single use consumables, where unnecessary for infection control.
- Switching patients from metered dose inhalers to dry powder inhalers where clinically appropriate.
- Implementing policies across all jurisdictions that dictate energy performance and type of energy use for any new public health system buildings and facilities.

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?

It is difficult to priorities one health impact over another; all the negative health and health system outcomes identified in the consultation paper are known risks of climate change and will need to be addressed.

We recommend initially prioritising heat-related illnesses given the rising average global temperature, and respiratory-related illnesses given Australia's previous experience of thunderstorm asthma events and prolonged exposure to bushfire smoke. It would also be prudent to prioritise health system strengthening to prevent healthcare insecurity due to destruction of infrastructure, disruption of supply chains, and disruption of workforce and delivery of care.

There should be a nationally consistent process or methodology to identify and prioritise climate-sensitive health risks, vulnerabilities and impacts. The World Health Organization's *Quality criteria for health national adaptation plans* states that criteria to determine prioritisation could include magnitude of risk, size of population, level of vulnerability, available resources and funding.[19] A process that includes the requirement to consider these criteria would be appropriate.

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, the Australian government should **develop and complete** a National Health Vulnerability and Adaptation Assessment, in collaboration with state and territory governments, to ensure a consistent approach is applied nationally.

The consultation paper has stated that the Australian Government has allocated $28 million over 2 years to support the development of a National Adaptation Plan (NAP), in which the health sector will be considered. It may therefore be unnecessary to develop a separate National Health Adaptation Plan, and instead use the results of the health vulnerability and adaptation assessment (V&A) to develop the health sector section of the NAP.

[19] Quality Criteria for Health National Adaptation Plans (who.int)

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a) V&A assessments are used in many industries, with the main consideration of the methodology being that the V&A generates useful information for stakeholders to address the concerns identified as within the scope of the assessment.[20] This should also be the main consideration of any V&A assessment developed by the Australian Government.
b) Where possible, any work already done at state and territory level should be taken into consideration to ensure any issues or challenges previously encountered are known and addressed. International examples of similar work should be reviewed as they may highlight key considerations not already identified.
c) A national approach will support local and jurisdictional V&A assessment and adaptation planning by reducing duplication of effort where there may be limited resources.

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?

The *Framework for a national strategy on climate, health and well-being for Australia* published in 2017 by the Climate and Health Alliance, noted that the consultation process had revealed 'serious concerns at the lack of national leadership', and that 'a co-ordinated national effort is required to ensure that Australia is well prepared to protect the health and well-being of communities from the impacts of climate change'.[21] It would therefore be recommended for the Australian government to **lead and promote** a nationally consistent approach to anything related to this national strategy to enhance efficiency and reduce duplication.

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

The highest priority is to complete the Health Vulnerability and Adaptation Assessment, as the ability to adapt is linked to knowledge and awareness of vulnerabilities and adaptation actions will be informed by the results of the V&A assessment.

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[20] Vulnerability & Adaptation (unfccc.int)
[21] CAHA_Framework_for_a_National_Strategy_on_Climate_Health_and_Well-being_v05_SCREEN_(Full_Report).pdf (d3n8a8pro7vhmx.cloudfront.net)

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?

The consultation paper details the wider determinants of health, and associated policies that fall outside of traditional health policy in which a Health in All Policies approach would be of benefit. Some additional key areas where a Health in All Policies approach may assist including:

- budget/funding, to ensure sufficient funding resources are allocated. For example, most National Adaptation Plans underestimate the funding resources required for the health system, therefore impacting resilience.
- emergency preparedness and response management.
- workforce policies, to build resilience in the health workforce to reduce disruption during a disaster, and support continuity of care of patients.

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.

Enablers

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

The consultation paper notes that the World Health Organization has identified insufficient financing as a challenge that is impeding progress in developing national health and climate change plans or strategies; however, it has not been included as an enabler in this Strategy. Funding/financing should be added as an enabler to ensure that it is properly considered as part of the Strategy, particularly given cost and current funding models are often seen as disincentives to implementation.

Australia is lagging in addressing the impacts of climate change on health. Governance and leadership (not related to health workforce leadership) should also be included as an enabler to ensure there is responsibility and accountability for progressing the actions of the Strategy. The Climate and Health Alliance developed a framework for a National Strategy on Climate Health and Wellbeing in 2017[22], with the support of many health organisation, yet the Australian Government is only just preparing to develop a Strategy now despite the ongoing threat of natural disasters such as bushfires and flooding. The NHS England has implemented a strategy to ensure NHS

[22] CAHA_Framework_for_a_National_Strategy_on_Climate_Health_and_Well-being_v05_SCREEN_(Full_Report).pdf (d3n8a8pro7vhmx.cloudfront.net)

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organisations have a board-level net zero lead; this sets a clear intention for all staff that reaching net zero is a priority.[23]

Enabler 1: Workforce, leadership and training
We recommend E1.1 is rephrased, as below, to recognise universities as the fundamental bodies responsible for education of the health workforce, and the important role VET providers play in education of the health workforce (e.g., health service assistants, enrolled nurse diplomas, aged care and disability care workers, and health administration).

> *E1.1. Encourage universities, VET providers, medical colleges and other education and training institutions to ensure the impacts of climate change on health form part of the training curriculum and continuing professional development for all health care professionals.*

Additionally, the health Impacts of climate change should be included in curriculum frameworks published by relevant Accreditation Authorities (under the National Registration and Accreditation Scheme). For example, in the case of pharmacy education, in the *Pharmacy Learning Domains* published by the Australian Pharmacy Council. And for within VET Training Packages, Qualifications and Units of Competency.

Enabler 2: Research
We recommend that enabler E2.1 be changed, as below, as "A scan of…." is not meaningful or likely to lead to action.

> *E2.1 Promote opportunities for research activities pertaining to climate change and health across all health disciplines, e.g., by prioritising such research through Australian Research Council and/or NHMRC grants.*

Enabler 3: Communication and engagement
The examples of communities that will be hardest hit by climate change should also acknowledge that this includes people living in rural Australia.

Enabler 4: Collaboration
The wording within this enabler should be simplified or rephrased for clarity.

Enabler 5: Monitoring and evaluation
This enabler could be improved by providing some examples of key deliverables for the strategy.

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

a) Enabler 1: Workforce, leadership and training
Some university health courses and university centres have incorporated content on the health impacts of climate change in their curricula to raise awareness of the issue. All health disciplines should be encouraged to incorporated this into their curriculum.

b) Enabler 1: Workforce, leadership and training
Develop, or sponsor the development of VET units, and CPD modules for health professionals on the health impacts of climate change and ways to mitigate the impacts of the health system on the climate. Similar to the creation of content in response to COVID-19. This will result in quicker content delivery with assured coverage of desired principles.

Foster conversations and commission articles from both academics and practitioners in each health profession on topics for research into climate change in their respective profession.

[23] B1728-delivering-a-net-zero-nhs-july-2022.pdf (england.nhs.uk)

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24 July 2023

Department of Health and Aged Care
National Health, Sustainability and Climate Unit
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Email: health.climate.consultation@health.gov.au

To the Department of Health and Aged Care,

Submission: National Health and Climate Strategy

The Western Sydney Primary Health Network (PHN) acknowledges the traditional owners of Country throughout Australia on which we gather, live, work and stand. We acknowledge all traditional custodians, their Elders past, present, and emerging, and we pay respect to all First Nation's people.

This submission is made by the Western Sydney Primary Health Network (WentWest) in response to the Department of Health and Aged Care's consultation on the development of a National Health and Climate Strategy.

For 20 years, WentWest has been a part of the Western Sydney community, delivering support and education to primary healthcare professionals, and working with key partners to progress the region's health system. In July 2015, WentWest became the Western Sydney Primary Health Network (Western Sydney PHN), expanding its work to deliver better health outcomes for the Western Sydney region. PHNs are funded by the Australian Government Department of Health and Aged Care to strengthen primary care, improve patient-centred service integration, and increase the efficiency and effectiveness of primary healthcare services for Australians; particularly those at risk of poor health outcomes.

The Intergovernmental Panel on Climate Change's 2023 report has identified increases in global surface temperatures, which have caused widespread changes in the weather, and natural disasters across the globe. Extreme climate events have exposed millions of people to food and water insecurity, with the greatest adverse impacts observed amongst Indigenous communities, food producers, and low-income households[1].

The impacts of these events on human health and well-being include direct effects, namely incidences of heart attacks, strokes, accidents, heat-related exhaustion and death, post-traumatic stress, and smoke-induced asthma attacks; inevitably having repercussions on the healthcare systems, and providers, who are the first responders in extreme events. Understanding the climate-related health risks is crucial for effective planning and response within the health sector.

As the Western Sydney PHN, our programs, initiatives, and strategies are shaped by the rich diversity of Western Sydney, focusing on downstream determinants of health, exploring and understanding vulnerabilities, and appreciating the heterogeneity of our community demographics. WentWest is in the process of undertaking an Environment, Social, and Governance strategy, which considers the

[1] Intergovernmental Panel on Climate Change, Climate Change 2023 Synthesis Report. (2023). Geneva: Switzerland. Retrieved from: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf

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impact of the environment on the Western Sydney primary care providers, and the community as a whole. Particularly, our Natural Disasters Management Strategy utilises guiding principles to ensure mitigation and adaptation to climate change across the community.

This submission will address the 6 areas outlined in the Strategy Consultation Paper and will provide feedback and recommendations informed by WentWest's expertise in climate change's impact on health systems and the considerations in addressing this. Overall, our submission highlights the need for reduced fragmentation in addressing climate change, focusing rather, on a cross-sectoral, multi-disciplinary approach. We also refer to inherent gaps in the Strategy that should be explored by the Department.

We commend the Department on the Strategy's focus on Scope 1,2, and 3 Greenhouse Gas emissions of the healthcare system, which is pivotal in both understanding and addressing the overarching footprint of the sector. WentWest endorses this core component of the Strategy. In the following pages, we will present more targeted feedback on specific aspects of the submission.

WentWest would welcome the opportunity to contribute to further consultations and elaborate further on our proposed recommendations for the National Health and Climate Strategy as needed. WentWest would also be pleased to provide more context and background on the recommendations outlined below and our programs and Strategies working to address the environmental sustainability of healthcare.

Yours Sincerely,

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Western Sydney Primary Health Network

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Introduction

Question: How could these objectives be improved to better support the vision of the Strategy?

As will be discussed in depth in subsequent answers, elements of each objective and areas of possible gaps should be considered by the Department. In summary:

Measurement: Reporting and measuring emissions in the health sector across Australia is not consistent nor enforceable. Private and small-medium health facilities are often omitted from reporting requirements. Scope 1, 2, and 3 emissions should all be reported, however, this is not consistent.

Mitigation: The 6 focus areas for climate change mitigation are pivotal to the Strategy, however, WentWest argues that the areas cannot be addressed if proper monitoring and measurement of emissions is not done (currently the case).

Adaptation: This is an essential part of the role of the healthcare sector in minimising the risk to health and well-being, adaptation can be achieved via natural disaster management strategies and enhancing cross-community resilience.

Health in all policies: A cross-sectoral, cross-departmental approach is necessary to increase efficiency and ensure success of the Strategy. Collaboration and the removal of Government and Departmental silos are pivotal.

Question: How could these principles be improved to better inform the objectives of the Strategy?

The guiding principles outlined as part of the Strategy address areas which are essential to address, this part of the Strategy is commended by WentWest.

First Nations Leadership – As will be discussed in subsequent questions, First Nations engagement under the Strategy should be multi-faceted and ongoing, being done at every part of the Strategy. The language surrounding First Nations engagement should divert from 'consultation' which implies a single instance of engagement. Instead, First Nations Leadership uses more positive language that promotes continuous communication with First Nations cultures, drawing upon generational knowledge of custodianship and a symbiotic relationship with the environment. Communication and leadership by Traditional Owners who have an inextricable connection and understanding of Country are pivotal. Climate Change, environmental degradation and rising sea levels will mean that places of cultural significance and parts of Country will be damaged, thus having confounding effects on First Nations persons culture, physical health, and emotional well-being. Although the Strategy addresses the importance of First Nations engagement, there are issues for consideration that remain- these are discussed below.

Tackling health inequities- At WentWest, we believe that addressing inequality in social determinants of health ensures positive health outcomes, i.e. primordial prevention. This belief has also been echoed in previous literature.[2] [3] [4] In the context of this Strategy, this will involve the understanding of which key communities are most affected by Climate Change, and how these communities are impacted by functions under the Strategy. As such, we stress the importance of this guiding principle and recommend that the Department's understanding of specific vulnerabilities is informed by scientific research and established literature. This also relates to the 'Evidence-Informed policy making' guiding principle.

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[2] Friel, S. (2020). Climate change and the people's health: the need to exit the consumptagenic system. The Lancet, 395(10225), 666-668. Doi:10.1016/S0140-6736(20)30257-9
[3] Walpole, S. C., Rasanathan, K., Campbell-Lendrum, D. (2009). Natural and unnatural synergies: climate change policy and health equity. Bull World Health Organisation- Perspectives, 87, 799-801. Doi:10.2471/BLT.09.067116
[4] Patrick, R., Noy, S., & Henderson-Wilson, C. (2015). Urbanisation, climate change and health equity: How can health promotion contribute? International Journal of Health Promotion and Education, 54(1), 34–49. doi:10.1080/14635240.2015.1057653

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Population health and prevention- Linking to the above point, prevention and health promotion are essential elements of reducing the risks of Climate Change on health. This involves addressing downstream determinants of community health and how climate change will exacerbate determinants and affect more vulnerable communities. For example, at WentWest, many of our commissioned health services, that aim to reduce the prevalence of chronic diseases (such as mental illness, diabetes, cardiovascular disease etc), act at the level of socioeconomic factors, addressing issues such as diet, healthcare access, education, etc. By operating at the primordial prevention level, our commissioned services have a knock-on effect in reducing the overall prevalence of targeted disease in the Western Sydney community. The importance of prevention and health promotion at this level has been well-established in scientific literature for a range of public health matters[5], and should be utilised in this Strategy.

One health- This principle may be better placed within the First Nations Leadership Principle. The understanding of the connection between the health of people, animals, and the environment, is an inherently First Nations cultural understanding, in which cultures exercised a symbiotic, balanced relationship with Country. Aboriginal and Torres Strait Islander Peoples see themselves as belonging to the environment rather than having dominion over the environment themselves. A reciprocal interrelationship exists between Aboriginal and Torres Strait Islander peoples and the environment, which integrates sustainable practices with obligations to Country.[6]

Evidence-informed policymaking- All aspects of the Strategy should be informed by peer-reviewed evidence, there may also be an opportunity for the Government to fund primary research which can coincide with the Strategy and achieve the Strategy's aims. Region and community-focused research will ensure knowledge of the feasibility and perceived success of initiatives under the Strategy in target populations. Research will also guide understanding of inherent barriers to the Strategy, and how to address these. At WentWest, we implement and utilise research to inform funding and commissioning decisions, but more importantly, to identify needs and gaps in our community. Research allows the understanding of specific vulnerabilities and risks, and investigates solutions for addressing these vulnerabilities. In the context of addressing climate change in the health sector, both utilising established and creating new evidence bases will be crucial. Evidence at each level of the sector is also important, ie. on the state/territory and hospital level, as well as the federal and primary health network level. The Department may consider funding and commissioning research through established health organisations such as PHNs, which provide regional insight and community-focused evidence.

Partnership-based working across all levels of government and beyond- A cross-sectoral and cross-governmental approach to the Strategy is essential. WentWest encourages collaboration and the removal of silos, ensuring efficiency, the overall success of the Strategy, and positive outcomes for health and wellbeing. Streamlining of policies and processes and ensuring consensus across sectors, means that sectors work in cohesion, and acknowledge that climate change is a cross-sectoral issue that impacts all facets of our modern society. The partnership also recognises the severity and magnitude of Climate Change for Australia as a whole. Climate Change has far-reaching impacts not only on our health sector but also has implications on transport[7], technology[8], infrastructure[9], agriculture[10], and more. In turn, when looking at Scope 2 and 3 emissions of the National health sector, there may be overlap with other departments. For example, transport and travel-related emissions may include collaboration with State/Territory and Local Government transport operations

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[5] Falkner, B., & Lurbe, E. (2020). Primordial prevention of high blood pressure in childhood. Hypertension, 75(5), 1142–1150. doi:10.1161/hypertensionaha.119.14059
[6] Assessment and Reporting Authority. (2023). The australian curriculum. Retrieved from https://australiancurriculum.edu.au/TeacherBackgroundInfo?id=56644
[7] https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-transportation_.html
[8] Sayegh, E. (2022). Retrieved from https://www.forbes.com/sites/emilsayegh/2022/04/21/how-climate-change-impacts-it/?sh=39d2dc3a6e52
[9] University of Sydney (2019). How climate change impacts infrastructure: experts explain. Retrieved from: https://www.sydney.edu.au/news-opinion/news/2019/11/27/how-climate-change-impacts-infrastructure--experts-explain.html
[10] Adapt NSW, (2023). Climate Change impacts on our agriculture. Retrieved from: https://www.climatechange.environment.nsw.gov.au/agriculture

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Departments. Therefore, minimising the contribution of the healthcare sector to Global Warming -and subsequently the impact of Climate Change on the sector- requires a multifaceted, cross-sectoral approach.
It is equally as important to involve those who are impacted by the Strategy as well, i.e: healthcare sector staff, inviting collaboration and partnership from primary, secondary and tertiary care providers, allied health, support health staff, etc. It is also pivotal to engage with representative groups and organisations (such as lobbying groups, advocacy groups, PHNs etc.) who engage with community and healthcare staff and understand the specific needs of their respective regions. Utilising these organisations may also be useful in increasing awareness, understanding, and acceptance of the Strategy itself amongst healthcare providers, and staff.

Question: Which of the various types of GHG emissions discussed above should be in the scope of the Strategy's emission reduction efforts?

The answer to this question is not clear due to an inherent lack of consistent research, reporting, and monitoring conducted in the Australian health sector. It is recommended that the Government implement a research plan which entails reporting of Scope 1, 2, and 3 emissions at small–large sized health facilities across Australia. Both Private and Public facilities should be implicated within this plan, and reporting requirements should be more stringent. In doing so, the Department will effectively create a knowledge framework for emissions across the Sector and would identify which emissions pose the greatest burden on overall GHG emissions, and should therefore be addressed in the first instance.

Question: 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?

First Nations insight is pivotal to the Strategy, as the understanding of stewardship over Country allows culturally cognisant, effective, and sustainable ways to reduce GHG emissions and address environmental degradation.

From the consultation paper, the consultation process with First Nations communities appears 'tick-box'. Rather, the consultation with Indigenous communities should be ongoing throughout the period of the Strategy and should be integrated into all decision-making and implementation processes under the Strategy. Engagement with First Nations groups should be multi-faceted and should be done at all steps of the Strategy.

Furthermore, through this engagement process, the Department must ensure that Indigenous persons of varying backgrounds are consulted – including Elders, youths, those living in rural communities, and those living in Urban communities. This will ensure a diversity of insight that is reflective of the wider Aboriginal and Torres Strait Islander community in Australia.

At WentWest, we are in the process of implementing a Citizen's Jury which will assist in determining health needs and opportunities in the community of Western Sydney and what are the best ways to address them. A Citizen's Jury uses a 'focus group' format, in which participants are prompted to share their experiences, knowledge, and perceptions, to elucidate what issues are facing members of the community, how successful are current interventions to prevent these issues, and what are the community's perceptions surrounding these interventions. We are also implementing a First Nations Citizen's Jury, ultimately empowering the Western Sydney First Nations community to lead conversations on health issues, outcomes, attributing factors, and their perceptions; which will in turn shape decisions and initiatives addressing First Nations Health. A similar method of engagement can be used by the Department for the purposes of the Strategy. A Citizen's Jury of First Nations persons can be used as an evidence base for segments of the Strategy and can be used to prompt

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conversation on the feasibility and perceived success of the Strategy's Objectives, Guiding Principles, and Enablers.

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

In ensuring First Nations voices are heard and embedded in the Strategy, it is important to remain distant from Deficit Discourse approaches, instead honing in on a Strengths-based approach.[11] Deficit Discourse encompasses disempowering patterns of thought, language and practice, representing groups and peoples as deficiencies – this approach is often used when discussing Aboriginal and Torres Strait Islander health and wellbeing.

On the other hand, a Strengths-based approach utilises positive terminology and emphasises the positive role that First Nations persons have in policy and decision-making processes. The Strengths-based approach also incorporates the communication and terminology used as part of the Strategy is culturally cognisant. The consultation paper has correctly identified the relationship of First Nations persons with Country, however, there has been no specific mention of Traditional Owners and their ongoing, inextricable connection. Due to the ongoing impacts of colonisation and removal of Indigenous persons from Country, not all First Nations people have knowledge of cultural history and customs, which are held by Traditional Owners. Traditional Owners specifically should be consulted as part of this Strategy.

Ultimately, the strengths-based approach acknowledges First Nations self-determination and the cultural environmental practices of First Nations persons which predated colonialism. This is evidenced in cultural burning practices (back-burning) which are now utilised by Australian and State/Territory Emergency responders to mitigate the effects of bushfires and minimise damage to life, health, and property.[12]

Proposed Objective 1: Measurement

Question 2: What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

As outlined in the Consultation paper, there is currently fragmentation in GHG emissions reporting across healthcare in Australia, with reporting schemes and programs under the Department of Climate Change, Energy, Environment and Water (DCCEEW) having differing requirements.[13] Evidently, there is a need to create reporting measures for Scope 3 emissions, which are not entirely required under current reporting in Australia. Scope 3 emissions (supply-chain-related emissions) comprise the majority of GHG emissions in the healthcare sector (71%[14]), through the production, transport, and disposal of goods and services, such as pharmaceuticals and other chemicals, food and agricultural products, medical devices, hospital equipment, and instruments. Furthermore, emissions reporting schemes currently have minimal enforcement on health institutions, therefore there is little incentive to reduce emissions. Thus, as part of the Strategy, imposing enforcement of reporting requirements by the DCCEEW, through legislation with collaboration from the Attorney General Department or otherwise, is recommended.

To effectively minimise GHG emissions in the health sector, it is pivotal that collected emissions data is accurate and reliable. It has been noted in the Consultation Paper that the DCCEEW does currently

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[11] The Lowitja Institute, Deficit Discourse and Aboriginal and Torres Strait Islander Health Policy, (2018). Victoria, Australia: ANU. https://www.lowitja.org.au/content/Document/PDF/deficit-discourse-summary-report.pdf
[12] Royal Commission into National Natural Disaster Arrangements, Cultural Burning practices in Australia (2020). Canberra, ACT: Commonwealth of Australia. https://naturaldisaster.royalcommission.gov.au/system/files/2020-06/Cultural%20burning%20practices%20in%20Australia%20-%20Background%20Paper.pdf
[13] National Greenhouse and Energy Reporting. (2022). Retrieved from https://www.cleanenergyregulator.gov.au/NGER/About-the-National-Greenhouse-and-Energy-Reporting-scheme
[14] Healthcare without harm, Measuring and reducing plastics in the healthcare sector (2021). Brussels, Belgium. Retrieved from: https://noharm-europe.org/sites/default/files/documents-files/6886/2021-09-23_Measuring-and-reducing-plastics-in-the-healthcare-sector.pdf

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receive much data on emissions of smaller-scale health institutions, thus implying that emissions Accounts may be inaccurate. Scientific literature has identified that primary care practices and community practices (often small-scale) contribute to the sector's emissions through inappropriate diagnostic imaging or pathology test ordering, and over-prescribing of medications (amounting to over 8000 kilotons of CO2e[15] per annum in Australia).[16] Collaboration with smaller health facilities, their staff, and organisations such as PHNs can assist in identifying current needs and gaps in emissions reporting and can also explore solutions and possible initiatives to address these gaps.

Proposed Objective 2: Mitigation

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

Regarding travel and transport to and from health facilities and amongst health staff would require consideration of (1) addressing and incentivising patient and staff transport, and (2) utilising emerging services such as telehealth:

(1) Incentivising public transport use amongst patients and staff – Promotion of public transport may be done in conjunction with State/Territory Government Transport Departments and may include public health media campaigns and materials, with a particular focus on urban areas with greater access to both transport and doctors.

WentWest acknowledges that varying social factors can impede access to healthcare, including geographic location and isolation. It is important, therefore, to address social determinants in accessing care. We appreciate the Federal Government's announcement of funding for introducing more urgent care clinics and funding after-hours care, however, more should be done to ensure equitable and timely access to healthcare across Australia. Previous studies have elucidated that patients living in rural areas have higher GHG emissions due to geographic isolation from GPs and health services, with some patients having to take flights to their nearest general practice.[17] As such, in addressing this aspect of Mitigation, there needs to be collaboration across the Department of Health and Aged Care to ensure health access needs are met particularly in rural/regional communities. Access to public transport infrastructure is an issue that should be collaboratively addressed within itself. A recent study has identified that within NSW, access to public transport infrastructure is geographically concentrated and skewed to areas of higher income[18]. The Western Sydney region, for example, has one of the lowest rates of workers living within 30 minutes of public transport infrastructure, and the lowest mean household income in all Metropolitan Sydney.[19]

Research into the impact of patient and staff transport on overall emissions of the health sector has been limited in Australia, however, some global examples can be drawn upon. A study of primary care practices in Switzerland elucidated that staff and patient transport to and from practices comprised half of the total annual emissions[20], a similar trend has been established in the UK.[21] Evidently, Primary Care has a predominant role to play in modifying practices to reduce overall emissions of the sector. Established literature suggests that GPs could reduce carbon emissions of their practices by 5-10% per year by adapting their mode of transport.[22] Furthermore, through their role in their respective communities, GPs could also play a role in promoting sustainable practices, with studies suggesting

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[16] Smith, C. L., Zurynski, Y., & Braithwaite, J. (2022). We can't mitigate what we don't monitor: Using Informatics to measure and improve healthcare systems' climate impact and environmental footprint. Journal of the American Medical Informatics Association, 29(12), 2168–2173. doi:10.1093/jamia/ocac113
[17] Skinner, I., Cheek, C., Jaffray, L., & Skinner, T. (2013). Making a case for telehealth: Measuring the carbon cost of health-related travel. Rural and Remote Health. doi:10.22605/rrh2723
[18] The McKell Institute (2022). Funding the infrastructure of tomorrow. Sydney: Australia. Retrieved from: https://mckellinstitute.org.au/wp-content/uploads/2022/03/McKell_Super-Funding-Infrastructure.pdf
[19] ibid
[20] Nicolet, J., Mueller, Y., Paruta, P., Boucher, J., & Senn, N. (2022). What is the carbon footprint of primary care practices? A retrospective life-cycle analysis in Switzerland. Environmental Health, 21(1). doi:10.1186/s12940-021-00814-y
[21] Andrews, E., Pearson, D., Kelly, C., Stroud, L., & Rivas Perez, M. (2013). Carbon footprint of patient journeys through primary care: A mixed methods approach. British Journal of General Practice, 63(614). doi:10.3399/bjgp13x671579
[22] Legrand, J., Aubin-Auger, I., De Bary, L., Fossembas, É., Baruch, D., & Malmartel, A. (2023). Sustainable development in general practice. Family Practice, 40(3), 511–518. doi:10.1093/fampra/cmad003

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that a physician could save 15 tonnes of CO_2e per year through counselling patients on lower-carbon diets, walking and cycling, and utilising public transport for short commutes.[23]

Concerning promoting public transport use amongst primary health staff specifically, 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 on climate change mitigation strategies, reducing emissions, and increasing changing behaviours amongst patients.

(2) Increasing telehealth and e-health services – The COVID-19 pandemic brought unprecedented challenges for the healthcare sector, its facilities, and staff. The increased utilisation of telehealth and e-health has resulted in an evolution of the Australian health sector overall, even post-pandemic. The Federal Government has increased bulk-billing incentives for telehealth and has introduced funding for e-health initiatives, as showcased in the 2023-24 Federal Budget.[24] As well as increasing access to healthcare for Australians, telehealth could be investigated as a carbon mitigation option, culling transportation emissions of patients and staff.[25] However, further research in this area is required as although telehealth and e-health would reduce transport emissions, the real-time monitoring, operations of smart devices, and data storage in power data centres, all consume massive amounts of energy and produce atmospheric emissions.[26]

For example, during the COVID-19 pandemic, the importance of telehealth and e-health amongst the community of Western Sydney in the continuity of healthcare provision was exemplified. During the pandemic and associated lockdowns, ensuring the continuity and access to healthcare was pivotal in maintaining positive health outcomes in the community. PHNs across the country provided GPs with guidance on organising telehealth appointments, training in telehealth, and support for videoconferencing, and digital mental healthcare.[27] [28] The increased popularity of telehealth and e-health during the pandemic also created an opportunity for its continued use post-pandemic. Once again, PHNs can work to develop telehealth skills and knowledge amongst primary practice, as a way to mitigate emissions of both staff and patient transport. Further research may be needed, however, regarding the strain telehealth poses on staff work demands. Using telehealth as an environmentally and fiscally sustainable method of primary care is important and would require further investigation through the Strategy.

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

Questions 4 and 5 are answered together for the purposes of our submission. Pharmaceutical supply chains comprise 19% of the sector's total GHG emissions[29], due to generation of pharmaceuticals, over-prescribing, and mismanagement of waste. Scientific literature instead focuses on Value-based care; ensuring the best care for patients, whilst considering environmental, personal, physical, and societal contexts.[30] Value-based care discourages environmentally damaging health practices, yet is time-intensive and is often not prioritised by practitioners due to factors such as staffing shortages and high patient demand. There may be an opportunity here for the Department to liaise with Federal

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[23] Legrand, J., Aubin-Auger, I., De Bary, L., Fossembas, É., Baruch, D., & Malmartel, A. (2023). Sustainable development in general practice. Family Practice, 40(3), 511–518. doi:10.1093/fampra/cmad003
[24] Commonwealth of Australia, Budget Measures – Budget Paper No 2. (2023). Retrieved from: https://budget.gov.au/content/bp2/index.htm
[25] Holmner, Å., Ebi, K. L., Lazuardi, L., & Nilsson, M. (2014a). Carbon footprint of telemedicine solutions - unexplored opportunity for reducing carbon emissions in the health sector. PLoS ONE, 9(9). doi:10.1371/journal.pone.0105040
[26] Jiang, P., Klemeš, J. J., Fan, Y. V., Fu, X., & Bee, Y. M. (2021). More is not enough: A deeper understanding of the COVID-19 impacts on healthcare, energy and environment is crucial. International Journal of Environmental Research and Public Health, 18(2), 684. doi:10.3390/ijerph18020684
[27] Lau P, Trankle S, Abbott P, Lo W, Reath J. The experience of New South Wales Primary Health Networks during the 2021 COVID-19 outbreak. July 2022. Available from: https://doi.org/10.26183/5ht8-xp87.
[28] Snoswell C L, Caffery L J, Haydon H M, Thomas E E, & Smith A C. (2020). Telehealth uptake in general practice as a result of the coronavirus (COVID-19) pandemic. Aust Health Rev, 44(5), 737-740.
[29] Astell, - Kylie. (2023). Retrieved from https://dea.org.au/doctors-for-the-environment-australia-net-zero-report/
[30] Pavli, A., Loblay, V., Rychetnik, L., & Usherwood, T. (2023a). What can we learn from Australian general practices taking steps to be more environmentally sustainable? A qualitative study. Family Practice, 40(3), 465–472. doi:10.1093/fampra/cmad027

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and State/Territory Industrial Relations sectors, advisory bodies and lobbying groups to understand the barriers amongst the workforce to value-based care, and how these barriers can be addressed.

Furthermore, choosing to prescribe certain pharmaceuticals may decrease GHG emissions whilst maintaining high-quality care for patients. For example, metered-dose-inhalers (MDIs) are the first intervention used in treating persons suffering from asthma, however, GHGs emitted in a typical Salbutamol MDI are as much as a tailpipe exhaust from a car driven for 300km.[31] MDIs alone account for 3-4% of the total carbon footprint of the UK healthcare sector and have been shown to be less effective in long-term, ongoing asthma therapy than the sustainable-alternative, Dry powder inhaler.[32] Global initiatives by GP representative and lobbying groups are currently underway to increase awareness of such prescribing decisions, placing emphasis on value-based care. The Strategy should consider similar initiatives and/or partnerships to mitigate these emissions.

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

It is widely established in the scientific literature that waste management practices differ across health practices, with different countries/states/jurisdictions/practices with their own processes. Some waste management processes are more detrimental (autoclaving) to the environment than others (recycling)[33].

A recent report measuring plastic use in the health sector globally[34] also outlines that recycling does not effectively mitigate the effects waste has on the environment. As such, reporting measures should be introduced under the Strategy to audit waste management in hospitals, primary care practices, and private facilities. The reporting should identify what and how much waste is procured by facilities, what is the source of the waste, and how the waste is managed.

The COVID-19 pandemic had unprecedented effects on the health system as a whole and resulted in increased production, dispersion, and use of single-use plastics, medical instruments, and PPE.[35] However, research on the environmental impacts of COVID-19 on Australia has been limited. Understanding the impact of COVID-19 on waste creation, disposal and management across Australia will be pivotal to understanding the environmental impact of the health sector and how to mitigate this.

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

Engagement with private health facilities and providers is an inherent gap in this Strategy. A lack of monitoring of emissions released by private facilities by the DCCEEW would imply that the total emissions data gathered is not a true representative of the health sector's total emissions. This can have confounding implications for the success of the Strategy. Reporting and monitoring of emissions should therefore be considered to be extended to Private facilities.

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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 6 sources of emissions discussed on pages 13-18 of the Consultation Paper is the highest priority for action?

To our knowledge, there is currently no consistent, clear, or up-to-date answer of which of the focus areas poses the greatest burden to emissions by the Australian healthcare sector. As such, an investigation into the emissions of these areas on a national scale, as well as an assessment of the ways to address this is needed. Subsequently, this will elucidate which focus area to address as a matter of priority.

Furthermore, although Scope 3 emissions must be addressed – as the area in which the most GHG is produced and emitted – Scope 1 emissions should be immediately prioritised. These are the direct impact of the healthcare sector and begin with small-scale changes that may have profound impacts. Scope 1 emissions also allow the introduction of education and training for healthcare facilities and staff, increasing awareness and building skills on sustainability in healthcare. The importance of education and awareness-raising amongst health staff is discussed in detail below (Proposed Objective 3, Questions 1-4). As such, Scope 1 emissions and associated health staff support and training should be prioritised for delivery in the first 12 months following the publication of the Strategy.

Proposed Objective 3: Adaptation

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?

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?

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?

The above will be answered together for the purposes of this submission. A critical component of Climate Change adaptation is natural disaster management and planning, that is, ensuring that the

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health system, facilities, staff, and patients are safe during a natural disaster event and health risk is minimised.

Persons experiencing socioeconomic disadvantage, older persons, infants, people with chronic diseases, First Nations persons, and people living in rural and regional areas are most at risk of experiencing detrimental effects of Climate Change on their health and well-being.[36] The Strategy should contain considerations for each group, how they are impacted by Climate Change, and how the Strategy will benefit them. This may be done by considering the role of local health facilities and the specific needs of their patient base.

There is a clear imperative to address Natural Disasters on a health facility level, with Management tailored to the type of disaster event that the facility is likely to experience, the community it serves and its demographics, and the specific risks of the health facility. Natural disaster management should include staff training, backup plans, engagement with local first responders and coordination with State/Territory and Local emergency plans. There may also be an opportunity for health professionals to engage with the community and promote individual and communal climate change adaptation practices (sustainable/green practices in the home and group/communal settings).

At WentWest, our Natural Disaster Management Strategy aims to enhance Natural Disaster preparedness across the Western Sydney Primary Health sector and centres around a tailored approach to disaster management. Our Strategy takes into account types of natural disasters, the demographics of our local area, and specific risks and vulnerabilities that primary care practices may be susceptible to.

To allow the Department to address vulnerability through adaptation measures, the Department may be able to draw upon existing structures and organisations with regional knowledge and expertise, ie: PHNs. Specific roles and responsibilities of PHNs in natural disaster management and climate change resilience vary based on the region and nature of the disaster. PHNs work in collaboration with other healthcare organisations, emergency management agencies, and community stakeholders to ensure a comprehensive and coordinated response to natural disasters in their respective regions. [37] [38] PHNs have the capacity to collaborate with local health services, emergency management agencies and other stakeholders to assess the vulnerabilities of their regions, identify critical healthcare needs during emergencies and establish strategies to address these needs.

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.

The creation of a nationally consistent vulnerability plan is recommended for ensuring the removal of silos in climate change mitigation and adaptation strategies. A vulnerability assessment plan that is conducted individually by each State/Territory or Local Government would be crucial in ensuring the specific needs of each region are met. However, it may cause a fragmented approach, which will ultimately be inefficient and unsuccessful in minimising climate change-induced risk. As such, a nationally consistent plan created in conjunction with State/Territory Governments is recommended.

To do so, the Department should draw on the successes of the Commonwealth's National Strategy for Disaster Resilience (NSDR) [39] which focuses on understanding risks, strengthening capabilities,

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[36] NSW Health. (2023). Retrieved from https://www.health.nsw.gov.au/environment/climate/Pages/who-is-most-at-risk.aspx
[37] PHN Cooperative White Paper, https://www.nbmphn.com.au/Resources/About/The-Role-of-Primary-Health-Networks-in-Natural-Dis
[38] PHN Cooperative, Submission to the Senate Select Committee on Australia's Disaster Resilience.
[39] Council of Australian Governments, National Strategy for Disaster Resilience (2011). Canberra, ACT. https://knowledge.aidr.org.au/media/2153/nationalstrategyfordisasterresilience.pdf

and fostering community engagement and education. NSDR promotes a whole-of-community approach, encouraging individuals, communities, and governments to work in collaboration to reduce vulnerability and increase emergency preparedness. Similarly, the National Disaster Risk Reduction Framework (NDRRF) [40] is a multi-sectoral, cross-government collaboration in disaster management. The NDRRF emphasises the integration of risk reduction principles into policies, programs, and decision-making processes at community, state, and National levels, ensuring holistic and integrated action.

PHNs can influence the priorities and activities of primary care and can play a key role in GP education and awareness raising. The North Sydney PHN, for example, has developed a Climate and Health Strategy, aiming to achieve 'better health, better climate, better health system' with acknowledgement of the need to transition operations in the health system to a net-zero carbon footprint.[41] Similarly, at WentWest we are developing our Natural Disaster Strategy, which involves objectives for emissions mitigation initiatives in primary healthcare. Improving data and centralised reporting of emissions of primary care services – and all health services – at a national level would further support PHNs in addressing climate change and its impacts on health at a regional level.

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

Regarding adaptation, it is pivotal to begin a rollout of education and training for healthcare facilities and staff, to be aware of climate change impacts on healthcare, what the risks are, and how to address them. This will ensure that health facilities can adapt to climate change effects, markedly, in natural disasters and extreme weather events, and will maintain facility and community level resilience during and after a disaster.

Education initiatives should also include information on how to implement sustainable practices in suggests that most healthcare professionals care about Climate Change and agree that initiatives should be put in place to address it,[42] however, many are unaware of the ways they can do so in the workplace.[43] [44] [45] It is pivotal, therefore, to ensure the timely and consistent rollout of education and training to address knowledge and skills gaps. The Department may consider utilising existing structures and organisations to coordinate these educational programs with regional facilities, such as PHNs and LHDs.

Proposed Objective 4: Health in all policies

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?

Working collaboratively across sectors and departments relies upon a mutual understanding and acceptance of skills, knowledge, and expertise of the involved groups, and how all can be used to enhance the consultation. Ensuring a cross-sectoral approach and reducing fragmentation. Ensuring the involvement of multiple departments across all levels of Government. But, creating a single, consistent strategy with clearly defined roles and responsibilities for all involved

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[40] Commonwealth of Australia, National Disaster Risk Reduction Framework (2018). Canberra, ACT.
[41] Sydney North Health Network, Climate and Health Strategy 2020 (2020). https://sydneynorthhealthnetwork.org.au/wp-content/uploads/2020/11/SNHN-Climate-and-Health-Strategy-2020-WEB.pdf
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Ensuring a diversity of opinions and expertise, in considering government departments, organisations, lobbying groups, and members of the community. This will involve critically analysing GHG emissions pathways via Scopes 1-3 of the healthcare sector, and the interactions of different groups and persons along these pathways. This will also involve including those who will be most impacted by the Strategy, namely health workers and staff. Engagement and collaboration with primary, secondary, and tertiary health workers or advocacy groups will help the department to understand their capabilities, interests, the feasibility of elements of the Strategy, and any identified gaps or needs.

Furthermore, as discussed above, ongoing involvement and leadership of First Nations and Traditional Owners is essential. Maintaining an understanding of culturally sustainable practices, custodianship of Country, and how climate change will inevitably impact the Aboriginal and Torres Strait Islander community is pivotal. Involving advocacy groups, community leaders and Elders, as well as Aboriginal and Torres Strait Islander health staff is imperative.

An example of effective cross-sectoral collaboration is the NSW Health and NSW Primary Health Networks partnership.[46] NSW Health, Local Health Districts, Specialty Health Networks and Primary Health Networks of NSW are committed to working in partnership to deliver patient-centred care through the collaboration of primary, community, hospital, and social care areas. Through a 'one health system mindset', and a regional focus, the partnership addresses health issues and ensures health promotion and disease prevention that is tailored to a community's specific vulnerabilities whilst considering health provision across the state. An important part of this partnership is the measurement and evaluation of progress at the system level across the organisations involved. Evaluation is also done collaboratively, thereby linking community, primary, and hospital healthcare spaces together with the patients and communities they serve.

Enablers

How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
For each of these enablers – What is currently working well?
What actions should the Strategy consider to support delivery?

For this submission, both questions regarding the Strategy's enablers are answered together.

Workforce leadership training – The specific needs, gaps, and challenges within the health workforce must be elucidated and addressed through this Strategy. Particularly for reducing Scope 1 emissions within healthcare facilities, proper knowledge and training are needed among staff. Perceptions and withheld notions of sustainable practice by staff will impact the effective uptake of climate change mitigation strategies in the workplace. As such, the Department must examine current evidence or commissions primary research pertaining to workforce knowledge and the likelihood of uptake of initiatives suggested under the Strategy. Current scientific literature highlights that common misconceptions amongst healthcare providers include a lack of understanding of mitigative strategies in the workplace, and a lack of clarity surrounding healthcare worker roles in addressing the sector's emissions.[47]

To address this gap in the primary care workforce, PHNs can be utilised to run informative and skill-building sessions to increase knowledge of sustainable practice. Currently, PHNs engage with primary care providers by providing ongoing support via education, training, seminars and webinars, and

[46] NSW PHNs & NSW Health, NSW Health and NSW Primary Health Networks: Working together to deliver person-centred healthcare, Joint Statement. September 2021. Available from: https://www.health.nsw.gov.au/integratedcare/Documents/joint-statement.pdf
[47] Legrand, J., Aubin-Auger, I., De Bary, L., Fossembas, E., Baruch, D., Malmartel, A. (2023). Sustainable development in general practice. Family Practice, 40(3), 511-518. Doi: 10.1093/fampra/cmad003.

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informative materials of new announcements, legislative and policy changes, emerging research, initiatives, etc. As such, PHNs can also build climate change and environmental skills amongst primary care staff, including providing information on ways to reduce energy waste in practice, social prescribing and prescribing sustainable alternatives, and how to counsel patients on leading more sustainable lives. Such educational initiatives would not only reduce Scope 1 emissions of primary care practice but would also reduce downstream and upstream Scope 2 and 3 emissions as well. As such, the involvement of PHNs should be considered by the Department for this enabler.

Research—As outlined above, research, reporting, and data gathering are pivotal to the success of this Strategy. There is an inherent lack of consistent data and research regarding emissions in the healthcare sector, more research should be done in this space. Research tends to focus on hospital settings, however more is required to examine community health facilities, general practices, small-medium sized health facilities and private facilities. Once again, PHNs, as regional-based facilitators, may be utilised in supporting primary care practices to investigate and report on their GHG emissions. There may also be an opportunity for PHNs to commission community-specific primary research and data gathering for the purposes of the Strategy.

Communication and engagement & Collaboration– The Communication and engagement & Collaboration enablers are inextricably linked. Achieving a holistic, cross-sectoral approach to health and climate change action will result in positive health outcomes for Australians. As outlined in previous answers, engagement should be conducted with members of the community, representatives of the health workforce, First Nations people, and relevant advisory/representative groups. Similarly, there should be engagement between the Federal, State/Territory and Local levels of Government, removing the silos and fragmentation in healthcare and climate change management.

Monitoring and reporting- Monitoring should be used as an evaluative step, informing future iterations of the Strategy and subsequent policies occurring as a result. Monitoring and Reporting also tie into the 'Research' enabler, in which ongoing measurement of emissions of the sector is essential to ensuring the success of the Strategy.

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Government of **Western Australia**
Department of **Health**

National Health and Climate Strategy: Consultation Paper Feedback

The Western Australian Department of Health's Sustainable Development Unit (SDU) acknowledge the significant work involved in the development of the National Health and Climate Strategy. We would like to thank the National Climate, Health, and Sustainability Unit (NHCSU) for the opportunity to provide feedback on the Consultation Paper.

About the Sustainable Development Unit

The Sustainable Development Unit (SDU) was established in late 2021, to lead and coordinate a systemwide response on climate action and sustainability. The SDU works closely with Health Service Providers, State Government agencies, the public health sector, and broader stakeholders. Our work reflects the WA health system's commitment to reducing its emissions, energy and water use – while preparing our health system and communities for the impacts of climate change.

The SDU has answered the questions outlined in the Consultation Paper below:

Q1. How could these objectives be improved to better support the vision of the Strategy?

A clear vision statement and purpose is required to set the ambition and direction of the Strategy.

Objective 1 feels more like an action or an enabler than an objective. It would be good to reframe it as more of a goal or ambition to achieve. This could be around a net zero health system, or an opportunity to state a specific target on emissions reduction.

Noting footnote 8, we agree that measurement should be expanded beyond 'greenhouse gas emissions' – this could include things like water use, waste, 'nature positive' outcomes, addition to social value (consideration of social carbon costing), adaptive capacity etc. The Sustainable Development Goals could be guiding principles to 'measure' in regards the outcomes of the Strategy.

Similarly, we recommend expanding Objective 2 - mitigation - beyond mechanisms to reduce greenhouse gas emissions, recognising that waste, water, pollution, land use, biodiversity loss, and other environmental and social harms are equally

important to reduce. It could be reframed as ‘Achieve a sustainable healthcare system’.

It is recommended that objective three – Adaptation – be modified to recognise that adaptation strategies to climate change need to be multi-layered. They should include health sector adaptations, community adaptations, and adaptation strategies owned by other sectors (energy, water, food security etc). In line with the systems approach there must be identification of the adaptation requirements beyond the health sector. The purpose of adaptation is to build resilience – we would suggest reconsidering this objective to be one of ‘a resilient health sector’, with adaptation strategies the means to achieve this.

The Sustainable Development Unit applaud the inclusion of objective 4 – Health in All Policies. Although an ageing and often overused concept, the ideas and ethos it highlights aims to safeguard and enhance health. This objective should be the responsibility of everyone, and appropriately recognised in policy. We would, however, perhaps consider that the Strategy could go further by incorporating sustainable development or ‘planetary health’ in all policies, and that there is recognition of valuing health and wellbeing as a measure of prosperity.

Further, we recommend that the Strategy elevates this objective to the first and overarching priority. There must be recognition that the solutions to these health challenges are often adjacent to and influenced by factors broader than health. The strategy should identify that a systems lens must be applied if there is to be true progress.

Q2. How could these principles be improved to better inform the objectives of the Strategy?

An explanation about *how* the principles will be used in the development and implementation of the Strategy would be helpful.

Principle 1: We would encourage consideration of wording of this to ensure the explicit mentioning of Cultural Authority, the centralisation of Elder led process, and the necessity of decolonisation of practice that will enable non-extractive process built on reciprocity, trust, and mutual care and respect.

Principle 2: We encourage a strength-based approach to the issue of ‘vulnerable groups’ and recognition that it is usually intersecting social and health inequities that create vulnerability and sensitivity in the first instance.

Principle 4: It is suggested that concept of ‘one health’ is expanded to ‘planetary health’. Planetary health is the achievement of the highest attainable standard of health, well-being, and equity worldwide through judicious attention to the human systems — political, economic, and social. These shape the future of humanity and

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the Earth's natural systems that define the safe environmental limits within which humanity can flourish. This differs from one health as it focuses on more than the prevention of risks and mitigation of crises that originate at the interface between humans, animals, and their various environments.

Three additional principles are also suggested for consideration:

- Health Leadership – the acknowledgement of climate change and planetary health as significant threats to health. There is substantive need for Health Leadership (and urgency of action) as an outcome of the Strategy.
- Justice – the acknowledgement of the rights of future generations to have a safe climate.
- Regeneration – the acknowledgement that sustainability will not be enough, and that we must restore planetary health and right relations to create a healthy future for all.

Q3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

The National Health and Climate Strategy should consider all scope 1, 2 and 3 emissions (both upstream and downstream) generated by health and aged care services. This would align with emissions reduction work being done across various Australian states and territories both in the public and private healthcare sector.

The NHS are considered world leaders in this area and have explicitly mentioned in their *Delivering a 'Net Zero' National Health Service* report that emissions such as patient and visitor transport are to be included in their reporting. In an Australian context, inclusion of all scope 1, 2 and 3 emissions would provide a greater insight into the emissions released by the health and aged care sector and outline areas of high emissions which need to be addressed as a matter of urgency.

We also note that this approach would be consistent with work that the federal Treasury are undertaking that is looking at Scope 3 emission reporting as part of broader climate risk disclosure and reporting initiatives.

We would also strongly encourage the consideration of measurement of environmental impact that is broader than just emissions (see comments previously on Objective 1).

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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?

The SDU would recommend that the following groups are engaged to ensure that respectful and non-extractive relationships are built and maintained with Aboriginal and Torres Strait Islander people:

- Lowitja institute
- National Aboriginal Community Controlled Health Organisations
- Healthy Lives and Environments (HEAL) network

There are also clear links to existing policies and initiatives including:

- National Agreement on Closing the Gap
- Passing the Message Stick
- UN Declaration of the Rights of Indigenous Peoples

It is crucial that Aboriginal and Torres Strait Islander evidence and knowledge is respected and valued, and a strengths-based, community-led approach to co-design undertaken.

It needs to be clearly articulated how the strategy will work to help support and improve the health and wellbeing of Aboriginal and Torres Strait Islander communities.

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?

Governance models should be designed in coordination with Aboriginal and Torres Strait Islander people, groups, and communities.

We note the findings of the Climate Health WA Inquiry, which identified that climate change represents another element of colonisation, and failure to respond perpetuates and exacerbates systemic injustices. As such, there must be a clear and explicit approach that is grounded in culturally safe practice that is led by Aboriginal and Torres Strait Islander people.

It is recommended that transparency and accountability be built into any governance model.

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Q6. 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 Department of Water and Regulation (DWER) developed the Western Australian Climate Policy on behalf of the Western Australian State Government. This report sets out the Governments emission reduction targets across government agencies and the broader economy.

DWER is developing an Emissions Reduction Framework for all state government agencies, including WA Health. This framework will outline emissions reporting requirements and provide agencies with a coordinated approach to measuring and reporting on scope 1 and 2 emissions. Guidance for non-mandatory reporting of Scope 3 emissions will also be included.

Q7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

The SDU advises that the following data and information may be required to support emission reduction efforts:

- Marginal abatement cost curves to assist in identifying and prioritising work to reduce emissions.
- Top-down and bottom-up data to inform robust carbon footprint assessments.
- Consistent guidelines for the measurement of Scope 3 emissions.
- Standardisation measures to allow appropriate comparison across different healthcare settings and jurisdictions. This may include gross floor area, number of full-time equivalent staff, number of patient separations, and length of stay.
- Modelling of health co-benefits associated with emissions reduction efforts including burden of disease.
- Carbon and social accounting mechanisms to calculate the impact of different models of care (e.g.: SUSQI metrics)

Q8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

The proposed focus areas for emissions reduction cover the areas of highest emissions within the health and aged care sector.

It is suggested that this section of the Strategy include a high-level rationale explaining why each of the focus areas has been selected.

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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?

An area that the SDU believe is missing from the built environment and facilities focus area is the maintenance and renovation of existing buildings.

A specific action that the SDU would like to see addressed in this focus area is the electrification of health care facilities.

Additionally, building upon and mandating government schemes such as the NABERS rating for health and aged care facilities would be welcomed to ensure minimum standards of energy and water efficiency across Australia.

We would also encourage inclusion of:

- Tree canopy and green space
- Built form and biophilic design, including place sensitive design
- Discussion around concepts of 'hospital precincts' including links to transport, community, and urban spaces
- Consider how climate resilience can be enhanced through the development of hospitals as anchor institutes
- Transition to renewables and green energy

Q10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

Move to online platforms and encourage active forms of transport through incentives, end-of-trip facilities and during design of new healthcare facilities.

Q11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

Movement towards a national coordinated approach to procurement (similar to the approach in the HNS) is critical to address Scope 3 emissions and presents an opportunity to engage with suppliers and change industry behaviour.

Actions could include:

- development of common standards for assessing sustainability credentials of suppliers and products (similar to Evergreen NHS)
- support innovation and research with suppliers to develop more sustainable products
- invest in local suppliers where possible to strengthen supply chain security against global climate disruptions

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- develop required expertise (e.g. life cycle assessment, carbon literacy) to inform procurement policies and decisions
- establish national information networks to find solutions to common problems
- work with the TGA to understand supply shortages and receive TGA notification updates

Within this focus area there should also be consideration of factors such as land and water use, resource use, pollution, human rights, modern slavery, gender equity, and exploitation in these policies.

Q12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

The SDU recommends consideration of the below:

- Work with the TGA to review packaging and information requirements for medicines to reduce waste and carbon emissions
- Establish national datasets on anaesthetic gas use to support benchmarking across peer sites
- Consider targets for cessation of desflurane
- Develop a national approach to auditing hospitals for detection of piped nitrous oxide leaks
- Support Choosing Wisely prescribing practices
- Funding models that acknowledge the value of lifestyle interventions over pharmacological approaches

Q13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

- Inclusion of circular economy principles in purchasing and procurement decisions.
- Increase knowledge of market opportunities for recovered waste products.
- Opportunities to align with and provide input to the federal government scheme to track recyclable waste material through the life cycle (Recycling Passport)

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?

- Advocate for funding models that prioritise prevention, health promotion, strong primary care and decrease low-value care

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- Support for green and social prescribing

Q15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

As outlined in the Consultation Paper many of the private healthcare providers have committed to emissions reduction targets and have been taking steps to reduce their emissions. Engagement and knowledge sharing between private and public organisations has the potential to fast track the progress being made to achieve state and federal government targets. Further, as an important part of the health system, they should be measured and held to the same standards as public facilities. This could be mediated in the inclusion of mitigation and adaptation as part of health facility accreditation processes.

Q16. 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?

Given that health is a shared responsibility between State and Federal governments, there may be benefit in the national Strategy prioritising actions where the Federal government has most direct control (primary care, funding models, pharmaceuticals) or where it can leverage combined purchasing power of all jurisdictions to maximum effect (procurement and supply chains).

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

We urge immediate action to reduce emissions wherever possible. The overall strategic approach should be informed by evidence, including marginal abatement cost curves, to determine which actions will elicit most value.

Q17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

The SDU believe that the following 'quick wins' should be prioritised for delivery within the next twelve months:

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- Establish a clear governance mechanism to provide accountability on delivery of the Strategy objectives and targets.
- Commence development of ESG criteria for procurement and supply chains.
- Develop a robust plan to strengthen primary healthcare's role in reducing emissions and adaptation.
- National platform or forum for jurisdictions to progress collaborative actions, share learnings etc.
- Key working groups to address:
    - funding models for the PBS, Medicare and healthcare
    - volatile anaesthetic gasses including desflurane and nitrous oxide
    - pressurised metered dose inhalers
    - Increased capacity and centralisation of the GP and community health in care delivery
    - Aboriginal and Torres Strait Islander co-design of programs and initiatives

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?

- Health system resilience including critical infrastructure (ongoing medical care can be disrupted before, during, and after a natural disaster or extreme weather event, affecting health outcomes and quality of life), supply chain disruption and health workforce
- Community resilience including education and communication strategies to strengthen public awareness of links between climate change health
- Indirect health impacts from climate change are often underestimated, for example food/water security (local food production and supply chains may be disrupted by climate change impacts such as heat, drought, flood, fire, or pests. This can impact quality, availability and cost)
- Acute and chronic mental health impacts related to climate change

A standard risk matrix could be used to prioritise adaption action addressing the health impacts, risks and vulnerability. This matrix will need to take into account the adaptive capacity of various population so that vulnerable populations are properly considered. Efforts to increase adaptive capacity (including economic equity) is a huge boost to reduce vulnerability. Low-income earners are more at risk to the health effects of climate change because they have less resources and capacity to cope with the various threats that climate change poses to their health. They may have less ability to prepare for, evacuate from, or recover from extreme weather events due to lack of transportation, insurance, savings, or social support.

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A clear definition on vulnerability within the Strategy is needed to ensure that it can be appropriately addressed.

Q19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:

Yes.

a) What are the key considerations in developing a methodology?

Internationally there are a set of key agreement and standards that the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan adhere to:

- International health regulations (public health events and emergencies)
- Conventions on the rights of people with disabilities (often impacted first and most)
- Paris agreement (adapt to the adverse impacts of climate change and foster climate resilience)
- Sendai Framework (dealing with the impact of emergencies caused by extreme weather events)
- Convention on the rights of the child (minimise the CC impact to children, many impacts during childhood lead to a lifetime of reduced health quality)
- International Covenant on Economic, Social and Cultural Rights (right to an adequate standard of living)

Alignment or integration with planned national climate risk assessments would avoid duplication of effort.

Other considerations should be the ease, practicality and replicability of assessment methods. Consistent assessments allow for comparison between jurisdictions, but it should not be too restrictive and prevent adoption of new tools as they are developed and refined.

Additionally, the Strategy should consider the feasibility and impact of proposed actions that may be taken to adapt to climate change. Changes in infrastructure may be necessary to support these actions, which would require intra-governmental partnerships. It is also advised that the methodology notes the potential fallout of inaction on climate change and what this would mean for Australia.

b) How should their development draw on work already undertaken, for example at the state and territory level, or internationally?

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c) What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

- sharing of learnings, tools, and resources
- economic efficiency (e.g. purchasing power of medical supplies if all Australian jurisdictions are looking for better supplies)
- standardised methods and reporting
- clear delineation of roles and responsibilities
- funding mechanisms and inter-governmental partnerships

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?

Yes, a national response would reduce unnecessary duplication of work being done across the various health organisations and jurisdictions. Many states and territories have been leading efforts to explore climate risks and implement or make suggestions on adaptation to the changing climate.

Q21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

Education and capacity building of policy-makers, health workforce, community and emergency services etc.

Measure risk, impact, and vulnerability so that actions can be appropriately prioritised. In doing so there needs to be a focus on the determinants of health, and better understanding of how the community are projected to be impacted.

We would also suggest that appropriate forecasting for extreme weather events 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.

Implement lessons learned from COVID and supply chain disruptions to better prepare for future climate-related disruptions.

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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?

The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions.

As outlined in the Consultation Paper, some groups are at increased risk of adverse health impacts from climate change, with much of this relating to susceptibility, adaptive capacity and vulnerability. A health in all policies approach would assist in reducing the barriers between individuals and improved health outcomes, and build the capability of individuals to protect themselves from the impacts of climate change. This approach also necessitates increased engagement with both private organisations and government departments outside of health. The Strategy should clearly outline how this engagement will occur and what the desired outcomes are.

Some examples of a Health in All Policies approach:

- Ensure Australia's Nationally Determined Contribution includes recognition of climate-health risks and opportunities for health co-benefits from climate action, and that these are reflected in mitigation and adaptation plans.
- Ensure Australia's representation at international climate change forums includes Australian health ministers and health department officials.
- Include consideration of climate change and health in other significant national health plans, such as the Long Term National Health Plan and the National Preventive Health Strategy, and align the Strategy with these plans.
- Economic modelling of the health co-benefits of climate action to justify investment, funding and national programs.

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?

- Ensure a multidisciplinary, sector spanning and cross-agency response
- Prioritise and appropriately remunerate Aboriginal and Torres Strait Islander voices
- Ensure a focus on transformative and translational practice
- Engage in regular and clear communications and allowing for transparency during decision-making processes.
- Include voices of youth, elderly, diverse communities, those with disability, and those with mental and physical health needs

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- Take a long-term perspective with fixed funding and priorities. Changes in political priorities could hinder essential progress, and so this should be avoided or mitigated where possible.
- Take a collaborative decision-making approach

The COVID response demonstrated the capacity for successful collaboration across multiple stakeholders and could provide an example for climate change.

Q24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

Enabler 1:

For E1.1. the SDU would suggest this is expanded to include all health-related education, including nursing, allied health, public health, and biomedical sciences.

Training and upskilling of existing workforce is also critical and could be achieved via short courses, online training modules etc.

Enabler 2:

Research should not be confined to western understandings of science and should be broadened to incorporate Aboriginal and Torres Strait Islander evidence through non-extractive and mutually beneficial partnerships. Additionally, research on the impacts of climate change on health and health care needs to be prioritised. Without adequate funding and resourcing we will fail to translate research into action.

The SDU proposes another area be considered: E2.2. Liaison with international health systems to combine research efforts. The intention of this is to reduce double handling of research topics, improve international relations, and develop a more strategic approach to future research.

Enabler 3:

The inclusion of community engagement here is applauded as this is a vital enabler of the strategies success. There are some minor adjustments that could be made to make this more effective. It may be of benefit to consider the role that the media may play here and how we can work with mass communications organisations to be transparent about the work being done and the anticipated outcomes.

E3.1. notes the importance of public awareness as a method of empowerment; however, it should also include resourcing of these individuals and communities. Considering the ongoing cost of living crisis, recovery from the COVID-19 pandemic, and long-term narrative of climate change, people may feel less empowered with more awareness. This is because awareness doesn't equal action, and people may feel powerless to act in the face of the global threat that is climate change.

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Awareness campaigns must therefore focus on what small groups can accomplish and highlight what is being done across Australia in both public and private sectors to address climate change. There must also be funding, or resources allocated to assist individuals and communities in taking action to reduce emissions and build climate resilience.

Enabler 4:

The SDU proposes that the Strategy consider actions in the following area:

E4.1. Establish an Elder Steering group to guide the National Strategy Development

E4.2. Establish a Community Steering group to guide the development and implementation of the National Strategy

Enabler 5:

It is proposed that the Strategy consider actions in the following area:

E5.3. Provide an adaptive methodology for measuring and reporting on agreed indicators for state and territory health systems.

E5.4. Implement governance mechanisms to ensure that there is accountability with monitoring, evaluating and reporting.

Q25. For each of these enablers:

a) What is currently working well?

No response

b) What actions should the Strategy consider to support delivery?

No response

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Environmental Defenders Office

Submission to the Department of Health and Aged Care on the National Health and Climate Strategy

24 July 2023

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About EDO

EDO is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

Successful environmental outcomes using the law. With over 30 years' experience in environmental law, EDO has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

www.edo.org.au

Submitted to:

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For further information on this submission, please contact:

[redacted]

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Acknowledgement of Country

The EDO recognises and pays respect to the First Nations Peoples of the lands, seas and rivers of Australia. We pay our respects to the First Nations Elders past, present and emerging, and aspire to learn from traditional knowledges and customs that exist from and within First Laws so that together, we can protect our environment and First Nations cultural heritage through both First and Western laws. We recognise that First Nations Countries were never ceded and express our remorse for the injustices and inequities that have been and continue to be endured by the First Nations of Australia and the Torres Strait Islands since the beginning of colonisation.

EDO recognises self-determination as a person's right to freely determine their own political status and freely pursue their economic, social and cultural development. EDO respects all First Nations' right to be self-determined, which extends to recognising the many different First Nations within Australia and the Torres Strait Islands, as well as the multitude of languages, cultures, protocols and First Laws.

First Laws are the laws that existed prior to colonisation and continue to exist today within all First Nations. It refers to the learning and transmission of customs, traditions, kinship and heritage. First Laws are a way of living and interacting with Country that balances human needs and environmental needs to ensure the environment and ecosystems that nurture, support, and sustain human life are also nurtured, supported, and sustained. Country is sacred and spiritual, with culture, First Laws, spirituality, social obligations and kinship all stemming from relationships to and with the Land.

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EXECUTIVE SUMMARY

The Environmental Defenders Office Ltd (**EDO**) welcomes the opportunity to contribute to the Department of Health and Aged Care's (**the Department**) consultation on the National Health and Climate Strategy (**the Strategy**).

The EDO is the largest environmental legal centre in the Australia-Pacific. EDO is dedicated to protecting the climate, communities, and environment by providing access to justice, running litigation, and leading law reform advocacy. As an accredited community legal service and non-government, not-for-profit organisation, EDO uses the law to protect and defend Australia's wildlife, people, and places.

Our work is underpinned by an environmental justice and human rights framework. EDO recognises that the human rights of certain people and communities are disproportionately impacted by environmental harm, including the impacts of climate change. This guides EDO to focus on empowering overburdened people and communities to fight for environmental justice.

EDO endorses the Department's initiative in acknowledging the dangerous health impacts of climate change and in developing the Strategy. These are both important steps that will assist Australia to better combat climate change and its associated negative health implications. In this submission, we make 11 recommendations which, if adopted by the Australian government, will strengthen the Strategy and the government's broader climate adaptation and mitigation policies.

EDO has also had the benefit of reading a submission guide prepared by the Climate and Health Alliance (**CAHA**). In recognition of CAHA's leadership in health and climate research and advocacy, we are supportive of CAHA's position and encourage the Department to implement CAHA's recommendations.

In support of our submission, we **attach** the following documents:

- **Attachment 1** – *A Roadmap for Climate Reform* (EDO report, July 2022);
- **Attachment 2** – *A Healthy Environment is a Human Right* (EDO report, August 2022);
- **Attachment 3** – EDO submission to the Climate Change Authority on setting, tracking and achieving Australia's emissions reduction targets (30 June 2023).

Summary of Recommendations

1. The purpose and application of the Strategy must be expanded to guide activities in all federal portfolios and sectors beyond the health system and health sector.
2. The Australian government should have legal responsibility for investigating, monitoring, and addressing the health impacts of climate change.
3. Adopt EDO's recommendations in our *Roadmap for Climate Reform* (July 2022).

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4. Increase Australia's current emissions reduction target to reduce greenhouse gas emissions by 74% of 2005 levels by 2030 and achieve net zero by 2035. Australia's emissions target must also include exported emissions and goals for the phase out of fossil fuel production.

5. Adopt EDO's recommendations in our submission to the Climate Change Authority on setting, tracking, and achieving Australia's emissions reduction targets.

6. The Strategy's emission reduction efforts must address scope 1, scope 2 and scope 3 emissions in all portfolios and sectors, including exported emissions.

7. Health implications must be considered in all planning and development projects assessed by the federal government and by state and territory authorities.

8. Expand the Strategy's principles to ensure the Strategy is underpinned by a human rights framework.

9. Enshrine the human right to a clean, healthy and sustainable environment (the 'right to a healthy environment') in federal human rights or other legislation.

10. Consult with First Nations Peoples in a culturally appropriate manner that is consistent with Australia's obligations under the *United Nations Declaration on the Rights of Indigenous Peoples*.

11. In relation to the health system, we recommend that:

    a. the Strategy addresses scope 1, scope 2 and scope 3 emissions from travel and transport sources in the health system;

    b. the Department ensures that all new vehicles within the health system are zero-emissions by 2035;

    c. the Department takes steps to monitor and mitigate against the exposure of the public to pollution and associated health impacts caused by travel and transport sources in the health system.

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OVERARCHING COMMENTS

Purpose and application of the Strategy

As noted in the Department's Consultation Paper, Australia is highly vulnerable to the effects of climate change including from temperature extremes, extreme precipitation and humidity, droughts, sea level rise, and increased risks of extreme events including bushfires and floods, all of which result in adverse impacts on human health.

The Consultation Paper states that the purpose of the Strategy is to protect the health and wellbeing of Australians from the impacts of climate change. However, from our interpretation of the Consultation Paper, it appears that the Strategy (as currently drafted) is focused primarily on the health system and health sector.

EDO endorses the Department's initiative in acknowledging the dangerous health impacts of climate change and in developing the Strategy, which are both important steps that will assist Australia to better combat climate change and its associated negative health implications. However, the purpose and application of the Strategy must be expanded to guide activities in all portfolios and sectors to achieve better climate and health outcomes.

We recognise that the Department has administrative responsibility for the health and aged care sectors, which may explain why the Strategy focuses primarily on the health sector. However, in EDO's view, people living in Australia who already and will increasingly experience impacts on their health from climate change are the responsibility of the Department, along with its state and territory counterparts. As climate change worsens, Australians' health care needs will only increase, resulting in a greater burden on Australia's healthcare system, including increased hospitalisations. The Department must therefore ensure that the Strategy includes measurement, mitigation, and adaptation measures for all portfolios and sectors that are contributing to climate change and its related health impacts.

For these reasons, **EDO recommends that the Strategy is expanded to have broader application to federal portfolios and sectors beyond the health sector**.

Recommendation 1: The purpose and application of the Strategy must be expanded to guide activities in all federal portfolios and sectors beyond the health system and health sector.

The role of the federal government

Following the 2019-20 Black Summer bushfires, the Royal Commission into National Natural Disaster Arrangements confirmed the need for the Australian government to have a greater role in natural disaster management, and that Australia needs a national approach to natural disasters that involves 'whole-of-nation', 'whole-of-government' and 'whole-of-society' cooperation and

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effort.[1] Similarly, EDO considers that the Australian government must take a leadership role in Australia's efforts to combat the health risks of climate change.

The Australian government must play a proactive role in relation to the health impacts of climate change. It should not be left up to climate activists to identify and draw public attention to the unacceptable impacts of climate change; this should be the role of the Australian government.

EDO recommends that the Australian government should have legal responsibility for investigating, monitoring, and addressing the health impacts of climate change. This could include a responsibility for issuing the public with health warnings or notifying the public of health risks.

We understand that the Department of Climate Change, Energy, the Environment and Water will be responsible for the delivery of a National Climate Risk Assessment and National Adaptation Plan over 2023-24, which will consider a range of climate-linked health impacts at the national level. We are supportive of this initiative.

In response to Question 19 of the Consultation Paper, we are also supportive of the Department's proposal to develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan. In response to Question 20, we agree there would be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system.

Recommendation 2: The Australian government should have legal responsibility for investigating, monitoring, and addressing the health impacts of climate change.

Other climate reforms

We further recommend that the Australian government adopt EDO's recommendations in our 2022 report *A Roadmap for Climate Reform*.

Recommendation 3: Adopt EDO's recommendations in our *Roadmap for Climate Reform* (July 2022).

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[1] *Royal Commission into National Natural Disaster Arrangements: Final Report* at [15], p 21; [37], p 23.

OBJECTIVES OF THE STRATEGY

Question 1 of the Department's Consultation Paper asks how the four objectives of the Strategy (ie, Measurement, Mitigation, Adaptation, and Health in all policies) could be improved to better support the vision of the Strategy.

EDO is supportive of the four objectives, in particular the adaptation and the Health in All Policies objectives. While EDO is supportive of the measurement and mitigation objectives, for the reasons explained earlier in this submission, the Strategy - including its objectives - ought to be expanded to have broader application beyond the health sector (**Recommendation #1**). The measurement and mitigation objectives should be amended to include measurement and reporting on greenhouse gas emissions from all portfolios and sectors, and acceleration of the reduction of greenhouse gas emissions in all portfolios and sectors. Below we have set out our additional recommendations on the objectives of the Strategy.

Australia's emissions reduction target

CAHA has recommended that the Strategy should articulate specific emissions reduction targets, including an updated Nationally Determined Contribution that aims to reduce national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. EDO is supportive of this recommendation.

At present, the Department's Consultation Paper refers to and relies on Australia's current emissions reduction target, which is to reduce greenhouse gas emissions by 43% below 2005 levels by 2030 and achieve net zero emissions by 2050. These targets remain vastly inadequate to contribute to international efforts to limit global temperature rise to 1.5°C as agreed under the Paris Agreement. The current targets are not in line with the rapid and genuine emissions cuts needed to meet the Paris Agreements goals, do not reflect Australia's fair share of the global emissions reduction task, and should be updated to reflect the urgency of the climate crisis.

Global warming will continue to increase in the near term in nearly all considered scenarios and modelled pathways considered in the recent IPCC Assessment Report.[2] Deep, rapid, and sustained greenhouse gas emissions reductions, reaching net zero CO_2 emissions, and including strong emissions reductions of other greenhouse gas emissions are all necessary to limit warming to 1.5°C or less than 2°C by the end of century. These emissions reductions would also lead to improvements in air quality within a few years, to reductions in trends of global surface temperature discernible after around 20 years, and over longer time periods for many other climate impact-drivers. This has clear implications for the health and wellbeing of Australians.

However, we are not on track to realise the 2030 target,[3] let alone the much greater reductions required to stay within the Paris Agreement temperature goals. This means a steeper decline rate

[2] Hoesung Lee et al., 'Synthesis Report of the IPCC Sixth Assessment Report (AR6)' (2023) IPCC, Figure 3.5, 56, https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_LongerReport.pdf.
[3] Department of Climate Change, Energy, the Environment and Water, *Australia's emissions projections 2022* https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2022.pdf.

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and lower emissions target will be required by 2035, including short-lived emissions that are so detrimental to short-term exacerbation of climate change triggers. Further, emissions targets must also account for reporting failures and inaccuracies in our emissions contribution.[4] New targets should be set conservatively and should be based on the precautionary principle to ensure greater catch-up will not be needed as monitoring and accounting improves.

An equitable emissions target must also take into account Australia's fair share of the remaining carbon budget, acknowledging we have historically benefitted from the use of fossil fuels and continue to do so, including through our enormous fossil fuel exports. Australia also has the capability and capacity to mitigate, adapt, and respond to climate change. The current 2030 target, which is consistent with 2°C of warming, therefore not only spells disaster for our neighbours in the Pacific, but also abrogates Australia's responsibility as a global citizen. **EDO therefore recommends Australia adopt a target to reduce greenhouse gas emissions by 74% of 2005 levels by 2030 and achieve net zero by 2035.**

A non-ambitious target that does not effectively combat climate change will only increase the risk of Australians experiencing adverse health effects from climate change. It is therefore critical for the Australian government to accept our recommendation to increase its current emissions reduction target.

In addition, the Paris Agreement does not preclude nations from submitting targets and commitments beyond each country's domestic emissions. Given Australia's significant contribution to the climate crisis through our production and export of fossil fuels, and the health implications of climate change for Australia no matter where emissions are produced**, EDO recommends that Australia's emissions target must include exported emissions and goals for the phase out of fossil fuel production** (discussed further below).

We also encourage the Department to consider our broader recommendations on setting, tracking, and achieving Australia's emissions reduction targets in our recent submission to the Climate Change Authority (**Attachment 3**).

Recommendation 4: Increase Australia's current emissions reduction target to reduce greenhouse gas emissions by 74% of 2005 levels by 2030 and achieve net zero by 2035. Australia's emissions target must also include exported emissions and goals for the phase out of fossil fuel production.

Recommendation 5: Adopt EDO's recommendations in our submission to the Climate Change Authority on setting, tracking, and achieving Australia's emissions reduction targets.

[4] The Guardian, 'Methane from Australian coal and gas could be 60% higher than estimated' (24 February 2023) available at https://www.theguardian.com/environment/2023/feb/23/methane-from-australian-coal-and-gas-could-be-60-higher-than-estimated.

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Greenhouse gas emissions

The Department's Consultation Paper asks which of the various types of greenhouse gas emissions discussed in the Paper (scope 1, scope 2, and scope 3) should be in scope of the Strategy's emission reduction efforts (Question 3).

As noted in the Consultation Paper, Australia's emission reduction targets cover all scope 1, 2 and 3 emissions occurring within Australia, but do not include emissions occurring in other countries' jurisdictions. The Consultation Paper states that this approach reflects the Paris Agreement requirement that each member country estimate and report emissions occurring within its jurisdiction, in accordance with agreed rules and guidelines. However, as noted above, the Paris Agreement does not preclude nations from submitting targets and commitments beyond each country's domestic emissions.

Like CAHA, EDO unequivocally supports including scope 1, 2 and 3 emissions, as the health and aged care system must do its part and be as ambitious as possible in mitigating its emissions, without compromising quality patient care. However, as explained earlier in this submission, the Strategy ought to be expanded to have broader application beyond the health sector, and we recommend that the Strategy include emission reduction efforts to address emissions from all portfolios and sectors (**Recommendation #1**).

EDO recommends that the Strategy's emission reduction efforts address scope 1, scope 2 and scope 3 emissions from all portfolios and sectors, including exported emissions.

Exported emissions are emissions that are generated from the activities of overseas facilities from sources that originated in Australia and include all the emissions resulting from exported fossil fuel products combusted outside Australian borders.

According to 2018 findings by the Australia Institute, Australia was the world's largest exporter of coal and liquid natural gas by volume and was the third biggest fossil fuel exporter globally by CO2 potential, coming behind only Russia and Saudi Arabia.[5] A 2019 report by Climate Analytics for the Australian Conservation Foundation found that Australia's exported fossil fuel emissions represented around 3.6% of global emissions,[6] and that if current government and industry projections for fossil fuel exports are realised, Australia could be responsible (including both domestic and exported emissions) for about 13% (between 11.9% and 17.4%) of Paris Agreement compatible global CO2 emissions in 2030, with the largest growth coming from coal exports.[7]

However, there is currently no law or policy in Australia that requires constraining the production of fossil fuels or accounting for the emissions from their export. As a result, the contribution of Australia's exported emissions towards global CO2 emissions remains unaddressed. Australia's

[5] Tom Swann, *High Carbon from a Land Down Under: Quantifying CO2 from Australia's fossil fuel mining and exports* (Report, The Australia Institute, July 2019) pp 1-2, 20-23.
[6] Climate Analytics, *Evaluating the Significance of Australia's global fossil fuel carbon footprint* (Report, July 2019) pp 2, 16-17.
[7] Ibid, pp 2, 22.

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current and future planned expansion in the exploitation of fossil fuel resources goes against global efforts to combat climate change.[8]

In relation to the health system, scope 3 emissions include all emissions that arise as a consequence of the Australian health system including healthcare products manufactured overseas. EDO understands from CAHA that a high proportion of healthcare products are imported. If so, the health system must be responsible for their associated emissions.

For these reasons, we recommend that the Strategy's emission reduction efforts should also address exported emissions. There is also a critical need for the Australian government's broader climate adaptation and mitigation policies to begin accounting for, and addressing, Australia's exported emissions.

Recommendation 6: The Strategy's emission reduction efforts must address scope 1, scope 2 and scope 3 emissions from all portfolios and sectors, including exported emissions.

Health in All Policies

The Consultation Paper suggests taking a Health in All Policies approach, whereby sectors outside of the health sector are required to routinely consider and account for the health impacts of their policies, plans and implementation. EDO strongly supports and recommends the Health in All Policies approach.

In response to Question 22 of the Consultation Paper, **EDO recommends that health implications must be considered in all planning and development projects assessed by the federal government and by state and territory authorities.** This includes projects that are referred to federal government decision-makers under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth), and to state and territory authorities under their planning and environment legislation. It is particularly critical for government to consider health impacts when assessing projects that will contribute to greenhouse gas emissions, such as fossil fuel projects. Governments must also consider health implications when developing planning policies, noting that poor planning outcomes – such as heat islands in metropolitan areas – can worsen health impacts.

Recommendation 7: Health implications must be considered in all planning and development projects assessed by the federal government and by state and territory authorities.

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[8] Ibid, 5.

PRINCIPLES UNDERPINNING THE STRATEGY

Question 2 of the Department's Consultation Paper asks how the six principles informing the Strategy could be improved to better inform the objectives of the Strategy.

Human rights

As the Department recognises in the Consultation Paper, climate change is associated with many adverse implications for both human health and the health of our environment. It has been increasingly recognised that human health and the health of our environment are dependent on one another and are indivisible. As humans, we are part of the natural environment. It is essential to have a healthy environment for humans to thrive.

Viewing the health of humans and our environment in this way, it is clear that climate change has a direct impact on human rights. It is therefore essential for the Strategy to include measures for acknowledging, considering and addressing the human rights implications of climate-related health impacts. **EDO recommends that the principles are expanded to ensure the Strategy is underpinned by a human rights framework.**

Human rights that are directly impacted by climate change include, but are not limited to:

- the right to life enshrined in Article 6 of the *International Covenant on Civil and Political Rights* (**ICCPR**);
- the right to privacy and home (Article 17 of the ICCPR);
- the right to culture (Article 27 of the ICCPR);
- the right to an adequate standard of living enshrined in Article 11 of the *International Covenant on Economic, Social and Cultural Rights* (**ICESCR**);
- the right to health (Article 12 of the ICESCR);
- the right of children to special protection, opportunities and facilities under Principle 2 of the Declaration of the Rights of the Child; and
- the human right to a clean, healthy and sustainable environment, explained in further detail below.

Recommendation 8: Expand the principles to ensure the Strategy is underpinned by a human rights framework.

The right to a healthy environment

As noted above, we recommend that the principles are expanded to ensure the Strategy is underpinned by a human rights framework. One of the most important human rights in the context of climate change is the human right to a clean, healthy and sustainable environment.

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In a landmark resolution on 28 July 2022, the UN General Assembly reaffirmed recognition of the human right to a clean, healthy and sustainable environment,[9] after this right was explicitly recognised by the UN Human Rights Council in October 2021.[10] The resolution passed with an overwhelming majority, with Australia voting in favour along with another 160 UN Member States.

The result is that the human right to a clean, healthy and sustainable environment (the 'right to a healthy environment') is now universally recognised as a human right that is important for the enjoyment of other human rights.

As Australia voted in favour of the UNGA resolution, Australia has a responsibility to implement its commitment to the international community by enacting federal legislation that enshrines the right to a healthy environment in law.

The right to a healthy environment recognises that the health of the environment is indivisible from human health and wellbeing. Our 2022 report *A Healthy Environment is a Human Right* (**Attachment 2**) describes the importance of the right to a healthy environment and calls on all levels of Australian government to enshrine the right to a healthy environment in Australian law. As explained in our report (p 10), the Special Rapporteur on human rights and the environment has recognised that access to a safe climate is one of the essential elements of the right to a healthy environment.[11] Other components of the right to a healthy environment include the right to clean air,[12] access to safe drinking water and sanitation,[13] healthy biodiversity and ecosystems,[14] toxic free environments in which to live, work and play,[15] and healthy and sustainably produced food,[16] all of which may be adversely impacted by climate change. Our report also explores the impacts of environmental harm, including from climate change, on Australians' health and wellbeing (p 25).

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[9] UN General Assembly, *The human right to a clean, healthy and sustainable environment*, UN Doc. A/RES/76/300 (28 July 2022).
[10] UN HRC, *The Human Right to a Clean, Healthy and Sustainable Environment*, GA Res 48/13, UN Doc. A/HRC/48/13 (18 October 2021).
[11] David R Boyd, Special Rapporteur on Human Rights and the Environment, *Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/74/161 (15 July 2019).
[12] David R Boyd, Special Rapporteur on Human Rights and the Environment, *Issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/HRC/40/55 (8 January 2019).
[13] David R Boyd, Special Rapporteur on Human Rights and the Environment, *Human rights and the global water crisis: water pollution, water scarcity and water-related disasters*, UN Doc A/HRC/46/28 (19 January 2021).
[14] David R Boyd, Special Rapporteur on Human Rights and the Environment, *Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/75/161 (15 July 2020).
[15] David R Boyd, Special Rapporteur on Human Rights and the Environment, *The right to a clean, healthy and sustainable environment: non-toxic environment,* UN Doc A/HRC/49/53 (12 January 2022).
[16] David R Boyd, Special Rapporteur on Human Rights and the Environment, *Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/76/179 (19 July 2021).

If the Australian government is serious about protecting Australians' health from the impacts of climate change, it must accept our recommendation to enshrine the right to a healthy environment in federal legislation. As explained in *A Healthy Environment is a Human Right*, we recommend that the clearest way to achieve this would be to enact a federal Charter or Act of Human Rights and Freedoms that enshrines the right to a healthy environment in law (p 43). Alternatively, the government could legislate a duty for decision-makers to consider, and act consistently with, the right when exercising powers under federal legislation (p 45).

Recommendation 9: Enshrine the human right to a clean, healthy and sustainable environment (the 'right to a healthy environment') in federal human rights or other legislation.

Principles of intra- and inter-generational equity and justice

EDO endorses CAHA's recommendation for the principles to be expanded to include the principles of intra- and inter-generational equity and justice.

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FIRST NATIONS

We understand that the Department intends to work in partnership with First Nations Peoples to develop and implement the Strategy.

Consultation with First Nations

The Department's Consultation Paper asks what existing First Nations policies, initiatives, expertise, knowledge and practices the Strategy should align with or draw upon to address climate change and protect First Nations Country, culture and wellbeing (Question 4), and 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 (Question 5).

We recommend that the Department ensures it consults with First Nations Peoples in a culturally appropriate manner that is consistent with Australia's obligations under the *United Nations Declaration on the Rights of Indigenous Peoples* (**UNDRIP**) including the right to participate in decision-making in matters which would affect their rights (Article 18) and the right to free, prior and informed consent (Article 19).

Consultation with First Nations Peoples must occur as early as possible and at all stages of development of the Strategy. Consultation should also be specifically designed alongside First Nations Peoples to ensure that the consultation process is accessible and culturally appropriate. In some circumstances, it may be appropriate for consultation to take place in person on Country, allowing First Nations to provide their views to the Department as First Nations peoples see fit, which may include orally. In addition, consultation takes up time and resources, which may already be limited. Some First Nations Peoples may experience consultation fatigue from being frequently consulted to provide input on a variety of government programs and policies. We encourage the Department to ensure that the First Nations people and organisations it consults with are appropriately remunerated for their work or receive adequate funding to provide these services.

In response to Question 5, we recommend that the Department consults with First Nations Peoples about the types of governance forums that may be appropriate.

In making this recommendation, it is important to note that the EDO is not a First Nations organisation and therefore cannot speak on behalf of First Nations Peoples. Further, due to capacity and funding constraints, we have not consulted with any external First Nations Peoples in relation to our recommendations. We instead make this recommendation based on our interpretation of human rights law and international best practice.

Recommendation 10: Consult with First Nations Peoples in a culturally appropriate manner that is consistent with Australia's obligations under the *United Nations Declaration on the Rights of Indigenous Peoples*.

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MITIGATION

EDO supports the mitigation measures proposed in the Strategy. However, for the reasons explained earlier in this submission, the Strategy ought to be expanded to have broader application beyond the health sector (**Recommendation #1**). This would include expanding the Strategy to include measures to mitigate greenhouse gas emissions in all portfolios and sectors, and not just the health sector. We have set out our further recommendations on travel and transport below.

Travel and transport

As recognised in the Consultation Paper, air pollution from travel and transport is harmful to human health. EDO is strongly supportive of including mitigation measures for emissions from travel and transport in the Strategy.

EDO has long advocated for reforms to address emissions from the transport sector, and that transport planning should be better linked to strategic planning and emissions reduction targets.[17] Given transport emissions account for 19% of Australia's emissions and the sector is projected to be the largest source of emissions by 2030,[18] it is crucial for Australia to implement measures to reduce transport emissions. Although the Australian government is currently preparing a fuel efficiency standard, Australia's historical reticence in introducing a fuel efficiency standard means that we have fallen behind comparable countries in attracting low- and no-emissions vehicles.

For Australia to meet its own domestic emissions target of net zero by 2050 and to keep global warming below 1.5°C in line with our Paris Agreement obligations, Australia must be on a trajectory for all new vehicles sold by 2035 to be zero emissions.[19]

There are also public health benefits to decarbonising the transport sector. Pollutants from internal combustion engine vehicles – especially fine airborne particulate matter (PM2.5) and nitrogen dioxide (NO_2) – are estimated by recent research undertaken at the University of Melbourne to be responsible for more than 11,000 deaths annually in Australia.[20] This is significantly more deaths than Australia's annual national road toll, which in 2022 stood at 1,194

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[17] Environmental Defenders Office, A *Roadmap for Climate Reform* (2021) (**Attachment 1**); see also Environmental Defenders Office, *Submission on Better Fuel for Cleaner Air; Improving light vehicle efficiency; and Improving noxious emissions standards for light and heavy vehicles*, Submission to the Vehicle Emissions Working Group (10 March 2017) available at https://www.edo.org.au/wp-content/uploads/2019/12/Vehicle_and_fuel_standards_EDOs_of_Australia_submission_Mar2017.pdf.

[18] Australian Government, Department of Industry, Science, Energy and Resources, *Australia's Emissions Projections 2021* (Commonwealth of Australia, Canberra 2021) 1, 21 available at https://www.dcceew.gov.au/sites/default/files/documents/australias_emissions_projections_2021_0.pdf.

[19] Ketan Joshi, 'IEA says all new cars must be electric by 2035. Will Australia do it?', *The Driven* (19 May 2021), available at https://thedriven.io/2021/05/19/iea-says-all-new-cars-must-be-electric-by-2035-to-meet-climate-goals/; International Energy Agency, *Net Zero by 2050 Roadmap* (2022), available at https://www.iea.org/reports/by-2030-evs-represent-more-than-60-of-vehicles-sold-globally-and-require-an-adequate-surge-in-chargers-installed-in-buildings.

[20] Clare Walter and Kevin Say, The University of Melbourne, Melbourne Climate Futures, 'Health Impacts Associated with Traffic Emissions in Australia' (Expert Position Statement, February 2023) 1.

road-crash deaths.[21] A further 85,000 Australians are estimated to be burdened with severe health conditions. This number includes hospitalisations for cardiovascular and respiratory emergencies, and the prevalence of asthma.[22] While these health burdens are increasingly known to health professionals and researchers, Australia lacks a cohesive plan to reduce public exposure to transport pollution.

In relation to the health sector, Question 10 of the Consultation Paper asks for input on two initiatives to reduce emissions from travel and transport in the health system: increasing the adoption of electric and zero-emission vehicles within the health system in line with the Australian Government's National Electric Vehicle Strategy and increasing the utilisation of low-carbon fuels within the health system where continued use of liquid fuels is unavoidable.

While EDO is supportive of both initiatives, for the reasons explained earlier in this submission, we have recommended that the Strategy is expanded to have broader application beyond the health system (**Recommendation #1**). This would include expanding the Strategy to include measures to mitigate emissions from Australia's broader travel and transport systems at all levels of government and in all portfolios and sectors.

In relation to the health system and health sector specifically, **we recommend that the Strategy addresses scope 1, scope 2 and scope 3 emissions from travel and transport sources in the health system.**

We support the Consultation Paper's proposal to increase the adoption of electric and zero-emission vehicles within the health system. However, **we recommend that the Department ensures that all new vehicles within the health system are zero-emissions by 2035.**

We further recommend that the Department takes steps to monitor and mitigate against the exposure of the public to pollution and associated health impacts caused by travel and transport sources in the health system. These steps should encompass increased transport pollution monitoring by the Australian government as well as state and territory governments, and developing health warnings and exposure limitation policies that treat exposure to transport pollution in the same way as other significant health issues like tobacco smoking or skin cancer.

Recommendation 11: In relation to the health system, we recommend that:

a. the Strategy addresses scope 1, scope 2 and scope 3 emissions from travel and transport sources in the health system;
b. the Department ensures that all new vehicles within the health system are zero-emissions by 2035;

[21] Australian Bureau of Infrastructure and Transport Research Economics, *Road Trauma Australia 2022: Statistical Summary* (Report, 2023) iii.
[22] Clare Walter and Kevin Say, The University of Melbourne, Melbourne Climate Futures, 'Health Impacts Associated with Traffic Emissions in Australia' (Expert Position Statement, February 2023) 4.

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c. the Department takes steps to monitor and mitigate against the exposure of the public to pollution and associated health impacts caused by travel and transport sources in the health system.

Thank you for the opportunity to make this submission.
Please do not hesitate to contact our office should you have further enquiries.

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Food for Health Alliance

National Health and Climate Strategy

Consultation

Policy Submission
July 2023

"Climate is the greatest global health threat facing the world in the 21st century, but it is also the greatest opportunity to redefine the social and environmental determinants of health."

The 2022 Report of the *Lancet* Countdown on health and climate change: health at the mercy of fossil fuels

Food for Health Alliance

Executive Summary

Food for Health Alliance welcomes the opportunity to participate in the Australian Government's National Health and Climate Strategy. Challenges posed to human health by climate change are significant and accelerating. Action on climate and health is hugely beneficial for social, environmental, cultural, and economic outcomes but these benefits can only be achieved with urgent and decisive action, and the funding to execute it.

This consultation is a once in a generation opportunity to meaningfully prepare to meet the health needs of all people in Australia in the face of the climate crisis. To ensure the Strategy meets the needs of the community, it is crucial that it takes a 'Health in All Policies', whole of government approach with tangible mechanisms for implementation including targets and funding. All aspects of climate change are interlinked with human health and reducing the health risks from climate change requires working across all sectors and levels of government. The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions.

Contact us

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Acknowledgement of Country

Food for Health Alliance would like to acknowledge the traditional custodians of the land on which we live and work. We would also like to pay respect to the elders past and present and extend that respect to all other Aboriginal people.

About us

Food for Health Alliance is a partnership between Cancer Council Victoria, VicHealth, and the Global Centre for Preventive Health and Nutrition at Deakin University; a World Health Organization (WHO) Collaborating Centre for Obesity Prevention.

Food for Health Alliance is a leading policy and advocacy voice working to improve diets and prevent overweight and obesity in Australia. We advocate to governments across Australia for changes to laws and policies to improve our food environment.

Cancer Council Victoria

VicHealth

DEAKIN UNIVERSITY

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General comments

Strategy structure

The protection of population health and wellbeing should be the primary focus of the Strategy

The Strategy should clearly articulate what it means by 'health'. Health should be defined in the holistic sense, as "*... a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity*"[i]. The Consultation Paper does not show an understanding of the broader definition of health, and therefore an understanding of the strategies required to protect and promote population health in a climate-changed world. This should be the primary focus of the Strategy.

All dimensions of climate change are interlinked with human health. To reduce the health risks from climate change requires working across all sectors and all levels of government. As currently drafted the Strategy is focused primarily on the health system and health sector, rather than influencing and guiding activities in all portfolios and sectors to achieve better climate and health outcomes. Without expansion beyond the health system, the Strategy cannot fulfil its stated purpose of "*protecting the health and wellbeing of Australians from the impacts of climate change*".

The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health and food insecurity from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through the implementation of a Health in All Policies[ii] initiative and a broader focus on the wider determinants of health: commercial, social, cultural, economic, and environmental. It is clear that health outcomes are largely determined by factors outside of the health system. Policies that achieve better health and wellbeing outcomes while reducing greenhouse gas emissions are win-win options and should be at the heart of the Strategy.

Further consultation

Given the above recommendation for a refocusing of the Strategy, we strongly recommend that a second round of consultation is undertaken once the Strategy has been reframed to put the protection of population health and wellbeing as the primary focus of the Strategy.

Targets, timeframes & monitoring

Set targets and timeframes for actions and implementation

An Implementation Plan that accompanies the Strategy should set clear targets and timelines for the achievement of goals and targets in the short, medium, and long-term.

Establish targets and measures for climate-related injury and disease prevention

It is recommended that targets are set for disease and injury prevention and population health metrics in line with other national strategies, including the National Preventative Health Strategy.

Expand Adaptation beyond the health system

At present, the Consultation Paper refers largely to adaptation in the health system. There are two components to adaptation, which are related to how the healthcare system adapts, and how the community adapts to the health impacts of climate change. The latter will entail considering how the Strategy will support communities to prepare for, and respond to climate related harm to health and build resilience and capacity for the future.

Expand the Principles

Include the human right to health as a principle of the Strategy

Health is a fundamental human right that is being undermined by climate change.[iii,iv] As a signatory to the Paris Agreement[v], the Australian Government has committed to ensuring a healthy, just, and safe climate for the benefit of current and future generations of all people living in Australia.

Responses to survey questions

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

FHA strongly supports a Health in All Policies approach and the recognition of the importance of health systems resilience in the Strategy's objectives.

We recommend that an additional objective of *Promoting and protecting health and wellbeing* is included in the Strategy. This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at national, state and territory and local government level. It is imperative that a key objective is the promoting and protecting health and wellbeing.

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

FHA supports the six principles outlined and strongly supports that the objectives are informed by the principles of tackling health inequities and population health and prevention.

We recommended that the principles of the Strategy are primarily underpinned by the fundamental human right to health.

Principle 2, *Tacking health inequities,* should be strengthened to include inter- and intragenerational healthy inequity in climate impacts. For example, young people are more impacted by the climate crisis and therefore need a specific focus in policy development and implementation. We also recommend that the language is change from 'supporting action' to 'taking action'.

While the inclusion of Principle 4, *One Health*, is welcomed, it is crucial that the Strategy take a broad approach to the impacts of global environmental change on human health. We recommended that the Strategy adopt a Planetary Health[vi] approach, which more fully captures the intersection of broader environmental impacts on human health outcomes in the context of planetary boundaries and sustainable development.

Principle 6, *Partnership,* should be expanded to include collaboration with consumers. If the principle of Partnership is to be realised, the Strategy will need to establish governance mechanisms, programs and initiatives that enable and facilitate partnership across all relevant stakeholders.

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

No response.

Question 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?

FHA strongly supports for the inclusion of:

- the impacts of climate change on First Nations peoples' health and wellbeing;
- the strengths-based approach of First Nations cultural knowledge; and
- the coordination of goals and targets of the Strategy with other policy that impacts First Nations health and wellbeing.

The Strategy should clearly outline how genuine engagement with First Nations leaders, Elders and communities will occur, how leadership will be fostered, and how the health and wellbeing of First Nations peoples will be advanced through the Strategy. The Strategy should seek to integrate objectives and actions being developed through the Measuring What Matters Framework community consultation processes and the objectives.

Closing the Gap is a crucial mechanism through which First Nations health and wellbeing is being addressed. The Strategy should outline how it will support the work of Closing the Gap, and how those priorities are being centred in the Strategy.

Question 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?

FHA supports the co-design of governance structure for the Strategy with First Nations peoples.

The Strategy will only be effective for First Nations peoples if it is underpinned by genuine engagement and co-design principles. The Strategy must ensure there is an ongoing process to embed First Nations cultural knowledge and practice into its goals, targets, and actions.

Question 6 -13

No response.

Question 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?

FHA strongly supports the inclusion of preventative health and notes the consultation papers acknowledgement that '*one clear pathway for reducing emissions is by keeping people healthy and out of the health system through prevention*.'

The Strategy should specifically acknowledge the disproportionate impact of unhealthy diets, particularly ultra-processed foods and meat consumption, on climate change and the need to shift Australians towards more sustainable and nutritious diets to mitigate both the impact on planetary health and preventative non-communicable diseases.

The summary of the Australia's *National Preventive Health Strategy*, definition of prevention includes taking measures to keep people healthy and avoid the onset of illness, disease, or injury.

Non-communicable diseases (NCDs) are the biggest burden of disease in the world. The Strategy should explicitly articulate how NCDs are exacerbated by climate change and how prevention will support reductions in disease burden. Primary prevention is crucial to addressing health inequity in Australia. This includes supporting and enacting policy that addresses the social determinants of health and underlying systems of power that have led to the climate crisis. While actions 2.6.1–2.6.4 are all positive, they need to include defined targets:

- The Strategy should explicitly support the commitment of the National Preventive Health Strategy to 5% of health spending for prevention.
- The Strategy should explicitly include actions on how it will coordinate action across the existing and new national strategies, including the National Preventative Health Strategy and the National Obesity Strategy.
- The Strategy should explicitly include how it will support key aspects of policy in other portfolios that have an impact on health outcomes.
- The Strategy should explicitly include actions for how it will support state and territory governments in preventive health measures.
- Promoting health and preventing illness are major ways to reduce greenhouse gases by reducing illness and so demand for health care services while improving wellbeing. This can be done by:
    - Increasing funding for primary prevention including the National Preventive Health Strategy, the National Obesity Strategy and the Australian Centre for Disease Control.
    - Supporting actions under the National Preventative Health Strategy and National Obesity Strategy to shift to Australians to more sustainable and nutritious diets, including reducing intakes of ultra-processed foods and meat products in the diets of Australians.
    - Increasing funding for beneficial screening and health promotion, while regulating adverse influences from commercial entities.
    - Supporting policy monitoring and evaluating through funding research.

Question 15 - 17

No response.

Question 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?

FHA supports the inclusion of health systems resilience in the Strategy and communities experiencing vulnerability and we welcome acknowledgement that impacts of climate change are here now, even if mitigation is achieved.

The Strategy should recognise the overall increase in burden of disease because of climate change and include goals and targets as part of resilience planning.

Question 19

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

FHA supports the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

Question 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?

FHA supports a nationally consistent approach to vulnerability assessment and adaptation planning for the health system. The assessment should take into account the extensive range of vulnerabilities across different communities and regions and the wide variety of health and wellbeing considerations, and how these are being impacted by climate change.

Question 21

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

- Food and housing systems including food security (with an assessment of caloric and nutrition intake).
- Support and resources for rural and remote health services to improve resilience.
- Responding to escalating inequity, increasing poverty, homelessness.

Question 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?

FHA strongly supports the adoption of Health in All Polices approach to the Strategy. All aspects of climate change are interlinked with human health and reducing the health risks from climate change requires working across all sectors and levels of government. The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through a Health in All Polices approach.

The Commonwealth Government should include consideration of climate change and health when implementing actions under existing significant strategies, like the National Preventative Health Strategy.

Question 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?

FHA strongly supports alignment with international policy, particularly the Sustainable Development Goals. We also support a collaborative approach to policy development.

The Ministerial Committee should be responsible for monitoring and reporting to the National Cabinet (or any subsequent body) on the progress and outcomes from the Implementation of the Strategy, which should be outlined in detail in a publicly available annual report by the nominated national agency.

Question 24

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

FHA supports the enablers outlined in the Strategy; however, these could be strengthened in several areas:

- **Research** - there is a high priority need for better data on climate related health and wellbeing outcomes. Data can guide better invest – and disinvestment - where programs and interventions are needed or less effective.
- **Collaboration** - there is limited support for mechanisms for collaboration on climate change and health. The health sector has self-organised to collaborate on responding to climate change and health and health care decarbonisation, but these efforts require government investment in order to scale up and be more effective.
- **Monitoring and reporting** - Regular assessment and forecasting of climate related health impacts across the country is vital. Monitoring over long time periods with robust indicators would help governments and services understand climate change risk, identify specific vulnerabilities and adaptation challenges, and track how communities and organisations are responding. Monitoring of the implementation of solutions is also required – in terms of implementation progress, impact, and cost benefit analyses.

We recommend that the enablers be expanded to include governance, finance and implementing planning. All of these are crucial aspects in the successful implementation of any national strategy.

Question 25

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

As per question 24.

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Australian College of Rural & Remote Medicine
WORLD LEADERS IN RURAL PRACTICE

College Submission
July 2023

National Health and Climate Strategy

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About the Australian College of Rural and Remote Medicine (ACRRM)

ACRRM's vision is ***the right doctors, in the right places, with the right skills, providing rural and remote people with excellent health care.*** It provides a quality Fellowship program including training, professional development, and clinical practice standards; and support and advocacy services for rural doctors and the communities they serve.

ACRRM is accredited by the Australian Medical Council to set standards for the specialty of general practice. The College's programs are specifically designed to provide Fellows with the extended skills required to deliver the highest quality Rural Generalist model of care in rural and remote communities, which often experience a shortage of local specialist and allied health services.

ACRRM has more than 5000 rural doctor members including 1000 registrars, who live and work in rural, remote, and Aboriginal and Torres Strait Islander communities across Australia. Our members provide expert front line medical care in a diverse range of settings including general practices, hospitals, emergency departments, Aboriginal Medical Services, and other remote settings such as RFDS and Australian Antarctic Division.

Initial Comments

ACRRM welcomes the opportunity to provide feedback on the draft National Health and Climate Strategy. The College acknowledges the substantive evidence that the impacts of climate change are creating a global health emergency and that these effects are being felt especially by rural and remote communities in Australia.[1]

[1] Watts N et al. *The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come* Review. Vol 392: 10163, P2479-2514, Dec 8, 2018: https://doi.org/10.1016/S0140-6736(18)32594-7

In addition to strengthening primary health care to respond to the health impacts of climate change, this Strategy presents an opportunity to design and implement the required changes in structure, process, and practice across the health sector to achieve sustainable development goals. However, changes in mindset and the re-design of health services to address their environmental impacts are required.[2]

To maximise its effectiveness, the strategy needs to strike a balance between ensuring safety and quality of patient care, harmonisation with existing strategies, and minimising compliance burdens on a system already under pressure. The health sector cannot solve the climate emergency in isolation, and health service providers and health organisations must be fully supported and funded to deliver sustainable, adaptable, and resilient health care.

If the Strategy is to succeed in the aim of net zero emissions from healthcare by 2040, it must be properly funded to do so. The College calls on governments at all levels to actively invest in the process across all sectors.

As a trainer of the next generation of rural doctors, ACRRM is committed to developing policy and progressing toward reducing its own organisational carbon footprint, as well as educating and supporting its members on practical ways they can make a positive individual contribution as well as leading and supporting their communities to do so.

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The Rural and Remote Context

Research demonstrates that impacts from climate change vary considerably across Australia.[3] The health impacts of climate change in rural and remote Australia are broad, damaging, increasing and under-estimated. They include (but are not limited to): increasing heat stress; exacerbation of non-communicable diseases; increasing exposure to infectious diseases; increasing frequency and severity of hydrometeorological disasters (droughts, floods and tropical cyclones); and psychological distress.[4]

Our rural and remote communities already experience many disadvantages compared to their urban counterparts, and the risks posed by climate change to health threaten to exacerbate many of the health inequities experienced by those living and working in regional and rural areas.[5]

With many rural and remote areas reliant on primary agriculture production and vulnerable to drought, bushfires, cyclones, floods and heatwaves, these areas stand to be disproportionately affected by the impacts of climate change, particularly as water security is inherently threatened by changes in climate.

The National Farmers Federation has cited climate change as the biggest issue ever faced by Australian agriculture. The follow-on effects for agriculture, horticulture and livestock production has the potential to impact on the availability and price of food.

On the global scale, the College acknowledges the World Health Organisation's prediction that areas with weak health infrastructure – such as developing countries and remote communities will be the least able to cope with the negative effects of climate change.[6] It is therefore of paramount importance that

[2] WHO Transforming Healthcare, 17 March 2022 https://www.who.int/news/item/17-03-2022-transforming-health-care-stories-of-changemakers-across-the-world
[3] Climate Change and Aboriginal and Torres Strait Islander Health, Lowitja Institute, November 2021 https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf
[4] Climate change: a brief overview of the science and health impacts for Australia, Hanna and McIver
[5] Climate Council "On the Frontline: Climate Change & Rural Communities", MJA 208 97) 16 April 2018.
[6] WHO Climate Change and Health Factsheet. https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health

the Strategy applies a “rural-proofing lens” to climate policy to protect the health of populations living in rural, remote and Aboriginal and Torres Strait Islander communities across Australia.

The Role of the Rural Generalist

ACRRM supports doctors to become specialist General Practitioners trained to work in the Rural Generalist model of practice. As such they are purpose-trained through the ACRRM Fellowship (FACRRM) to provide comprehensive primary care, secondary care, population and public health services and emergency care within the clinical context of rural and remote locations.

Rural Generalists are often the only provider of medical services in rural and remote areas, and in areas where health services do exist, are often the first point of contact for patients. They work under unique circumstances and with a scope of practice and working environment which can be very different to urban practice. These doctors are often the only readily available health care practitioners and as such, they may need to take on a range of roles which would ordinarily fall to specialists, allied health professionals, or health care teams in larger areas.

Rural Generalists are uniquely placed to lead the response to the burden of disease resulting from climate change, including mental illness, and to provide high quality care and keep people healthy and out of hospital. They are also able to support ongoing education for themselves, other health professionals, communities and patients regarding climate change and its impact on individual and population health. Within the public health setting, they can strengthen preparedness for disaster and promote resilience and community capacity building.

Response to Consultation Questions

We have responded to the consultation questions pertinent to the work of the College.

Question 1: How could the objectives of measurement, mitigation, adaptation, and health in all policies be improved to better support the vision of the Strategy?

Rural and remote Australians are grossly underserved by the health system and record greater disadvantage by health, mortality, and morbidity measures as well as by most measures of social determinants of health. The disparities in the health status of Indigenous Australians and those of remote Australians are intertwined. It is imperative that the Strategy specifically references those communities which face unique challenges in accessing health services, such as rural and remote and Aboriginal and Torres Strait Islander communities.

Whilst the College commends the Health in All Policies objective, we would caution against a “one size fits all” approach. The Strategy must recognise that there will be different challenges for different communities, requiring purpose-built solutions. Strong partnerships and a multi-agency approach, which is flexible to adapt to the specific needs of rural and remote communities is required to address health inequity.

Question 2: How could the following principles be improved to better inform the objectives of the Strategy?

Principle one – First Nations Leadership

The disparities in the health status of Indigenous Australians and those of remote Australians are intertwined, and it is imperative that in addressing rural access that this includes providing access to culturally safe and responsive health care for Aboriginal and Torres Strait Islander peoples. The impacts of climate change disproportionately impact Indigenous communities, who suffer an even

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greater burden than non-Indigenous populations due to, *inter alia*: a higher proportion living in remote areas; lower levels of household income; less access to affordable, nutritious food; less access to safe water and sanitation; higher rates of overcrowding; and higher rates of unemployment.

The Strategy presents an opportunity to empower Aboriginal and Torres Strait Islander communities to lead climate action planning based on their intimate traditional and historical knowledges of Country. Best practice principles to facilitate this will include place-based adaptation and mitigation strategies, leveraging valuable biocultural knowledge and sustainable resourcing, all as outlined in the recent Lowitja Institute discussion paper.[7]

Engagement with NACCHO and Aboriginal Community Controlled Health Services will be key to incorporating First Nations expertise and knowledge in the Strategy. The success of the Plan will be contingent on its interaction with the *National Agreement on Closing the Gap,* and the *National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan 2021-2031.*

Principle two – Tackling Health Inequities

Achieving health equity requires a multi-agency approach to respond to both health needs and their determinants.[8] The development of purpose-built solutions, designed in partnership with communities and other participants in the system (including non-health services) which can in turn respond to specific health needs, will be key to the success of the Strategy in rural and remote areas. Connected systems which empower patients and clinicians, harness participation, share resources and accountabilities will be an important component.

Principle three – Population Health and Prevention

The Strategy must include and prioritise a health systems reform approach that centres prevention, optimising models of care and reducing low value care and resource use. Targeted investment is required in a National Climate Change and Health Resilience Fund to identify resilience strategies suited to Australia's health system. A Climate Friendly Health System Innovation Fund should also be established to provide grants to local health services for emissions reduction and sustainability initiatives.

The College recommends that a designated proportion of any investment under these funds be allocated to projects which are located in, or targeted towards, rural and remote and Aboriginal and Torres Strait Islander people and communities.

Principle five – Evidence Informed Policymaking

We note this principle centres around actions being prioritised based on the principles of cost-effective analysis, considering where resources can be allocated to maximise population health gains, while also taking account of health inequities. The latter is particularly important in prioritising investment in support and strategies in rural and remote communities, services and facilities, which may not have the same quantifiable public health gains as in more populated area and where the traditional assessments of cost-effectiveness may not apply.

The Strategy must include the development of a rigorous and accessible online monitoring and recording 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.

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[7] Climate Change and Aboriginal and Torres Strait Islander Health, Lowitja Institute, November 2021 https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf
[8] Rural and Remote Health and Wellbeing Strategy 2022-27 https://www.health.qld.gov.au/system-governance/strategic-direction/plans/rural-and-remote-health-and-wellbeing-strategy

Principle six - Strong Partnerships across all Levels of Government and Beyond

The College would recommend the Strategy adopts a cross-sectoral approach which recognises that strong and continued leadership, support and commitment will be required from different groups including government and non-government organisations across sectors, members of the workforce, and people and their communities.

It is imperative that the pivotal role of health professionals is recognised and utilised. This is particularly important in the context of rural and remote and Aboriginal and Torres Strait Islander communities, which rely heavily on the small team of doctors, nurses, and health professionals to deliver healthcare needs. The development and rollout of guidelines must support locally led climate risk and vulnerability assessment, adaptation, and resilience planning, with specific co-design and guidance from First Nations leadership.

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

Targeted emissions reduction efforts must recognise the importance of tailored solutions. What is appropriate for a large urban hospital is unlikely to be achievable in small rural and remote facilities. There is the potential for the costs associated with implementation to prove prohibitive for smaller service providers without additional funding and support.

Rural and remote health service providers are diverse in terms of size, scope of practice and range of services provided, facilities and funding models. They do however share several commonalities when operating across rural and remote communities:

- Administrative and financial imposts associated with the need to interact with, report and respond to a range of agencies with the flow-on costs in time and staff resources, and potential for duplication and wasted effort.
- A fragile workforce– the nature of the rural workforce means that even the strongest service providers can change rapidly with the retirement or departure of a few key personnel.
- Less flexibility and ability to quickly respond to change.
- Higher cost structures and challenges in sourcing goods and services, including in providing after-hours services.
- High patient populations which have generally poorer general health and lower socio-economic status.
- Poorer access to prompt referral, hospital-based and psychiatric and other services.

The Strategy must acknowledge that smaller service providers in rural and remote communities may face challenges in implementing targets, even with the best intentions. There is a compelling argument for prioritising opportunities to reduce costs and administrative imposts and streamline the process as much as possible, particularly for these providers and facilities.

The Strategy should consider the need to develop a range of targeted resources to support reduction efforts, including factsheets, tools, and templates. These need to be backed by sufficient funding and resourcing. The potential role of Rural Generalists as service providers, system managers and community leaders in rural and remote communities should be leveraged in the process.

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

There are a range of practices across health care delivery which contribute to global climate impacts. These include low value or unnecessary tests, unnecessary travel, poorly implemented preventative health and ineffective design and management of facilities.

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Embedding actions to address sustainability outcomes within a health service organisation's safety and quality monitoring framework would ensure that climate risk, resilience, adaptability, and sustainability become part of daily practice for health service providers.

Question 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?

Supporting health service organisations to deliver sustainable, adaptable, and resilient care health care should be an important component of the Strategy. Initiatives such as the Australian Commission on Safety and Quality in Health Care (ACQSHC) Sustainable Healthcare Module represent a positive step forward. The module was developed to apply in any healthcare setting across Australia, leveraging an organisation's existing clinical governance framework for its implementation.

ACRRM's submission outlined support for the Module, which will equip organisations to:

- Develop systems to anticipate, recognise and respond to changes in climate-based health demands
- Build resilient systems to plan for adapt to climate threats, and use available resources, while minimising waste
- Reduce the provision of low value care
- Develop a workforce with the capacity to understand and interpret risks to sustainable healthcare, as well as build and apply these systems in the workplace.

The College noted that whilst these benefits are highly commendable, health service organisations will need to be sufficiently funded and supported to achieve these outcomes. Organisations will need to adapt to manage the impact of climatic events, and anticipate, prepare for, and respond to climatic changes to build resilience.

Climate risk literacy will need to be substantially improved across organisations through education, training, and support to ensure the workforce is upskilled to meet the challenges associated with delivering sustainable health services in the future. It is therefore imperative that the work of the ACQSHC and the National Health and Climate Unit align in this space.

Question 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?

Rural doctors are at the frontline of the emergency and disaster response in rural and remote areas. They are often called to assist the ambulance and retrieval services at the roadside; supervise transport to the local hospital; and stabilise the patient for retrieval. Many have on-call responsibilities to their local rural hospital. This local involvement is important and can save lives. It is important that these rural doctors have the necessary training, skills, and support to be able to provide an effective response to a wide range of emergency situations.

Prolonged periods of droughts, large-scale bushfires, and the increasing number of adverse weather events and floods, together with the advent of the COVID-19 pandemic in Australia in early 2020, have reinforced the need to better utilise the skills and experience of rural doctors as first responders, as providers of frontline health care in the community and local hospitals during and in the aftermath of emergencies and disasters, and in strategic planning at the local, jurisdictional and national levels.

The establishment of a well-equipped and appropriately-skilled surge health and medical workforce for deployment in response to extreme weather events would be welcomed, alongside maximising the

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potential from existing locally based services. The development and rollout of guidelines and training to support locally led climate risk and vulnerability assessment, adaptation, and resilience planning, co-designed, and where appropriate, and guided by First Nations leadership. should be included in the Strategy. The national approach must be sufficiently flexible to allow adaptation to suit rural and remote contexts and tailoring to specific needs.

A range of climate resources, information for patients, resilience initiatives and appropriate workshops and training for frontline healthcare teams should be funded and developed in consultation with rural and remote practitioners and communities.

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

The response to and impacts from extreme weather events should be considered as an urgent national priority. In countries such as New Zealand, Scotland, the UK and Canada, there are formal rural responder networks which incorporate the rural GP in their centralised emergency response protocols. By contrast, Australia's health system is characterised by siloed approaches, fragmented and inequitable funding, and convoluted arrangements, including the two-tiers of responsibility (Commonwealth and State/Territory).

Poor interconnectedness between health services and social and community services, emergency services and others, means that delivering the integrated responses needed during emergencies and disasters is challenging. Poor communication and mixed messages exacerbate the issues.

The College recommends that national and regional emergency and disaster response be reviewed as one immediate health system adaption action. This should include the involvement of rural and remote doctors and their teams, who are critical players in emergency and disaster response efforts. As frontline health carers during events they provide care for their own patients and others. They are also the main providers of ongoing care following such events. They can offer unique insights not only into community responses during and in the aftermath of emergencies and disasters but also into the operation of the health system, particularly in relation to how rural general practices and community care can operate and integrate with secondary and tertiary care.

Utilising 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.

An example of such a network exists in South Australia. The Rural Emergency Responder Network (RERN) is a network of specially trained South Australian Rural GPs that attend out-of-hospital emergencies in partnership with the SA Ambulance Service (SAAS) and the MedStar retrieval service. RERN doctors are linked to the SAAS communications network allowing them to be called to life threatening incidents in regional South Australia.[9] 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.[10]

A 2015 survey demonstrated tacit support for such a scheme, with 98% of 420 rural doctor responders supporting involvement in a National Rural Emergency Responder Network[11].This network should be national, have reciprocal recognition between the states for credentialing, include ongoing upskilling in prehospital and emergency care, and be integrated into existing disaster plans.

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[9]https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/services/regional+health+services/rural+emergency+responders+network+rern/rural+emergency+responders+network+-+rern
[10] Leeuwenburg T, Hall J. Tyranny of distance and rural prehospital care: Is there potential for a national rural responder network? *Emerg Med Australasia. 2015 Oct;27(5):481-4. doi: 10.1111/1742-6723.12432. Epub 2015 Jun 24.*
[11] Leeuwenburg T, Hall J. Tyranny of distance and rural prehospital care: Is there potential for a national rural responder network? *Emerg Med Australasia. 2015 Oct;27(5):481-4. doi: 10.1111/1742-6723.12432. Epub 2015 Jun 24.*

While practitioner health and wellbeing must be supported at all times, this becomes more vital during, after and beyond emergency and disaster response. The rural and remote health workforce must have easy access to personal mentoring and support structures to assist them maintain their physical and mental safety and wellbeing. Services such as the CRANAplus Bush Support Line[12], (which provides high-quality, free of charge, confidential 24/7 telephone support and is open to all health workers and their families in rural, remote, and isolated communities), and 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.

Question 24: How could the following enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

***Enabler one* - Workforce, leadership, and training**

The differing circumstances in rural and remote areas which require practitioners to provide a varying and typically broader and more complex suite of services than their urban counterparts apply not only to rural general practice, but also to the provision of other healthcare services in rural and remote areas. Services are often delivered in ways that differ from typical urban practice models due to the limited resources and clinical teams in the local rural setting, and it is important that in aiming to provide education and support to our rural and remote clinicians, the system allows the necessary flexibility to reflect these unique circumstances.

The approach recommended by the ACSQHC Sustainable Healthcare Module is supported, however health service organisations will need to be sufficiently funded and supported to achieve these outcomes.

Enabler two – Research

The Strategy must support 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.

Where possible, rural and remote clinicians should be supported to undertake or support relevant research projects to increase the knowledge and resource base for their communities.

Enabler three - Communication and engagement

Improved integration of public education and awareness with the primary healthcare sector is especially important in improving healthcare outcomes for rural and remote communities which are geographically isolated and rely on collaboration to maximise local capacity.

Health professionals are one of the main sources of information about health care for consumers. In rural and remote areas in particular, they can recognise the needs and preferences of individual consumers and tailor their communication style to the person's situation.[13] Health professionals play and important role in presenting information, encouraging people to speak up if they have difficulty in understanding information, adopt and adapt effective communication strategies, and improvement projects to reduce barriers to health literacy.[14]

The Strategy should support the development of a range of rurally-relevant resources, including factsheets, tools, and templates. These need to be underpinned by sufficient funding and resourcing to support effective promotion and implementation.

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[12] https://crana.org.au/mental-health-wellbeing/call-1800-805-391
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[14] ACQSHC Report August 2014: Health Literacy: Taking action to improve quality and safety https://www.safetyandquality.gov.au/sites/default/files/migrated/Health-Literacy-Taking-action-to-improve-safety-and-quality.pdf

Enabler four - Collaboration

It is imperative that in addressing the climate issues faced by rural and remote and Aboriginal and Torres Strait Islander peoples that the process includes buy-in and a systematic approach to the development of health service capacity at all levels of government, across sectors, and with community participation and engagement. Multi sector collaboration and cognisance of the wider determinants of health will be key.

As mentioned previously, coordination and collaboration between all levels of government; the public and private sector; and health care facilities, practitioners and communities will be pivotal in achieving significant and lasting change.

Enabler five - Monitoring and reporting

The Strategy must be viewed as a catalyst and enabler for outcomes, rather than an outcome in itself. It will only be as effective as the associated implementation and monitoring activities.

The College recommends the development and implementation of a robust and transparent monitoring and evaluation framework, including indicators that show progress on health outcomes, health system resilience and capacity-building, together with targets that demonstrate a reduction in health system emissions. The framework should include an annual reporting cycle which is based on an holistic and multi-system approach and which is linked to clear and achievable indicators and targets.

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ACRRM acknowledges Australian Aboriginal People and Torres Strait Islander People as the first inhabitants of the nation. We respect the Traditional Owners of lands across Australia in which our members and staff work and live and pay respect to their Elders past present and future.

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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?
This submission is on behalf of the Australian Medical Students' Association (AMSA). Authors: [redacted]
What is your email address?
[redacted]
What is your organisation?
Australian Medical Students' Association (AMSA) The Australian Medical Students' Association (AMSA) is the peak representative body of over 17,000 medical students across the country.
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
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Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
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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

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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?
Firstly, the vision of this Strategy could be more defined. It should be brief, impactful, and clearly articulated in order to guide the implementation and future evolution of the Strategy. AMSA recommends the following vision statement: Australia's National Climate and Health Strategy envisions a robust and sustainable healthcare system at its core, driven by a Health In All Policies framework leading proactive public health measures and ambitious climate action, safeguarding the wellbeing of its people while building a resilient and ecologically balanced future. **Measurement** • While AMSA are supportive of accurate measuring of greenhouse gas emissions, 'measurement' is more appropriate as a tool to meet an objective, not an objective in itself. • An alternate objective would be to reduce harms of climate change, which AMSA believe demonstrates a more focused vision for the Strategy. This objective could then be worked towards by utilising measurement tools to track emissions (and progress of their reduction); to identify key health vulnerabilities and outcomes; to identify and monitor underserved communities at greatest risk; and to identify the ongoing health impacts of climate change (e.g. through epidemiological modelling), as well as to inform both contemporaneous and future responses to the health impacts of climate change. • While it is important to reduce the health system's greenhouse gas emissions, it is critical to reduce ALL emissions in order to address the health impacts of climate change. It is of limited value to restrict the scope of the Strategy here. Additionally, inclusion of Scope 3 emissions is vital; addressing Scope 3 emissions measurement through methods such as implementing healthcare industry reporting standards is essential. • Measurement as implemented by this Strategy must involve bidirectional feedback opportunities to ensure both accurate data, and a supportive relationship between data reporters and collectors. Additionally, sufficient guidance should be provided to minimise workload on an already pressured health workforce; implementation of a National Sustainability Development Unit, as well as individual hospital or health district Sustainability Development Units, would be one way to increase capacity and support for measurement and reporting. • It is widely known that climate change is leading to excessive mortality and morbidity globally, however currently there is no good way to accurately quantify the impact. One proposed solution which could be advocated for in the Strategy, and is supported by AMSA, is the use of Medicare codes which quantify mortality and morbidity caused by climate change to more accurately track the health impacts. **Mitigation** • A major shortfall of this objective is the absence of mitigation targets.

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    - Mitigation should be pursued with targets that are committed to by all stakeholders, including government and healthcare bodies. Interim targets may also be required to monitor progress. The role of an independent commission on climate action could be considered.
    - AMSA supports existing target recommendations. This includes a reduction in greenhouse gas emissions by a minimum of 50% of 2005 levels by 2030 in accordance with the Paris Agreement and the Climate Change Authority, and net zero emissions by 2045; as well as for the Australian healthcare sector to reach net zero carbon emission by 2040, with an interim emission reduction target of 80% by 2030, as supported by the Australian Medical Association, Doctors for the Environment, and others.
    - This section also requires clear articulation of how the Federal Government will incentivise the implementation and use of renewable energy in healthcare to mitigate emissions.
    - Critically, Scope 3 emissions must be included in mitigation targets.
- This objective also outlines suggestions to mitigate climate change that are not actionable by the government, i.e. encouraging healthcare workers to walk and cycle to work. While there are co-benefits associated with this approach, focusing on goals such as these which would mitigate a very small portion of the emissions attributed to the healthcare system weakens the Strategy and reduces its credibility. AMSA suggests sincere mitigation targets that are actionable by the government be added to this policy instead. Using the example of reducing emissions in transport to and from the hospital, actionable targets would include but are not limited to:
    - More bike paths readily accessing healthcare facilities;
    - Sustainable and affordable public transport systems - our current transport systems currently holding significant deficits;
    - Effective transport systems to the outskirts of major cities.
- AMSA strongly believes that "encouraging" mitigation is not enough and reflects poor vision within this section of the Strategy.
    - AMSA recommends the language used in the Strategy be shifted from 'encourage' to more directive language, such as 'require.' Mitigation targets must be strictly outlined, actionable and regularly reviewed, including auditing the outcome of healthcare systems' actions and if they are abiding by these targets. There needs to be sincere commitment.

Adaptation

- AMSA strongly supports the establishment of an Australian Centre for Disease Control.
- Prioritisation of Australian-based statistics and studies on climate change impacts on Australia is vital. Utilising these existing studies and data is central to forming evidence-based adaptation strategies. This evidence should be used to inform urgent action in lieu of the 'National Climate Risk Assessment' and subsequent 'National Climate Risk Plan' to avoid delays in adapting to a time-critical threat.
- AMSA recommends the Strategy consider the following health impacts of climate: extreme weather events, extreme heat, outdoor air quality, food and water security, vector-borne ecology, sea level rise/ocean temperature and acidification, mental health issues, displacement and conflict, and loss of heritage and cultural lands.
- The Strategy should outline where the human resources for emergency prevention, response, and recovery will come from. AMSA is concerned that there is a risk that healthcare workers will experience unbalanced increases to workload in this area during an ongoing staff shortage. Existing emergency strategies, including urgent deployment of the Australian Defence Force in response to

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climate disasters, is not sustainable in the face of increasing climate risks. We recommend that the Strategy carefully examine and then articulate the logistics of engaging expertise and resources in this area.
- AMSA suggests outlining clear definitions of adaptation and mitigation within these objectives to prevent misunderstanding by the government and allowing effective implementation of the policy.

Health In All Policies
- AMSA strongly supports the inclusion of the Health In All Policies (HiAP) objective in this Strategy, and believes it should be the first objective listed. It is a critical component for the success of the Strategy as the majority of health determinants lie outside of the healthcare system, e.g. social and environmental determinants of health.
- AMSA also suggests that a Planetary Health framework be utilised over a OneHealth framework for HiAP, as the Planetary Health framework utilises greater systems-level thinking and would be more impactful and effective in this area going forward.
- As discussed in the Strategy paper, there is a great need for increased focus on preventative health; this must include greater financial and policy support for primary care (e.g. increased medicare funding, increased GP workforce), otherwise it will not be possible to achieve robust primary prevention of many of the stated health issues which are exacerbated by climate change.

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

First Nations in leadership
- AMSA strongly supports the plan to include First Nations peoples in leadership within this policy, and this is discussed in detail in later question responses.
- AMSA also advises utilising the findings of the First Nations' Consensus on Planetary Health: The determinants of planetary health: an Indigenous consensus perspective

Tackling health inequities
- The Strategy should clearly define and describe which populations would be vulnerable to climate change; for example, there are multiple differing definitions of rural and remote communities. AMSA recommends the inclusion of the following: First Nations peoples, rural and remote communities, young and future generations, low socioeconomic groups, and culturally and linguistically diverse communities.
- The Strategy should also acknowledge that each of these groups are impacted differently, and there is significant intersection between many of these and other demographics, e.g. women.
- Discussion of First Nations peoples as a vulnerable group should occur here rather than in the section on First Nations people (questions 4 and 5). The focus of this section (questions 4 and 5) should be more the value and strengths of First Nations peoples and their knowledge in climate and health.

Population health and prevention
- AMSA strongly supports the focus on preventative health measures, however, notes that this principle can only be realised within a strong healthcare system that supports all community members. Therefore, AMSA suggests that funding for Medicare and NDISS are discussed within this policy.

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- This principal also assumes fair and equitable access to healthcare without addressing any measure to ensure this is a possibility. AMSA suggests continued use of tracking to understand the barriers felt when accessing healthcare and implementing suggestions from current research in this policy to address these barriers.
- This principle lacks actionable goals. AMSA suggests implementing goals to move towards a centralised healthcare system, increasing funding to Medicare and NDISS, and addressing barriers to early patient interaction with the healthcare system such as language and cultural barriers.

One Health

- AMSA agrees with utilising a framework as a principal in this policy, however, suggests that the Planetary Health framework is better suited. The Planetary Health framework applies a systems level thinking approach and better addresses the need for transdisciplinary involvement in mitigation and adaptation to climate change and its impacts on health.
- More information on the Planetary Health framework can be found here: Planetary health care: a framework for sustainable health systems

Evidence-informed policymaking

- AMSA suggests removing the language of "cost effective" in this section as it weakens the policy. This language may allow future governments to weaponise cost as a reason not to implement suggestions within the policy. Cost must not become a barrier to climate and health action and response; critically, the initial costs of action are dwarfed by the long-term costs of inaction.
- AMSA strongly supports the commitment to implement change in urgent areas despite uncertainty and incomplete information. It is important that action is taken now, that progress and feedback from relevant stakeholders is tracked, and resulting action re-evaluated. AMSA suggests implementing a sustainable development unit in order for this process to be implemented effectively. This was implemented in the UK and has been successful in encouraging and supporting local sustainable action: Sustainable Development Unit archive - Greener NHS

Partnership-based working across all levels of government and beyond

- AMSA strongly supports the suggestion of a transdisciplinary approach, however, again suggests the need for targets to be specified in order for this principle to be actualised. These targets should include implementing centralised resources across the healthcare system, introducing reporting standards as well as standardised and centralised models for feedback, information sharing and re-evaluation.

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

AMSA believes that all three emission sources discussed are within scope of the Strategy's emission reduction goals, but need to be tackled differently.

- It is crucial to note that 90% of healthcare emissions in Australia are indirect, resulting from both national and global supply chains involved in healthcare delivery; it is unacceptable to neglect scope 3 emissions occurring in other jurisdictions when Australia precipitates these emissions.
- **Scope 1 emission reduction**:
    - It would be useful for there to be a focus on scope 1 emissions in the Strategy, as this would allow health centres to directly consider and act on their own emissions created.

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- **Scope 2 emission reduction**:
    - It would be useful for there to be a focus on scope 2 emissions in the Strategy, as this would allow health centres to consider their sources of electricity. It is already very easy to measure the amount of health centre energy consumption. It is also possible to incorporate renewable energy sources as a part of the design process of hospitals and health centres, as the Royal Adelaide Hospital (the first 4 star Green Star hospital in Australia) has done, and the new Adelaide Women's and Children's Hospital is doing - planning to be run on 100% renewable energy.
- **Scope 3 emission reduction**:
    - Scope 3 emissions are more difficult to measure directly, however, it is vitally important to focus in full on as part of the Strategy. Scope 3 emissions form the majority of healthcare's carbon footprint, at over 60% of total healthcare emissions. Utilising measurement via process-based life cycle assessment (LCA) and multiregion 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. Australia must not abscond from our responsibility to include both onshore and offshore measurement of scope 3 emissions in our mission to reduce healthcare's carbon footprint.
    - The Strategy should give consideration to upstream emissions such as policy mandating minimum standards for sustainable procurement, as we know this is an area where a large proportion of emissions created lie. Additionally, policy strengthening public transport, such that staff commuting to the hospital could avoid use of private vehicles, as well as policy encouraging proper disposal of waste to minimise incineration and maximise recycling, could be other areas to focus on for reducing scope 3 emissions.
- Additionally, while AMSA acknowledges that the Paris Agreement requires that each member country estimates and reports emissions occurring within its jurisdiction, and that this is included within the Strategy, emissions occurring in other countries as a result of Australia's imports/exports/buying power need to be taken into account. If these are not considered, and ideally measured and reported on, then this creates a significant barrier to informed purchasing and overall emission reduction within the supply chain. For example:
    - When making decisions about the import of pharmaceutical goods into Australia, the emissions created in the country of origin should be considered, and those with the lowest emission should be sought out and purchased in preference to those with highest emissions. Australia has an obligation to purchase goods responsibly.
    - Just because Australia is not burning all the fossil fuels it exports, it does not absolve Australia of the emissions burden these products are creating. Australia's exports should not involve fossil fuel commodities which recklessly increase global emissions. An immediate moratorium on fossil fuel projects is necessary, and AMSA strongly recommends this be incorporated into the Strategy.
    - At a government level, governments should mandate that manufacturers provide evidence of the environmental impacts of their products, such that healthcare organisations can use their purchasing power to preference carbon neutral products and suppliers. It would be impactful for the Strategy to include and prioritise this.

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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?

AMSA identifies the following potential issues and advises in-depth collaboration with First Nations groups and people for further feedback. The following feedback was written with AMSA Indigenous:

- This discussion in this section alternates between strength-based and deficit-based language. A clearer structure would be beneficial. Please see below for criticism on the use of deficit-based language.
- The Strategy mentions the 'strengths of First Nations Cultures'. However the focus of this section is very much on First Nations groups as a vulnerable population and how climate change is worsening outcomes for Indigenous peoples. A deficit-based approach results in only superficial collaborations with First Nations people without co-design implementation strategies. It will not appropriately address climate action and will not improve outcomes for Indigenous peoples. Furthermore, while we recognise the attempt in including more strength-based discussion, the current discussion ignores the vastness and depth of First Nations knowledge at both local and societal levels, and the longstanding respect and relationships First Nations peoples and communities have kept with the land. This section should explore more deeply the strengths of First Nations people in caring for the land as they have successfully done for millennia, and acknowledge the importance of preservation of First Nations cultures and increased self-determination.

  First Nations people and knowledge are instrumental in the fight against climate change and to improve ecological structures - but fixing climate change will not heal First Nations communities.
- The Strategy should clearly distinguish between First Nations peoples and rural/remote communities even when acknowledging their overlap. This nuanced discussion should perhaps be done best in a separate section addressing Principle 2 on vulnerable populations.

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?

AMSA encourages further discussions with First Nations groups and peoples for this question.

AMSA commends the use of 'co-design' rather than 'consultation' with First Nations peoples - we urge that co-design should occur from the very beginning rather than consultation on a framework already designed. The latter imposes a power structure which limits meaningful collaboration.

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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?
N/A
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
The Strategy should ideally recommend standardised, consistent measurement tools able to be used by all Health and Aged Care institutions across Australia. As correctly identified within this Strategy (although in AMSA's opinion misplaced as an Objective), measurement is a critical component to inform emissions reduction; creating methods of accessible, collaborative, centralised measurement would better enable hospital and healthcare emissions reduction.

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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?
• Of these sections, AMSA believes the Strategy should put most emphasis on Prevention and Optimising Models of Care, followed by Supply Chain, then Built Environment and Facilities, Medicines and Gases, Waste, and finally Travel and Transport, in that order of priority. This is in alignment with the largest contributions to healthcare emissions, as well as AMSA's priorities regarding optimised healthcare and population wellbeing. • AMSA supports the emphasis on high-value care as low carbon care in the Prevention and Optimising Models of Care section. However, its focus on prevention fails to mention critical aspects of access to primary care, namely sufficient government funding of medicare. The Strategy's '*2.6.3. Further explore opportunities to shift models of care from acute care to primary care and self- care*' is a key area in which to address General Practitioner (GP) accessibility as a major barrier to primary care access and community health literacy. AMSA strongly recommends improving access to primary care by increasing medicare funding, increasing medicare rebates for GPs, and incentivising GP training for medical students and the medical workforce. • Health care's response to climate change: a carbon footprint assessment of the NHS in England - PMC • Waste should be reframed as encouraging a circular economy. Additionally, a stronger emphasis on reusable tools rather than single-use tools should be included. • The inclusion of a moratorium on fossil fuels and a wider switch to renewable sources of energy nation-wide is paramount, and is a gaping hole in the mitigation section of the Strategy. • Please see the response to each specific question for more detailed responses.
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?
• AMSA believes that the built environment is an important mitigation focus area of the Strategy. Nearly all hospitals/health facilities are undergoing expansion/refurbishment at any one time. There needs to be high level, centralised standards set for efficiency for these new buildings in the design and constructions stage. These standards should include regional flexibility as per Australia's varying climates. • The NABERS ratings discussed in the Strategy are a great way to measure ongoing efficiency, but could be combined with Green Star ratings to focus more heavily on an efficient design. This is already occurring in Australia; the Royal Adelaide Hospital is the first 4 Star Green Star health centre in Australia. There should be a minimum 4 star Green Star rating for all new hospital projects for approval to build, to ensure efficiency. • Increased green spaces in hospitals and health spaces, while only covering a small area, would still assist to decrease air pollution, promote physical activity, and improve mental health of patients and staff. Green spaces should be a part of the design for all hospital builds and extensions moving forward. • An explicit emphasis must be placed on renewable energy sources in hospitals. It is entirely reasonable to expect that solar panels are placed on the roofs of all health facilities. This would ultimately result in not only a decrease in carbon

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output, but save health facilities money in electricity bills. The Victorian Health Department is a good strategic example in this area, and currently outputs 2.6 megawatts of solar power, with plans for a further 4.9 megawatts to be installed in the near future, contributing 30% of the electricity requirements of the health networks. Another state leading the way is Queensland with Queensland Health's Green Power Purchase in 2018/19, contributing to 75% of Australian public renewable energy. This existing work can guide the Strategy's recommendations.

- Ultimately, the Strategy needs to support a 100% transition to renewable energy resources with no new gas installations, or else hospitals will continue to rely on co- or tri-electricity generation systems that ultimately end up using fossil fuels as demands exponentially rise.

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

The Department of Infrastructure explains that public transport infrastructure is not built to accommodate the growing population of Australia. The Australian Climate Council conducted a survey in which over two thirds of those surveyed stated that there is a need for investment in footpaths and bike lanes/electric scooter lanes. This is especially important to invest in concurrently with hospitals to ensure effective public transport access for both patients and staff. Investing in public transport will enhance mobility for those of who cannot drive, increase public physical activity and will increase jobs in the public transport sector. A great guide for this infrastructure is the New Zealand sustainable transport framework.

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

- As discussed further in AMSA's response to consultation question 3, Scope 3 emissions form the majority of healthcare's carbon footprint, at over 60% of total healthcare emissions. AMSA strongly recommends actioning process-based life cycle assessment (LCA) and multiregion input–output (MRIO) modelling (as used for the NHS for this purpose) as a means of measuring and mitigating supply chain emissions, including offshore.
- Committing to accurate measurement and reporting of emissions using existing assessments and modelling (as those suggested above) should be included within the strategy as an important contributor and support for evidence-based decision making around reducing total healthcare emissions.
- AMSA also specifically suggests implementing specific and actionable targets for hospitals regarding the procurement of medical equipment, pharmaceuticals and goods with low carbon footprints. One suggestion is for The Strategy to mandate minimum standards for sustainable procurement, given this is an area with an extremely significant emissions burden. By utilising the purchasing power of hospitals nationwide, pressure can be applied to suppliers to produce low emission products and to provide transparency regarding the emissions produced in their production and transportation processes; this should be promoted within the Strategy.
- Moreover, AMSA recommends implementing a National Sustainability Development Unit (SDU), as well as hospital- or health district-specific Sustainability Development Units. This will enable targets around supply chain emissions reduction to be implemented, tracked, and evaluated consistently and effectively at both local and national levels. This would again be strengthened by mandated sustainable procurement standards.

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- AMSA also suggests utilising current evidence based research to direct hospitals towards more sustainable options for medical equipment, pharmaceuticals and goods. This ties in with a National SDU which could help lead and coordinate these efforts.

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 is an excellent summary of the current evidence related to medicines and gases, and the environmental threat posed by metered dose inhalers and anaesthetic gases.
- Policy in the Strategy such as 2.4.1, 2.4.2, and 2.4.3 could be coupled with changes to the medical school curriculum to inform prescribing habits, as well as with education of prescribers and anaesthetists to encourage use of less environmentally damaging medicines and gases. There is space for both government/public and Specialty College-based educational campaigns in this space, promoted by the Strategy.
- In addition, the Strategy could include 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, and meaningfully contributes to the healthcare sector's carbon footprint. Iodinated contrast media should be encouraged to be used in a sustainable way, saving carbon on the extraction of iodine, transport of iodine, and production of iodinated contrast media. Techniques to reduce dosage and increase image quality continue to be developed further reducing the use of this resource. The Strategy might address this by increasing support for research funding in this area, and the overall area of sustainable alternatives to existing clinical options.
- While medicines and gases are an important topic, anaesthetic gases as a whole contribute 5% of the emissions from the healthcare sector in the NHS (unfortunately, Australian data is limited). Much larger gains could be made by placing more emphasis on implementing renewable energies, and addressing procurement policies and supply chain emissions. Medicines and gases are not an ultimate solution to carbon emissions in healthcare alone, and the same level of problem solving, strength of policy stance, and depth of this section needs to be applied to other areas of this Strategy.

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

- Waste is an important component of the carbon footprint of healthcare, and the Strategy effectively outlines topics to be considered in this area.
- AMSA suggests including the concept of a 'circular economy' rather than focusing on waste. A circular economy means that outputs from one system are inputs for another, resulting in negligible unuseable waste (landfill). The WHO has a great strategic report on this that could help inform the Strategy.
- The 'single use' model in healthcare is problematic, and a shift towards reusable items needs to be encouraged and presented as a priority in this section of the Strategy. Items such as scissors, needles, and forceps in suture packs made of steel (which is a carbon intensive process and finite resource to produce and manufacture) should be sterilised rather than disposed of. This is already happening elsewhere, and saving over one kilo of carbon per reuse. The Strategy should empower the Government to financially incentivise health services to utilise more reusable products. Reusable products currently available reduce

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environmental impacts in all measurable domains except water use. Focus should be placed on invasive medical devices; this is where gains can best be made.

- Food waste is a large component of the general waste produced by hospitals. Mandating composting measures would save money for health services disposing waste, as well as reducing carbon output. The Victorian Government already has a checklist to weigh the cost and benefit of diverting food waste from landfill to on site composting. The Strategy should encourage this.
- More emphasis should be placed on stratification of 'hazardous waste' from 'regular waste', as hazardous waste is a much more carbon intensive discarding process. This should be included in the educational curriculum for healthcare students and staff, as well as be a part of a broader upskilling campaign on sustainable practice for current staff.
- The Strategy should outline explicit policy points (such as the ones above) to assist healthcare facilities in meeting circular economy and waste reduction goals, to make the process as easy as possible for them.

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?

- It is critical to fund medicare and financially support the Australian public health system. As per social determinants of health, preventative health care is often most required by those who can least afford to pay to access it. The Strategy's '*2.6.3. Further explore opportunities to shift models of care from acute care to primary care and self- care*' is a key area in which to address General Practitioner (GP) accessibility as a major barrier to primary care access and community health literacy. AMSA strongly recommends improving access to primary care by increasing medicare funding, increasing medicare rebates for GPs, and incentivising GP training for medical students and the medical workforce.
- Primordial and primary prevention will always be the most cost efficient health interventions. AMSA's Climate and Health Policy has two approaches to preventative measures:
    - Practitioner lead: Studies have shown that preventative health interventions, such as smoking cessation and increasing physical activity, are better received and likely better adopted by patients when delivered by doctors leading by example.
    - Medical schools: Amendments to the Australian Medical Council Graduate Outcome Accreditation Standards due in 2023 will provide a key impetus for medical schools to teach environmentally sustainable healthcare. The Strategy, in addition to supporting these measures, should also recommend implementation of the Planetary Health Organ System Map framework within medical and health education.
- AMSA also recommends the Planetary Health Diet. The Strategy should encourage adoption of the EAT-Lancet dietary guidelines, developed as a collaboration between leading global experts on food, environmental issues and agriculture. This is a diet for both planetary and human health, as a strategy to avoid chronic disease for individuals, and to help mitigate climate risk. The Planetary Health Diet should be integrated into school and university curriculums, replacing the Australian Guide to Healthy Eating/Australian Dietary Guidelines.
- AMSA supports the Strategy's emphasis on high value care. High value care is low carbon care. This is touched on in 2.6.4, but can be elaborated upon:
    - For example (from a paper by Barrat and colleagues):

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        - There were at least 80 million haematology, biochemistry and immunology tests requested in the community in 2020,8 of which an estimated 10–40% were likely unnecessary.
        - Culling low value care is estimated to save Australia over 8000 kilotonnes of carbon dioxide equivalent emissions per year.
    - Doctors, medical students, and health professionals more broadly need to be upskilled on the concepts of high/low value care, such that fewer unnecessary tests are ordered, and therefore less resources wasted.
- AMSA strongly supports systems level thinking: in order to optimise models of care, the health system should be considered as a sum of multiple parts that interact and influence each other interdependently. It is not possible to address problems in a vacuum, and actions taken in one area of healthcare will affect not only other areas, but other sectors as well. The Strategy addresses this well with the Health in All Policies Objective, however the Strategy as a whole lacks explicit focus on systems-level considerations. Currently, there are large degrees of siloing between not only state-based healthcare systems, but even amongst individual health networks within states. To address inefficiencies within the system, there should be a model with carefully considered objectives for healthcare delivery (e.g. proposed action areas/ initiatives etc) with a clear understanding of the system as a whole.
- Any approach taken should consider reducing onus on the individual health networks to act, and applying legislation and directives to the health system as a whole.

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

- AMSA believes that implementing a National Sustainability Development Unit as a centralised resource (e.g. for healthcare sustainability guidelines, communication of measurement and reporting standards, assistance for both institutions as well as individual practitioners, etc.) would be one way to improve accessibility to sustainable healthcare in the private sector.
- The same emissions and sustainability standards applying to the public sector must also apply to the private sector. The Strategy should treat them as similar entities in order to meaningfully reduce healthcare emissions.
- AMSA also recommends mandatory measurement and reporting of private sector emissions, as well as the previously discussed mandating of minimum standards for sustainable procurement, to help incentivise reduction of supply chain emissions in the private sector. Private providers will not change without policy change to force a shift in behaviour.
- If the Strategy supports robust renewable energy policies, greener technologies should be cheaper for private providers and this will also incentivise a shift in this sector; this system influence is very important.

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?**

        - This Strategy has the ability to provide actionable, evidence based targets for the reduction of scope 1, 2 and 3 emissions. This full scale

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reduction of the healthcare sector's emissions is possible if the goals are accompanied by guidance for the sector on how to reach them, measurement on the progress of implementation and efficacy of intervention, bidirectional feedback opportunities and the possibility for reevaluation. These would be made possible through the implementation of national, state and local level sustainability development units. Please see feedback in other Qs regarding this?

- It is vital that this strategy remains consistent with its messaging and targets high value goals which will result in tangible change. While AMSA recognises the difficulty in prioritising some issues over others, it is vital that policymakers understand that being indecisive and broad will not result in change, and will instead produce a weak and inactionable policy. AMSA strongly suggests changes in wording to be directive (e.g. 'require' rather than 'encourage') to provide actionable targets and guidance for the government and the healthcare sector to follow.

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?
AMSA would stratify the six sources of emissions in the following order of priority:

- The most important area for focus is prevention and optimising models of care, as this is where the most gains can be made as an area under more direct control of the healthcare system and government; the Strategy has an extremely important role to play in this area, as discussed more specifically in our prevention and optimising models of care question response.
- Supply chain and built environment are the next most important areas for mitigation, and where the best gains can be made. While supply chain emissions in particular, as part of scope 3 emissions as a whole, are more difficult to influence, the sheer proportion of healthcare emissions in this area make it critical to address. Suggested strategies have been outlined at length in other question responses.
- Waste, medicines and gases, and travel and transport, while still very important, are of the lowest priority.

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

The most important 'quick win' will be the creation of national standards for sustainable health services; something tangible for hospitals to utilise to guide their actions and practice moving forward. This could include:

- Implement a Sustainability Development Unit in every hospital, health service or health district (at minimum), with consultation required by health services around the issues outlined in the Strategy;
- Creation of clear emissions goals and specific renewable energy targets for all health services;
- Support telehealth and virtual models of care;
- A shift toward reusable equipment rather than single use in procurement;
- Incorporate circular supply chains where possible to reduce waste, increase sustainability, and reduce cost, including by supporting domestic production;

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- Inclusion of climate and health education content in staff CPD and upskilling;
- Switching to renewable energy in the health system to reduce emissions.

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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?

- AMSA notes that a large body of literature exists on this topic, and would encourage the Strategy to collaborate with and support those already working in both research and implementation in this space.
- Climate change has wide reaching implications for the health of Australians including, but not limited to, increased risk of infectious disease (both current and emergent), heat-related illness, natural disasters, respiratory health, and mental health.
- National Vulnerability Assessments and Climate Risk Assessments are important strategies for determining priorities and methodologies for adaptation, and are discussed further below.
    - Some underserved communities are at a greater risk of some health impacts more than others (e.g. infectious disease in tropical regions, natural disasters in rural communities, etc.) Adaptation measures should consider and identify which communities are most at risk of these health impacts, and these communities need to be consulted about adaptive solutions.
    - The vulnerabilities of the healthcare system in the setting of a climate disaster need to be identified and addressed to improve the resilience of Australia's healthcare system. Please see feedback in Q20 regarding a nationally consistent approach to vulnerability and adaptation planning assessments. These vulnerabilities and adaptation planning include, but are not limited to:
        - Evacuation plans;
        - Emergency plans for if a hospital is affected by event (i.e. diversion of patients to other hospitals, transport systems);
        - Dedicated emergency and medical response teams;
        - Portable technologies and alternate energy sources;
        - Emergency housing options.
- AMSA recognises the difficulties and limitations of quantifying burden, however, there is a wealth of research currently on the health impacts, risks and vulnerabilities as a result of climate change within Australia. Any decisions on what should be included or focussed on in this strategy should be based on this evidence. Please see: The 2022 report of the MJA–Lancet Countdown on health and climate change: Australia unprepared and paying the price
- Measurement can be utilised here as an important tool to determine which health impacts are being felt most at a national, state and local level. Please see feedback in Q1 regarding this objective.

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?

N/A

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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?
• AMSA believes there would be immense value in promoting a nationally consistent approach to vulnerability assessment and adaptation planning; however, we note that each state has a unique set of vulnerabilities and therefore would require the space within policy to address them equitably within their community. This approach should be partnered with standardised state and local level vulnerability assessments and adaptation planning, outlined within the Strategy. • AMSA suggests focusing on clear definitions of vulnerabilities of the health system and utilising current research to identify what is valid for each state/region. Rather than hinder states' adaptation by providing strict guidelines, the nationally consistent approach should promote broad targets for states to strive for in terms of adaptation planning and disaster preparedness. These targets should include measures by which the progress of each state can be monitored. Moreover, the nationally consistent approach should allow for states to work together to address these vulnerabilities and utilise each other as a wealth of knowledge to allow growth rather than repetition and inefficiency. • While granularity is important and relevant, rapid adaptation is critical and can be both incentivised and simplified with this initial response. The Strategy should leave space for future granularity as this becomes increasingly relevant. • AMSA suggests learning from the various models implemented internationally to create this nationally consistent approach: Assessing Health Vulnerabilities and Adaptation to Climate Change: A Review of International Progress - PMC
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
• Clear emissions reduction and renewable energy targets which are proactive, ambitious, and engineered to drive genuine change within the sector. • As discussed previously, AMSA supports existing target recommendations. This includes a reduction in greenhouse gas emissions by a minimum of 50% of 2005 levels by 2030 in accordance with the Paris Agreement and the Climate Change Authority, and net zero emissions by 2045; as well as for the Australian healthcare sector to reach net zero carbon emission by 2040, with an interim emission reduction target of 80% by 2030, as supported by the Australian Medical Association, Doctors for the Environment, and others.

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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?

Energy policy

- One key area completely missing from the Strategy where a Health in All Policies (HiAP) framework could be implemented is in energy policy. We need a moratorium on fossil fuel projects, and a transition away from coal and gas towards renewables. Examples of how energy policy is relevant to health include:
    - Gas and coal polluting the air, leading to increased incidence of asthma and other respiratory diseases
    - Climate change resulting in heatwaves, increasing the incidence of heatstroke and cardiovascular events
    - Increased incidence of natural disasters, such as fire, floods, and cyclones causing injury, and insecure housing which goes on to influence social determinants of health.

Transport policy

- The specificity of this needs to be outlined - is vehicle electrification in regards to public transport or individuals? More efficient public transportation systems that are electrified would allow for more individuals to rely on this form of transport, limiting traffic congestion and emissions (as well as limiting the amount of cars bought and imported in general). If this is targeted at the individuals of Australia, how can the current infrastructure be adapted to accommodate for charging stations nationwide? Additionally, in a cost of living crisis, with all vehicles being imported it is unethical and expensive to expect individual Australians to switch to expensive electric vehicles poorly supported by charging infrastructure. Redirecting public transportation and health care transportation to electric vehicles will have a more significant and quicker impact as Australian individuals transition. Furthermore, urban planning to allow active travel can be interlinked with public transport; there is always some walking involved and with the current urban areas having limitations in complete infrastructure change, this would make a fantastic middle ground for HiAP in the Strategy.

Housing policy

- The current policy is grossly underfunded, and in the context of the housing crisis requires increased funding to reach the goals of the Strategy.
- The Strategy also needs to consider the location of housing and provide a more detailed framework for the goods and services (i.e. public transport and healthcare) infrastructure to service the occupants of this housing. This framework should include:
    - A consistent set of sustainable infrastructure goals such as energy source, heating, etc.;
    - Requirement that these goods and services are within a reasonable distance of the housing;
    - A consistent set of guidelines regarding procurement of resources for building housing;
    - Regulations on the environmental impact of housing in its intended location.

Food, agriculture and trade policy

- AMSA supports moving towards more sustainable agriculture systems and techniques that suit the unique landscapes of Australia and are First Nations-led;

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stop land clearing and restore natural landscapes; and preserve biodiversity and ecosystems.

OneHealth vs Planetary Health

- AMSA suggests that the Planetary Health framework is better suited for the Strategy than OneHealth. The Planetary Health framework applies a systems level approach and better addresses the need for transdisciplinary involvement in mitigation and adaptation to climate change and its impacts on health. Moreover, the Planetary Health framework prioritises human health while simultaneously valuing the interplay between it, social structures and ecosystems, with a wider scope than OneHealth.

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?

- AMSA suggests reaching out to existing organisations such as the Australian Medical Association, Doctors for the Environment Australia, the Climate Council, Healthy Futures, and relevant university academics to assist in this process.
- This is another space where a National Sustainability Development Unit would be useful, as it could provide a centralised body to facilitate collaboration and partnerships between otherwise potentially isolated groups, e.g. through regular forums. Many of these networks already exist, but are siloed or lack national/central representation.
- Overall, AMSA emphasises that the Health in All Policies framework requires careful attention to ensure the correct identification of stakeholders, regular consultation with stakeholders, long-term policy and budgetary commitment, and measurement of key indicators to monitor implementation progress.

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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?

Enabler 1: Workforce, leadership and training

- AMSA believes this section should include more on training and increasing climate preparedness, especially in the event of an extreme weather event causing a code yellow/external emergency. This must include robust continuity plans, including preparedness for high influx of patients into ED (e.g. patient flow and triaging, workforce flexibility and emergency response teams, etc.) as well as failure of hospital infrastructure and systems in the event that the hospital itself may be affected (e.g. evacuation plan, diversion and transport of patients to other health services, power shortage plan, etc.). Preparedness needs to include regular and involved training of all staff, not just in Emergency Departments; it may also require recruitment of new staff for this explicit purpose (a 'flexible workforce').
- The Strategy must not only require hospitals to focus on preparedness, but can also call for the need for guidelines and further research on climate preparedness. A National Sustainability Development Unit may be one strategy to achieve this; the National Emergency Management Agency could be strengthened as another. Anecdotes, lived experiences and advice from healthcare workers are already being exchanged in forums such as Emergency Medicine conferences; AMSA hopes to see this knowledge disseminated and implemented using formal structures implemented and supported by the Strategy.

Enabler 3: Communication and engagement

- As mentioned earlier, the Strategy does not define or use 'vulnerable populations' consistently. However, AMSA supports the inclusion of 'young generations' in E3 and urges the Strategy to discuss in detail young generations as a vulnerable population and as a key stakeholder to collaborate and engage with.

25. 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) What is currently working well?

- AMSA supports E1.1 and believes it to be an absolute requirement for a climate resilient workforce.
- Organisations such as Doctors for the Environment, Healthy Futures, and AMSA's Code Green portfolio are already working to upskill health students and the health workforce in climate health related matters. The Strategy should recommend the Government utilise existing resources, such as these groups, and financially contribute to the work already happening in this space. There is significant expertise already available that could be better utilised.
- There is a large body of existing research into the most effective implementation of climate change into health education; AMSA recommends the Strategy authors consider recommendations from the existing literature. AMSA would suggest the Planetary Health Organ System Map framework.

(b) What actions should the Strategy consider to support delivery?

- AMSA recommends changing the language used in the Strategy to be more directive, e.g. change 'encourage' to 'require.' Direct language imparts authority and clearer aims, whilst indirect language puts the Strategy's important points at

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risk of being ignored or misinterpreted. The high priority of recommendations in the Strategy risks being lost or incompletely conveyed if the language is not of equivalent strength.

- To assist with improving medical and health student and workforce education:
    - Critical things the Strategy should recommend for inclusion in this curriculum include direct and indirect health impacts of climate change, high value care, and mitigation and adaptation strategies in healthcare.
        - We recommend this be required by each Australian medical school as well as via the Australian Medical Council.
        - The Planetary Health Organ System Map is an existing framework that enables introduction of climate education into health studies without supplanting other curriculum; AMSA recommends its methodology be supported by this Strategy.
- While inclusion of climate education is critical for medical and other health students, this education should be ongoing within the medical and health workforce as well and this may require a separate point within the Strategy. AMSA recommends climate education also be implemented within training colleges, at teaching hospitals (including grand rounds and courses), in existing training courses, at conferences, and so on.
    - Education on climate and health should be targeted to healthcare workers at various levels and integrated into existing education.
- Implementation of Sustainability Development Units within hospitals will enable local workforce guidance, making both climate education and climate action within hospitals (including mitigation, adaptation, and activism) more accessible.
- Accreditation standards could be updated and utilised to incentivise and increase uptake of recommendations to integrate climate health teaching into healthcare workforce training. This could be formalised by collaborating with accreditation bodies, such as the Australian Medical Council.

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

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NATIONAL HEALTH AND CLIMATE STRATEGY

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Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Naturopaths and Herbalists Association of Australia [NHAA]
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

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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?
A vision statement provides strategic framework and direction. The objectives outlined in the Strategy will enhance through a clear and articulated vision statement which will underpin such objectives. Inclusion of a vision statement is a key priority for this Strategy to ensure the stated objectives have foundation. A recommended vision statement – *To foster a climate resilient nation which adapts to lessen their impacts on climate change.* Albeit the objectives outlined lack detail and do not specify realistic targets which incorporate timelines or measurable outcomes for actions and implementation. Revised objectives should consider measures and timelines for example - a 50% reduction in greenhouse gas emissions by 2040 across all health sectors. Further, the Strategy's objectives contain terms which are inconsistent and not clearly defined – for example what/who constitutes the `health system' all health practitioners (registered or not), related suppliers/manufacturers, health related food transportation, client transport to/from clinic? The intent of the Strategy's objectives, measuring and mitigating greenhouse gas emissions and the Health in All Policies approach, should consider aligning to a health services paradigm which focuses primarily on promoting health and wellbeing and sustaining climate resilient communities through emissions reductions. **Recommendations:** - Provide vision statement - Revise objectives to incorporate detail - consider objectives which are specific, measurable, attainable, and time sensitive. - Revise objectives to primarily promote health in wellbeing in the context of climate change. - Include a glossary of terms to clearly define terms throughout the Strategy i.e., 'health system'. - RE: Objective 1 – include an accompanying list with specific emissions being tested.
2. How could these principles be improved to better inform the objectives of the Strategy?
Principle six can be expanded to incorporate the role of all the healthcare workforce and to include collaboration with consumers. The protection of population health and wellbeing must be the primary focus of the Strategy which is then enabled by measurement, mitigation, and adaption. Therefore, the proposed principles must also consider the intergenerational health consequences of global climate 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 efforts to reduce scope type 1, 2, and 3 emissions are supported. Notwithstanding, the 'health system' remains undefined (refer to question 1 above). Instating a glossary of terms will assist to identify the key sources of emission from within the health system and therefore the types of greenhouse gas emissions. Emission reduction efforts will succeed upon understanding and targeting the key sources of the emissions.

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Recommendations: - Include a glossary to define/clarify terms.
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?
The Strategy should outline how engagement with First Nations elders, leaders, and communities will occur and how First Nations peoples will be advanced by instituting the Strategy.
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 Strategy should outline how engagement with First Nations elders, leaders, and communities will occur and how First Nations peoples will be advanced by instituting the Strategy.

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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?
Currently, the NHAA are not 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?
Client experiences and outcomes are not to be compromised by the Strategy's approach to climate action. Therefore, consumer led solutions and lived experiences should be considered, when practicable. To ensure that all sources of emissions are captured, emissions data must be obtained from numerous sources not just those sources which currently report emissions. As stated above, a definition of the 'health system' is necessary as such clarity will assist to identify the exact emissions requiring measurement. Nevertheless, it is recommended to focus on all emissions with particular emphasis on scope two and three emissions (indirect emissions) within the broader context of health. Setting realistic goals should be considered by the Strategy. Renewable energy usage data may provide as valuable data to justify any decarbonisation efforts.

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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?
The Strategy recognises the urgency is taking action to reduce greenhouse gas emissions, and forms a solid starting point, yet fails to justify the inclusion of the proposed focus areas for emissions. Further, the Australian Health System considers food and plant-based medicines as pillars of health, and thus a significant contribution to the health system's carbon footprint; food/plant medicine growth, food/plant medicine production, and food/plant medicine waste is highly recommended for inclusion as a proposed area of focus. The implementation of decarbonisation approaches across sectors of the health system is another proposed focus area worthy of inclusion. Also, consider a transition to renewable energy sources for all health facilities.
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?
No further recommendations are considered within the scope of Naturopathy and Herbalism.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
No further recommendations are considered within the scope of Naturopathy and Herbalism.
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
No further recommendations are considered within the scope of Naturopathy and Herbalism.
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 further recommendations are considered within the scope of Naturopathy and Herbalism.
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?
No further recommendations are considered within the scope of Naturopathy and Herbalism.
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?

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The inclusion of preventive health and optimising models of care in the Strategy is supported. Considering the prevalence of non-communicable diseases [NCD's], the Strategy should address how prevention measures, keeping people healthy and avoiding disease onset, will combat NCDs exacerbated by climate change. The Strategy must also consider how it will assimilate and coordinate action across existing national strategies and other policy which impact health and climate outcomes. Opportunities should be explored by the Strategy to secure funding for health promotion and optimising models of care.
15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
The Strategy should incorporate a decarbonisation plan that guides private providers by outlining their opportunities and responsibilities to reduce emissions. Private providers, health executives, and board members must understand the role they can play to enable the Strategy and should be made aware of the potential for liability if failing to account for climate risks in strategic and operational plans.
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?
Immediate action informed upon best practice is endorsed.
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
No further recommendations are considered within the scope of Naturopathy and Herbalism.

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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?
Prioritize a strong support and inclusion of communities experiencing vulnerabilities.
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?
Support is advocated for the development of a National Health Vulnerability and Adaption Assessment and a National Health Adaption Plan. Consumer led solutions and lived experiences should be considered and implemented during development of the plan.

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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?
No further recommendations are considered within the scope of Naturopathy and Herbalism.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Immediate priority areas must consider the disruption and effects that operational changes may have on the health sector and how best to resource such changes. To effectively implement the Strategy through a Health in All Policies approach, adaption actions must be initiated through education and capacity building among the health workforce, health community members, and health policy makers. Priority should also be granted to support and resources for rural and remote health services.

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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?
The Strategy requires revision to address the health risks posed by climate change across all sectors of health. The overall focus of the Strategy should be amended toward reducing the current risks to population health from climate change. Please seek advice from health experts and industry consultants to assist in establishing regulatory frameworks for the assessment of health risks and impacts, to advice on appropriate solutions, and to monitor progress.
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 Strategy should seek to establish an overarching working group or National Committee that consists of experts representing the most relevant facets of health, climate science, and Government.

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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?
Enabler 1: Workforce, leadership, and training - Ensuring adequate support during the change process beyond training alone. Also, the Strategy must develop a contingency plan that will offer support in cases of workforce shortages in extreme climate events. To ensure workforce, leadership, and training spans all of the health sector, professional development programs regarding health and climate change may be instituted. **Enabler 2: Research** – Scan current research activities and then identify any gaps in the research so that key areas of climate and health research are identified as areas of investment and support. **Enabler 4: Collaboration –** Government investment is required to ensure effective interdisciplinary collaboration across the health sector; the health sector requires funding to make a commitment in responding to decarbonisation and climate strategies. **Recommendations:** Expand the enablers to also include a planning process which would address health and climate change governance, finance, and implementation.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
No further recommendations are considered within the scope of Naturopathy and Herbalism.

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NATIONAL HEALTH AND CLIMATE STRATEGY

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Respondent details

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What is your email address?
[redacted]
What is your organisation?
New England North West Health Ltd
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

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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?
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?
Scope 1 emissions associated with patient and visitor transport should be included. Scope 2 emissions should be included in the Strategy as burning of fossil fuels is the key driver of the climate crisis.

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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?
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?

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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?
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
Emissions reduction from food (in health settings where food is provided, e.g. hospitals and residential care facilities)

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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?
While the Australian government has committed to emissions reduction targets of 43% by 2030 and net zero by 2050, the National Health and Climate Strategy should aim higher and go faster in terms of emissions reductions. The Climate Council and the Climate and Health Alliance recommend reducing greenhouse gas emissions to 75% below 2005 levels by 2030 and aiming for net zero by 2035, in line with the science for what is needed to mitigate catastrophic climate change. Bioenzymes or kitchen enzymes can potentially contribute to reducing greenhouse gas emissions from the health system in several ways: Waste management: Bioenzymes can be used to accelerate the decomposition of organic waste, such as food scraps and other biodegradable materials, in healthcare facilities. By breaking down waste more efficiently, bioenzymes can help reduce the production of methane, a potent greenhouse gas that is released when organic matter decomposes in landfills. Cleaning and sanitation: Traditional cleaning agents and disinfectants used in healthcare settings may contain harmful chemicals that contribute to greenhouse gas emissions during production and use. Bioenzymes can serve as eco-friendly alternatives for cleaning and sanitation, reducing the carbon footprint associated with chemical-based products. Green Energy Production: Some bioenzymes have the potential to be utilised in bioenergy production, such as in biogas generation from organic waste. Biogas can be used as a renewable energy source, replacing fossil fuels and reducing greenhouse gas emissions.
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?
This Strategy should consider investing in 'green' public transport in Australia's rural and regional locations to allow these populations to access facilities that improve health outcomes (e.g. access to existing pools and sporting infrastructure) and prevent future burdens on the health system. Most public transport now is focused on routes to educational and retail locations.

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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?
Bioenzymes for Organic Waste: Bioenzymes can be utilised to accelerate the decomposition of non-hazardous organic waste, such as food scraps. By using bioenzymes in composting processes, healthcare facilities can divert these wastes from landfills, reducing methane emissions and producing nutrient-rich compost for landscaping or gardening purposes. Wastewater Treatment: Healthcare facilities produce wastewater that may contain traces of pharmaceuticals or chemicals. Bioenzymes can be employed in wastewater treatment processes to break down these compounds, ensuring that water discharged from the facility is less harmful to the environment.
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?
We support encouraging greater social prescribing and patient education for preventative lifestyle change. Social prescribing is an example of an evidence based approach to enhancing health and social outcomes in a community which is consistent with community resilience in disaster preparedness and recovery. We also recommend embodying messages around food sustainability in the next iteration of the Australian Dietary Guidelines
15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
Schemes for upgrading energy supply when health organisations are renting premises.

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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?

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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?
Food security and suitable housing.
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?

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

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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?
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?

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

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.

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

Respondent details

What is your name?
Australian Medical Association of Victoria
What is your email address?
president@amavic.com.au
What is your organisation?
AMA Victoria
Have you read and agreed to the Privacy Statement? Yes. (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?
On the opening page please indicate what the fundamental causes of climate change are, i.e. excessive consumption and population. Preventing further growth of these drivers is vital to maintain a healthy population and would align with health in all policies. **Measurement.** **1.** The **methods** of measurement of GHG emissions will be important. Measurement of direct healthcare energy (electricity and fossil gas) use, along with water and waste will be relatively simple, as will be obtaining the GHG emissions. Measurement of healthcare anaesthetic gases (including nitrous oxide) should also be straightforward. 2. Measurement not just of health system GHG emissions, but also other relevant environmental impacts such as water use, waste outputs, air pollutants, etc. 3. Measurement estimates and models of the beneficial effects of different types of improvements to healthcare's emissions, e.g. reducing obesity rates by 10% and the effects this would have on GHG emissions. Reducing hospital admissions and hospital builds by improving preventative and primary care delivery. **Mitigation. Carbon emission targets are required** to best mitigate and track improvements. Such targets must be science based. It is the role of healthcare professionals and scientists to advise governments at large of the importance of aiming for GHG targets that keep Australians safe and healthy below a temperature rise of 2ºC. **Health in all policies.** Explicitly stating the roles of First Nations peoples is welcomed. An Objective of the Strategy would be to inform the Federal Health Department, the whole Federal Government, and the whole nation, about **what decarbonisation aims, targets** and opportunities **are necessary** to avoid the dire health consequences of 2ºC warming, yet alone the Business As Usual current trajectory of >3ºC warming by 2100.

2. How could these principles be improved to better inform the objectives of the Strategy?
Indicating a strong **governance** framework. What are the roles and responsibilities of the National Climate Change, Sustainability and Health Unit, alongside the various state based similar sustainable healthcare units (NSW and WA currently)? How can these bodies collaborate to move Australian healthcare towards a low carbon, high value system? What role will each team have in encouraging other health focussed groups (e.g. private healthcare providers, hospitals in general, medical research organisations) to achieve net zero? The importance of data sharing cannot be over-emphasised. Tracking healthcare environmental sustainability data is feasible nationally, but requires careful collaboration and governance. Population health and prevention should include recognition of the importance of strengthening primary healthcare, which is the most efficient part of the healthcare system. Primary healthcare, particularly general practice, is approaching or at crisis point and this tips the healthcare system into greater inefficiencies with more hospital

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admissions and care that creates greater negative impacts on the environment and climate. Evidence-informed policy making indeed supports a focus on population health, prevention *and primary healthcare.*

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 (GHG) emissions lie within the purview of climate change since all cause climate change. Similarly, the Strategy must include all forms of GHG emissions. Scope 3 (indirect) GHGs are particularly important for healthcare since repeated environmentally-extended input-output (EEIO) whole of healthcare studies have shown that GHG emissions from health procurement form the majority of GHGs.

Further, in healthcare there may be complex interplay between different types of GHG emissions scopes. For example, it has been found repeatedly that adopting reusable items in lieu of single use medical equipment lowers the associated GHGs, particularly when the hospital's electricity source transitions to renewables. Yet, were one only to measure hospital Scope 1 GHG emissions this will increase with the use of reusable items as electric steam sterilisers would be more frequently in action. The reduction in Scope 3 GHG emissions due to lower single use equipment purchasing would not be captured in only Scope 1 and 2 GHG measurements.

Importantly, measurement of Scope 1 and 2 emissions already exists in most Australian jurisdictions (as noted on page 11 of the Strategy document). Measuring Scope 3 emissions carefully via process based life cycle assessment (LCA) as indicated in answers to questions 7 and 8, will be vital.

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?

AMA Victoria recommends deep engagement with organisations such as the National Aboriginal Community Controlled Health Organisation (NACCHO) and the Australian Indigenous Doctors' Association (AIDA) in this matter. AMA Victoria commends the *Strategy's* recognition of the importance of the Priority Reforms of the National Agreement on Closing the Gap, and in embedding the National Aboriginal Health Plan 2021-2031, plus First Nationals leadership and cultural knowledge into the *Strategy*.

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?

As above (answer to 4).

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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?
Thank you for noting the current national GHG reporting schemes, including National Greenhouse and Energy Reporting Scheme (on page 11 of the Strategy). We found the Scope 2 emissions calculations on page 11 challenging to understand. Particularly important will be how to harmonise such calculations with those of prior work (e.g. by Malik et al, https://pubmed.ncbi.nlm.nih.gov/29615206/) in the future. Avoidance of an over reliance upon Environmentally Extended (Economic) Input Output (EEIO) studies to guide local decision making (including by individual and groups of clinicians) is important. EEIO studies are useful for setting the scene and providing a broad overview of the healthcare sector's GHG emissions. EEIO studies aren't nuanced enough to guide individual clinician's and groups of clinicians' choices towards processes and procedures that result in fewer GHG emissions. At Western Health, Melbourne and in association with the Universities of Melbourne and Sydney medical practitioners have undertaken several process based life cycle assessments (LCAs) of common tests and procedures. Examples include common pathology tests (e.g. McAlister, MJA, 2020, https://pubmed.ncbi.nlm.nih.gov/33098108/), and computerised tomography (CT), and magnetic resonance imaging (MRI) scans (McAlister et al, 2022, https://pubmed.ncbi.nlm.nih.gov/35538935/). These studies are important for setting the foundation for healthcare to provide a more nuanced and informed healthcare GHG emissions profile. But such studies are only the beginning of the journey towards an informed, research and policy agenda towards low carbon healthcare.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
On page 11 of the *Strategy*, one notes the Dept of Climate Change, Energy, the Environment and Water's internal analysis of Australia's National Greenhouse Accounts (Ref. 14). The emissions are noted to be 90.5 Mt GHG emissions vs. approximately 35 Mt GHGs from Malik's 2018 Lancet paper. It is unclear why the results are so disparate. **1.** The **methods** of measurement of GHG emissions will be important. Measurement of direct healthcare energy (electricity and fossil gas) use, along with water and waste will be relatively simple, as will be obtaining the GHG emissions. We are aware of the NGERs and Australia's greenhouse accounts which will assist data gathering of healthcare's direct GHG emissions. Measurement of healthcare anaesthetic gases (including nitrous oxide) should also be straightforward. Measurement, however, of the carbon footprint of pharmaceuticals and medical equipment is uncertain and rudimentary currently. There are two main groups of life cycle assessments (LCAs) relevant to healthcare; environmentally extended input output (EEIO) studies, and process based LCAs. EEIO studies link a financial value with GHG emissions (kg CO2-e per dollar). They are useful for large, healthcare sector wide estimates of GHG emissions. Process based LCAs require careful analyses of the components, their masses, place of manufacture, and energy sources used to deliver the final product. It is possible to spend less time and money completing an EEIO study of the entire Australian healthcare system than that required to study the GHGs associated with the treatment of 10 patients with septic shock in one hospital Intensive Care Unit. Why undertake process based LCAs then? Because

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they are a reliable method to make comparisons between different clinical pathways; information which is becoming increasingly vital for clinicians.

It is vital to move beyond EEIO studies. The problem with the EEIO approach is that it assumes that there is a linear relationship between financial and environmental costs. See the Discussion in McGain et al's article on the treatment of patients with septic shock: https://pubmed.ncbi.nlm.nih.gov/30482138/

"So, a product that costs ten times as much has ten-fold the environmental footprint. Whilst this may be true for many publicly available products, in health care, environmental reporting is opaque. Although pharmaceuticals form a considerable part of health care's carbon footprint, there are few publicly available studies of individual drugs. Further, it is unlikely that an expensive, patented drug that costs ten-fold a non-patented drug has ten-fold the GHG emissions, or that GHG emissions would really fall ten-fold when no longer patented."

Although we have much process LCA data still lacking particularly for pharmaceuticals and medical equipment, we are gradually obtaining more life cycle data. We now have good process LCA data about common pathology and radiology tests. A vital role of the National Health, Sustainability and Climate Unit will be to assist universities and associated state government sustainability units to develop a robust life cycle inventory of common medical equipment etc.

2. Measurement not just of health system GHG emissions, but also other relevant environmental impacts such as water use, waste outputs, air pollutants, etc.

3. Measurement estimates and models of the beneficial effects of different types of improvements to healthcare's emissions, e.g. reducing obesity rates by 10% and the effects this would have on GHG emissions.

Mitigation. Carbon emission targets are required to best mitigate and track improvements. Such targets must be science based. It is the role of healthcare institutions, medical practitioners and scientists to advise governments at large of the importance of aiming for GHG targets that keep Australians safe and healthy below a temperature rise of 2ºC.

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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?
The focus areas are reasonable, but please rearrange the order of the areas of focus, placing 'Prevention and optimising models of care' first. Avoiding the building of further hospitals through optimising alternative models of care – and particularly recognising and addressing the growing crisis in Australian primary healthcare - will be vital. As mentioned in earlier answers, the greatest effort should be placed upon changing clinician behaviour and the system of healthcare in Australia to be high value, low carbon care: i.e. health promotion/disease prevention, reducing low value care, keeping people at home and away from hospitals. Primary care is the most efficient part of the healthcare system but there is a growing crisis in primary care in Australia. Workforce shortages, inequitable access and poor access to primary care is shifting healthcare to less efficient parts of the healthcare system, and resulting in individuals becoming sicker and requiring healthcare that is more expensive and has a greater negative environmental impact. Addressing the crisis in primary care, facilitating care close to home, bolstering preventative healthcare and reducing low value care will provide more efficient care and reduce GHG emissions. This is not to say that efforts to act upon reducing the GHGs stemming from the 'Built environment' or 'Medicines and gases' aren't important, just that the order and emphasis should be upon models of care. If there is less demand for hospital beds, then hospital builds can be minimised. Reducing demand for hospital beds through more effective methods of healthcare delivery is better than focusing on methods of building hospitals that have lower negative environmental impact. Further, engagement of clinicians to reduce low value care is likely to flow into interest in other clinician efforts to head to low carbon healthcare (e.g. travel and transport, medicines and gases).
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?
Existing policies such as the move towards 100% renewable electricity in Tasmania, the A.C.T., S.A., and even public hospitals in Victoria are to be lauded. Of great importance also is the need to reduce energy use through energy efficiency measures such as hospital zoning, operating theatre setbacks out-of-hours etc. Also vital is the necessity to get off gas as has been shown by new builds underway and planned in the A.C.T. (Canberra Hospital), S.A. (Women's and Children's), and Victoria (Melton) which will be fully electrified builds with no gas for heating nor hot water. That is, no new gas. And once again, avoiding the need to keep building hospitals is important (the drive to build hospitals of course stems from a growing and aging population with the dominant medical paradigm to always be doing more).
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
Encourage all new and existing hospitals to have excellent (and free for patients' families and friends) services to public transport.

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Encourage all new and existing hospitals to offer shuttle transport to public transport hubs if these are not within safe walking distance. Facilitate 'safe walking distance' measures (well lit, adequate security) to public transportation for health service employees.
Recognise the challenges of shift work and public transportation timing, and work with staff, public transportation services and those who roster shift workers to facilitate public transportation use, car pooling and shared transportation services.
Provide electric vehicle charging options at hospitals to facilitate EV use.
Provide salary packaging or other financial incentives for electric vehicle purchases.
Consider procurement of EVs wherever vehicles are purchased within healthcare.
Increase and improve the reach of excellent virtual telehealth meetings for staff, and patients and their families/friends. Consider the role of artificial intelligence to augment this reach (automated check ins with patients/families/friends).
Facilitate outreach services so that specialists travel to regional, rural and remote areas to see patients.
Facilitate case conferences via videoconsultation between general practitioners and hospital specialists (as is done at Northern Hospital in Victoria) to facilitate care close to home.
Improve public hospital communication and links with general practitioners so that patients can minimise their travel to large hospital centres by having care through their local general practice.
Improve access to and support for primary healthcare services to facilitate care close to home.

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

(i) Emulate the efforts of the N.H.S. Greening Healthcare (https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/). Incorporate purchasing preferences for robust, reusable, medical devices wherever possible.

(ii) Mandate all medical device suppliers to explain WHY their devices aren't reusable and what efforts they have taken and will take to make their devices reusable in the future. Collaborate with the medical services advisory committee (http://www.msac.gov.au/) and the TGA to initially encourage then mandate that all device manufacturers incorporate life cycle assessments into their products.

(iii) Similarly, coordinate with the Pharmaceutical Benefits Scheme (PBS) to ensure that all new listed drugs have life cycle assessments (environmental footprinting studies) undertaken as part of business as usual. Thus, knowledge of a pharmaceuticals' environmental footprint will complement relevant economic evaluations.

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

(i) Importantly, the section on Medicines and gases on page 20 only includes anaesthetic drugs and inhalers. This section could include all Medicines, leaving Section 2.3 to all other Procurement.

(ii) Encourage all new hospitals to avoid the installation of piped nitrous oxide as is being promulgated from 2023 by the Australian Health Facility Guidelines (https://aushfg-prod-com-au.s3.amazonaws.com/download/RDS_ORGN_5_0.pdf)

(iii) 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

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labour analgesic. (https://www.anzca.edu.au/resources/media-releases/2022-media-releases/nitrous-oxide-australian-anaesthesia-2022.pdf) (iv) Importantly the production of oxygen has an environmental footprint. A more scientifically sound or optimised approach to the use of oxygen in healthcare would aid in reducing associated GHG emissions.
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?
(i) Whilst it is important to initially 'Encourage' opportunities to reduce waste, we require Mandatory Targets to truly approach net zero GHG emissions from healthcare. (ii) 2.5.2. Remove 'sustainable single-use items' as this is certainly currently an oxymoron. There is nothing sustainable about single-use medical equipment, only reusable equipment is applicable. (iii) Consider models of care that increase waste, but which do not have a clear evidence base. For example, in other advanced healthcare systems minor surgical procedures such as minor skin procedures and simple hand surgery (including carpal tunnel surgery, trigger finger surgery) are performed under local anaesthetic in a minor procedures room. In Australia these are commonly performed in hospital operating theatres, with greater cost and greater use of equipment including disposable drapes and other items that contribute to medical waste. Reasons for this continuing include historical factors (i.e. resistance to change) and private health insurance that for legislative reasons does not provide rebates to consumers or proceduralists for procedures performed out of hospital, even if these can be safely and appropriately provided outside of an inpatient hospital setting.
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?
(i) Primordial as in Primordial prevention is more commonly used in discussions about life's evolution than in healthcare. I would suggest replacing with Health Promotion. (ii) For Health Promotion the importance of Health in All Policies cannot be overstated. Initiatives to reduce sugar and fat intakes via taxes, and increase fruit and vegetable consumption via subsidies are vital. (iii) Supporting public health initiatives should be in first place (2.6.1). The importance of improving healthcare information systems (interoperability) must be noted in this section, as unnecessary medical tests can be performed not because clinicians and patients desire that they be undertaken, but because there is poor, limited or no access to test results for tests that have been already performed, due to silos in healthcare and barriers to healthcare information access. (iv) Specific and explicit mention of avoiding low value care is useful. See Barratt et al https://pubmed.ncbi.nlm.nih.gov/34699070/.
15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
(i) Private providers of healthcare sit under the dominion of the Australian Federal Health Department with most (approx. 75%) of funding for G.P.s and private practitioners arising from Medicare). (ii) Providing financial incentives to avoid low value (and thus by definition high carbon) healthcare and encourage high value healthcare via MBS billing is feasible.

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(iii) Particularly for private hospitals encourage they mandate GHG emission targets linked to funding.

(iv) Where public in private care is procured, as is commonly done in Victoria to assist with elective surgery access, preferentially procure care from private providers who have demonstrated commitment to emissions reduction efforts, and are demonstrating best practice.

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?

16. a.
(i) Efforts to reduce healthcare's GHG emissions should be undertaken by everyone associated with healthcare, everywhere, and across everything related to healthcare. There is great urgency tied to getting to net zero GHG emissions.

(ii) Nevertheless, there are some quick wins that will begin healthcare's journey to low carbon, though only be the start of the journey. For example, cessation of the use of desflurane everywhere, and nitrous oxide where practicable, along with dramatic reductions in the use of propellant based metered dose inhalers, are relatively quick wins.

(iii) Electrifying everything, and associated with this: *getting off gas* is important; i.e. no new gas builds, and gradual removal of gas fired boiler heaters in hospitals is very helpful.

(iv) The statement that it may be 'harder to reduce emissions from these areas' (with high emissions) is probably correct given that reducing for example Australia's obesity and diabetes rates is going to be challenging. Such efforts must be redoubled though if we are to be successful in our drive to low carbon healthcare.

16. b.
The three sources of emissions of greatest importance are:
(i) Models of care (and avoiding new hospital builds) (known from prior EEIO studies, e.g. Malik, 2018).
(ii) Building energy and water use
(iii) Procurement of medical devices and instruments.

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

(i) Ban desflurane anaesthetic use by 2027. Scotland has:
https://www.bbc.com/news/health-64347191

(ii) No new nitrous oxide piping in most hospitals.

(iii) Aim to reduce propellant based inhalers to <10% total inhaler sales by 2027 (replace with dry powder inhalers).

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(iv) Provide research funding to undertake a comprehensive process based life cycle inventory (stocktake) of commonly used reusable and single use medical equipment and emulate this process for pharmaceuticals.

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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?
(i) Collaborate with the experts (i.e. Defence and Emergency Services, First Nations, National Parks and Wildlife et al) to prioritise the best methods to adapt healthcare to the new and changing realities of climate change. (ii) Particularly with First Nations people, plan to avoid building new hospitals on land precarious to climate change. (iii) Work with people at risk (First Nations, low socioeconomic status) to reduce the risk of morbidity and mortality from extreme weather (heat, fires, floods, storms etc.). Include Defence and Emergency Services. Establish clear communication and mitigation strategies regarding climate related events such as Thunderstorm Asthma, Bushfires and Floods. These communication and mitigation strategies should aim to prevent and minimise healthcare impacts, particularly on vulnerable communities and populations. (iv) It should always be stressed that Mitigation is far more important than Adaptation.
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?
19. Yes, the Australian government should develop a Vulnerability and Adaptation Assessment. Along with an Adaptation Plan. Please note the role of NCCARF: https://nccarf.edu.au/ which was disbanded in 2019. Please focus on Mitigation. Adaptation is useful also though. For example, a clearly advertised 'adapted' hospital can highlight to all that climate change is real, and that we are changing our behaviour and what/where we build, which can encourage greater efforts to mitigate our GHG emissions.

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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?
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Avoid building all new healthcare establishments upon land deemed likely to be damaged by the effects of climate change. Building on flood prone areas for example is highly wasteful financially and environmentally, and incongruous.

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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?
(i) A health in all policies (HIAPs) approach will emphasize the importance of upstream influences of healthcare's GHG emissions. (ii) A HIAP framework also grounds health within humanity's reality. As acknowledged in the draft *Strategy* document, areas such as Transport, Food, Agriculture and Trade, and Housing impact on the health of Australians. So do information technology areas that reduce silos in our healthcare system and facilitate information exchange, and allow care close to home. The National Disability Insurance Scheme is inexplicably linked with the health and wellbeing of Australians and does influence length of hospital stay and bed access. As a major provider of care to Australians policies that improve the environmental impact of care providers would be an important area for consideration.
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?
(iii) Publicly signed support from other Federal agencies (e.g. Environment, Climate Change, Defence, Treasury) for the National Climate, Sustainability and Health Unit will be advantageous and encourage the concept of Health in All Policies.

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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?
(i) Begin to measure and track healthcare's own GHG emissions (discuss with teams from the University of Melbourne- McGain/McAlister and University of Sydney- Prof.s Barratt, Bell). (ii) Engaging with clinicians is integral. This could be modelled on the roles of the clinical leads of the NSW Health Climate and Risk Unit (discuss with Dr. Kate Charlesworth). (ii) Work with the DEA (Doctors for the Environment) and Climate and Health Alliance (CAHA) to discover how to engage with frontline clinicians already working in the field (discuss with Prof. E. Kayak and Dr. B. Dunne). (iii) Expansion with time along the lines of the UK NHS Greening Healthcare team (discuss with Dr. Nick Watts).
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
a. See above. Clinician engagement through the DEA, medical and other colleges (e.g. RACP, ANZCA, RACGP, CICM, RACS, ANMF, AMA et al) has been in place for years already. b. The Strategy can systematize the aforementioned to make it a nationwide objective to make low carbon Australian healthcare a reality.

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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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Consolidated consultation paper questions

Please add your answers in the column above.

		SWSLHD Comments
1	How could these objectives be improved to better support the vision of the Strategy?	Objectives generally well defined and comprehensive **1-MEASUREMENT:** Track and investigate all climate related presentations to the health systems. This will require changing to coding systems to track environmental considerations, or rigorous data mining after the event. See further detail in 24-2 research, re data mining for climate related events by SWSLHD **4- HEALTH IN ALL POLICIES** Maximise the synergies between effective climate policies and public health policy by mapping the interdependencies in the system to collectively lessen the impact of climate change on all the determinants of health and wellbeing. --- The Strategy needs to be based on agreed indicators and measures that track change in the relationship between climate and health - Indicators developed by researchers and organisations within Australia and internationally and have been extracted from the Victorian Government's Tackling climate change and its impacts on health through municipal public health and wellbeing planning. They are typically grouped into a number of categories or domains, with vulnerability of exposed populations informed by two main factors: sensitivity – the degree to which populations are affected by climate variability or change; and adaptive capacity – the capability of populations to adjust to change, to minimise harm, to act on opportunities or to cope with the consequences.
2	How could these principles be improved to better inform the objectives of the Strategy?	Commend the Strategy principles taking a holistic and equity-based perspective. Would like to see the fostering of innovation in the strategy. A key principle which should be distinct from partnership is financial support. Funding is a critical component of moving forward and can be a rate-limiting barrier to organisations at all levels. Would like to see a balance between a unified overarching strategy and the ability of the strategy to be refined and adapted to meet the distinct needs of each different health system of the states and territories. --- 5) "climate change must be underpinned by a public health perspective" - needs to be stronger in message and call to action.

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		E.g. action to mitigate and adapt to climate change must be informed by evidence that describes the catastrophic impact on human health. 6. "All levels of government need to work closely with each other" - what does 'working closely' actually mean? Suggest this principle goes further such as: "All levels of government, across portfolios, need to agree a charter for pooling resources and expertise to multi-solve and adopt a systems approach." --- Adopting a 'Health and health equity lens' will facilitate decision making. For example a health lens in land use planning and asset management approach will strengthen understanding and action. The development of a network of collaborative working alliances, use of social and health impact assessments in city wide upgrades will enhance the quality and accessibility of community infrastructure, open spaces, and community corridors. WSHA is a best-practice example of this approach
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 Fugitive emissions (Hydrochlorofluorocarbon -HCFC, and Hydrofluorocarbon-HFC). Fugitive emissions from chillers and packaged air conditioning units need to be included. SWSLHD has been replacing air conditioning unit with the low GHG synthetic gas HFO (Hydroflouroolefin) - 12 have been changed already on (free) ARRP funding - and the rest will change based on the replacement schedule out to 2036 when the HFC phasedown ends. Prepackaged air conditioning (PAC) units seem to only have HFC as an option currently, so we have recently installed new PACS with HFC gas as there was no alternative. This needs to be designed or regulated out.
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?	Connecting with Country framework: the concept of creating a built environment that promotes environmental sustainability, climate change action, and healthy communities is not a new one. First Nations peoples around the world have long understood the importance of living in balance with the natural world and have developed traditional practices and knowledge to support this way of life. Connecting with Country framework shares the stories and experiences of Aboriginal communities, cultural advisers and built environment professionals who have been at the forefront of integrating traditional knowledge with modern technologies and approaches to create innovative solutions to the complex challenges we face.
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	First Nations people will be best placed to lead these forums and facilitate the co-design with (not for) their communities. First Nations leadership in collaboration with policy makers and decision makers for meaningful engagement, inclusive governance, and effective policy development. Long-term relationship building and working hand in hand in a collaborative way will foster positive change.

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	leadership are embedded in the Strategy?	Relationships with Aboriginal elders and work with First Nations organisations to identify how climate health will impact Aboriginal people and identify culturally safe practices etc. to address discrimination and increase inclusion. Care should be taken to engage First Nations people where their input is valued and necessary and not on those issues where their input will not be valued. Their expertise will be especially of value in aspects of mitigation and adaption.
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?	**SWSLHD ANNUAL CARBON FOOTPRINT REPORT** SWSLHD undertakes an annual carbon footprint, scope 1, 2 and minimal scope 3. Scope 1 include fuel use, gas use , medical gases (nitrous and anaesthesia gases) and scope 3 is waste, water and the scope 3 emissions related to scope 1,2 (chiller fugitive emission is not included due to lack of data and noted so in the carbon report) **SWSLHD ANNUAL ENVIRONMENTAL SUSTAINABILITY REPORTS** SWSLHD undertakes an annual environmental sustainability report, celebrating local champions and presenting resource data. **GREP REPORT** SWSLHD undertake mandatory NSW Government Resource Efficiency Reporting and provides an annual report. **CONDITIONS OF SUBSIDY 06** Mandated In 22/23, SWSLHD reports energy use reduction to NSW Health under the Conditions of Subsidy 06. Target 1.5% reduction from previous year **SERVICE AGREEMENTS** IN 23/24, MOH 2023-24 Service Agreements and Performance Agreements now have KPI and targets for Desflurane, Nitrous Oxide Energy and fleet reduction. Some highlights are included below. - To reduce use of Desflurane to less than 4% of fluorinated anaesthetic gas vials, thereby reducing carbon emissions from this potent volatile anaesthetic gas -Nitrous Oxide Reduction: To reduce direct emissions attributed to nitrous oxide use in ED, ICU, Oral Health, Paediatrics, Theatres and Birthing units (CO_2e reduced 5%). -Waste Streams - Reduce the amount of waste disposed to landfill by increasing the amount of waste diverted to non-landfill disposal by a minimum of 5% per annum compared to the previous reporting period. -Energy Use Avoided Through Energy Efficiency and Renewable Energy Project Implementation (%), same as the Condition of Subsidy target (nominally 1.5% reduction as per 22/23 target)

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		NABERS NABERS for hospitals is a health-specific scheme other than those mentioned which measures and assesses emissions/energy consumption. One issue with national system is the definition of terms used. Vic Health were used to refine NABERS hospitals, but they use a different definition of SEPARATION then NSW health, which can provide very different results.
7	What additional data and information is required to support targeted emissions reduction efforts within health and aged care?	**TECHNICAL ISSUE** There is no standard greenhouse account factors for clinical waste, (1-shredded+sterilised+landfill, or 2-incinerated) so SWSLHD waste emissions are under- reported (and noted as such in the carbon footprint report) Difficult areas for health include estimating the embedded carbon in the supply chain as we generally do not ask it of our suppliers in tenders.
8	What do you think of these proposed focus areas for emissions reduction? Should anything else be included?	Where does workforce fit into this piece? What guidance will be provided in relation to ensuring a balance of a sufficient workforce to meet community health care needs whilst also remembering that a higher workforce will result in greater generation of emissions --- Prevention and optimising models of care poses substantial challenges with setting baselines. --- SWSLHD Sustainability Manager recently took part in a survey by UTS: Identification of core content for teaching climate change and sustainability in undergraduate nursing and midwifery programs. This survey was asking what midwifes and nurses should know about climate change, the health impacts and the depth of knowledge. --- Supply chain needs to include the supply chain packaging as well as transport, see below, also repeated in 11. 1) Product packaging is a major source of waste for Health facilities. There needs to be urgent action on making more recyclable packaging. The Australian Packaging Covenant Organisation (APCO) is unlikely to meet its targets, the first of which is to "100% of packaging being reusable, recyclable or compostable by 2025". 2) There are existing take back and collection programs such as " Vinyl Council of Australia theatre plastic program which recycled Baxter Healthcare PVC IV bags and masks, and Fresenius Kabi collect and recycle IV bags. Focusing on take back programs or levers to influence changes towards more recyclable material or take back programs is required to minimise waste. This needs to be supported through the tender process or by regulation.

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		3) Example, Polystyrene, used in pharmacy delivery container (eskies) are single use only are a prime candidate for a collection, clean and reuse as they are uncontaminated. The other option is to be delivered with a refrigerated truck delivery. The cold gel packs are also a prime candidate for return and reuse. 4) If a product and /or packaging is sold as recyclable, it may not be recyclable where the product is used, particularly for regional areas. "Recyclable" is more theoretical than practical in some areas, State wide contracts should asked, "if the ability to recycle the product is part of the tender selection criteria, they need to specify recyclers where their product/packaging is recyclable"
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?	**AUSHFG** The Australasian Health Facilities Guidelines (AusHFG) schedule of accommodation provides very specific advice on the number and size of rooms, such as dock space and waste or utility rooms, based on bed numbers. This is normally espoused as a maximum standard, not a minimum standard and it can be difficult to get a higher standard / floor space etc. Utility rooms , e.g., only include space for general waste and clinical waste and sharps bins for all 3 size (10,12 and 14m2) . However, they do not account for the multiple recycling streams - Kimguard, paper/cardboard, LPDE, PVC, Return and Earn bottles, comingled, compostable, reusable, or take back streams - that are possible. Same with the dock space, it does not account for the onsite processing and storage requirements to allow product recycling, i.e., balers and baled product storage, or additional compactors, and reduce traffic. **RETROFITTING HOSPITALs** This section does not emphasise retrofitting existing hospitals. Hospitals should be aiming to operate at net zero. New hospitals need to be built to higher standards to reduce longer term operational costs. This is at odds with how we have historically currently built hospitals – build cheap, and pay the price afterwards in high operational costs. There is almost certainly big efficiency gains to be made by retrofitting existing hospitals . SWSLHD are planning in a program in 2024 to retrofit the façade of some hospitals to reduce energy cost, shades, window film etc
10	Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?	**E-VEHICLES** SWSLHD is already implementing the NSW E vehicle policy and will have 50% of all car 3e-vehilce by 2-26 and 100% e-vehicle by 2030. Patient travel – the hardest – here the focus should be on model of care and minimising unnecessary patient transport. **TELEHEALTH**

		One suggestion is to improve telehealth by moving to video conferencing – seeing your patient in true colour lighting - with soundproof audio-visual booths installed at community hubs/pop health sites etc to reduce travel and meet the needs of patients who do not or cannot use computers. Even more so with the potential to dial in an interpreter or have subtitles/ hearing aid loops..
11	Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?	**PRODUCT PACKAGING** Product packaging is a major source of waste for Health facilities. There needs to be urgent action on making more recyclable packaging. The Australian Packaging Covenant Organisation (APCO) is unlikely to meet its targets, the first of which is to "100% of packaging being reusable, recyclable or compostable by 2025". There are existing take back and collection programs such as "Vinyl Council of Australia theatre plastic program which recycled Baxter Healthcare PVC IV bags and masks, and Fresenius Kabi collect and recycle IV bags. Focusing on take back programs or levers to influence changes towards more recyclable material or take back programs is required to minimise waste. This needs to be supported through the tender process or by regulation. **POLYSTYRENE,** Example, Polystyrene, used in pharmacy delivery container (eskies) are single use only are a prime candidate for a collection, clean and reuse as they are uncontaminated. The other option is to be delivered with a refrigerated truck delivery. The cold gel packs are also a prime candidate for return and reuse. **IS IT REALLY RECYCLABLE?** Another issue is if a product and /or packaging is sold as recyclable, it may not be recyclable where the product is used, particularly for regional areas. "Recyclable" is more theoretical than practical in some areas, Statewide contracts should be asked, if the ability to recycle the product is part of the tender selection criteria, they need to specify recyclers where their product/packaging is recyclable.
12	Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?	**GUIDANCE and SUPPORT** SWSLHD is already working with one the MOH Net ZER Leads for Anaesthesiology to reduce medical gas use -desflurane and sevoflurane. We have had great success, with one our smaller hospital (Bankstown-Lidcombe) not ordering Desflurane since Oct 2022. You can read more about it at in his Australian and New Zealand College of Anaesthetists (ANZCA) & Faculty of Pain Medicine AUTUMN 2023 bulletin, ANZCA-Bulletin-Autumn-2023 page 60 **MANDATED SHORT TERM TARGETS** IN 23/24, MOH 2023-24 Service Agreements and Performance Agreements now have KPI and targets for Desflurane, Nitrous Oxide Energy and fleet reduction. Some highlights are included below.

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		- To reduce use of Desflurane to less than 4% of fluorinated anaesthetic gas vials, thereby reducing carbon emissions from this potent volatile anaesthetic gas -Nitrous Oxide Reduction: To reduce direct emissions attributed to nitrous oxide use in ED, ICU, Oral Health, Paediatrics, Theatres and Birthing units (CO2e reduced 5%).
13	Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?	**2.5.1 EQUIPMENT RE-USE, RECYCLING AND REPROCESSING**. There needs to be a simple way to encourage assets sharing within districts and to charities. SWSLHD has been repurposing internal assets and streamlining medical donations to external charities through the use of WARPIT, an E-bay style websites, used extensively by UK NHS. In the last 2 years we have saved $54,000 inhouse and given $217,000 of assets (purchase price, actual value zero) to charities. This has been a 4-month payback of a $8000 a year license. The ability to easily share unrequired assets within the district and to charities (mainly Rotary HEERA) has made asset reuse easy. **2.5.2. INNOVATION.** SWSLHD agree with implementing more ways to encourage innovation, but they do not need to be expensive or limited to university and manufacturers. SWSLHD have a project currently underway ($30k) to replace a single use plastic Snorkel (invasive instrument to track patient breathing in Thoracic Radiotherapy) with a custom-built anthropomorphic test phantom to non-invasively track patient breathing. This pilot is being down in-house, with a keen team of JMO and interns and homemade 3D printed designs. **2.5.3. PAPER REDUCTION** Reducing paper use is not only a district issues, but the system needs to holistically look at what the requirements are from our up and down stream customers and government end-users, some who insist on having paper faxed to them, or multiple print copes. SWSLHD has a project to reduce and eliminate where possible paper use. The initial survey (july2023) is asking why people are printing Ie. Work practices, legislation etc. Survey results due Aug 2023. 2.5.4 Misuse and overuse of high-emissions clinical waste disposal. The current NSW Clinical and Related Waste matters guideline states (2.3, table 1) clinical waste is “Bulk *blood or other body fluids (or body substances) AND Material and equipment visibly stained by blood or body fluids (includes incontinence pads and disposable nappies that come from an infectious patient*)” But is not clear on which infection, or which body fluid. The guideline needs to have clearer definitions. SWSLHD has developed a clinical waste segregation education pack with District Infection Control refining the description “infected body fluid” to “faeces and urine contaminated products from a patient with Clostridium difficile (C-diff) or Gastroenteritis), in August 2023, which should reduce clinical waste substantially and save up to $240,000/year.

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?	This area is critical to an overall reduction in healthcare emissions. I would recommend that the Strategy lean into the holistic approach detailed in earlier sections and encourage a whole-of-government approach. Social determinants of health need to be measured and included for health to be able to identify appropriate opportunities to reduce emissions. **MODELS OF CARE** There is probably more scope for emissions reduction in shifting models of care and reorienting towards primary care and care that is closer to a person's home. At some stage the Commonwealth and States may have to grasp the nettle of low value care for which there is a limited evidence base. For example, various ENT procedures, cosmetic procedures. Some public health mass screening such as breast screening generates a lot of patient activity. More attention may need to be paid to different models of care that use mammography less frequently and use ultrasound more commonly. **INVESTMENT in SOCIAL DETERMINANT OF HEALTH** Greater investment in a public health approach (that addresses the determinants of health across sectors and within the health sector) is urgently required. Public or population health is the point in the health system where connections are made across sectors and with communities. **2.6.1. ENCOURAGE GREATER SOCIAL PRESCRIBING AND PATIENT EDUCATION FOR PREVENTIVE LIFESTYLE CHANGE** The evidence for the effectiveness of social prescribing is mixed. As a way to modify the determinants of chronic disease and increase health enabling behaviours social prescription is still very limited (see Htun, H 2022 (https://pubmed.ncbi.nlm.nih.gov/36813546/) However the UK Health Connection Mendip mass social prescription program saw a 14% reduction in emergency department presentations in the first 3 year. Their website alone (Home - Health Connections Mendip) is worth pursuing for a district, giving a single site for information on all available local area's programs. **TRANSPORT PLANNING** Consider innovative service delivery models for mainstreaming public health outcomes into the core business of local urban and transport planning systems (such as being implemented in South Western Sydney Local Health District through the Healthy Places program). Healthy urban planners & designers are jointly appointed between the LHD and council. These partnership positions are better placed to mitigate and plan for the

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		health implications of climate change and decision making, policy development and service delivery that will result in well-designed adaptation measures that can prevent some health impacts of climate change at local community level.
15	What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?	This Strategy should be distributed for consultation wider than simply public and private healthcare providers. The community will need to be consulted as community engagement will be critical to any initiatives put in place. The most appropriate method of engagement would be a frank and open consultation process. For engagement to be effective, there will need to be an incentivisation process. Regulate private providers publish carbon accounts to get licensed.
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) are the highest priorities for action?	a) Assuming that the Strategy will provide a staged approach (as generated from an evidence-based investigation) which will cover some of the lower emission easily reduced areas first on conjunction with planning/research/piloting of innovations or initiatives to target some of the higher emission more complex areas to address b) Prevention and optimising models of care will be critical as its an upstream lever and will have downstream impacts if it can be appropriately addressed
17	What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?	Noting that any 'quick wins' will need to be supported by funding for implementation, NSW Health is already in the process of electrifying the fleet, includes ecologically sustainable development in building design, is transitioning to alternative fuel and energy systems **MONEY.** More funding i.e., Asset Refurbishment and Replacement Program (ARRP) to replace old chillers, more money to install more solar panels, more e-cars, e-chargers, more engineers/consultants to roll out contracts and efficiency programs. **BUY GREEN ENERGY**

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		Converting all or part of health to purchased renewable energy is a very quick win. Buying green energy might be cost effective when considered against the expenditure of thousands of hours of engineering, admin, clinical staff and procurement hours duplicated across multiple districts to gain the same emissions reduction result.
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?	**LOCATION, LOCATION, LOCATION** All these items are important, but the risk depends on the location. Any methodology to prioritise health impacts needs to understand that negative health outcomes such as disease vectors, climate effects, and mental health drivers are very specific to the location and population. Even within our district we have a wide variability of climate condition and population. A comprehensive risk assessment needs to be undertaken to understand the risks, their impact and develop an evidence base. Community will also need to be consulted to ensure that a balance is created between highest risks and highest perceived risks. **HIGH RISK AREAS** Priority needs to be given to those LGAs who have high risk vulnerability scores calculated by liveability tools such as available through the Australian Urban Observatory. In contexts like NSW, legislation and policy governing land use planning is inadequate for addressing climate change. The current NSW Environmental Planning and Assessment Act places downward pressure to create developments that do not take into account environmental sustainability or cumulative impacts across developments – which health and climate change impacts are essentially cumulative and cannot be assessed on a development-by-development basis. Strategic planning has been depowered in favour of environmental assessments that tend to facilitate polluting developments (roads, coalmines, hospitals). The main challenge for such legislation is to shift to support decisions based on evidence of their cumulative benefit or impact. **GROWTH AREAS AND REDEVELOPMENT** Growth Areas undergoing rapid development need to have enforceable controls in place for mitigation and adaptation to climate health. Developers will need to comply with these controls to create a climate-resilient built environment through updated urban adaptation plans and building standards, and retrofitting of existing estates.
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	**LOCATION, LOCATION, LOCATION** A National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan needs to understand that negative health outcomes such as disease vectors, climate effects, and mental health drivers are very specific to the location and population. The wide variation in building age and style, and the classification of the hospital (NSW Hospital Peer Groups) which categorises what the services can provide, are also a factor that must be considered. The national assessment needs to understand the local variability in all areas.

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	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?	Whatever methodologies are employed, the Australian government will need to ensure that plans can be adapted to the specific and unique risks and populations of each region,. state or territory **EFFECTIVE PLANNING** Effective local planning will be the key to delivering adaption plans. Local government will need to be charged with some responsibility. Identifying vulnerable populations (groups) will not be effective unless we can identify vulnerable people and households so that interventions can be targeted to support the most vulnerable in the community. 19 (a). Key considerations in a methodology should include: • Stakeholder Engagement: Ensure active involvement and collaboration with relevant stakeholders, including national health agencies, policymakers, researchers, healthcare providers, community organisations, and vulnerable populations. Engage stakeholders early and throughout the process to incorporate diverse perspectives, local knowledge, and ensure ownership and buy-in. Climate and Health Data Collection: Gather relevant climate and health data to understand the current and projected climate change impacts on public health. This includes collecting climate projections, epidemiological data, health system data, and socioeconomic information. Analyse the data to identify linkages between climate variables and health outcomes. • Vulnerability Assessment: Conduct a comprehensive vulnerability assessment to identify populations, geographic areas, and health sectors that are most vulnerable to climate change impacts. Evaluate exposure to climate hazards, sensitivity of health systems and populations, and adaptive capacity. Analyse the potential health risks and prioritise areas for adaptation action based on vulnerability levels. • Health Impact Assessment: Assess the potential health impacts of climate change in various sectors, including heatwaves, extreme weather events, air quality, water and food security, vector-borne diseases, and mental health. Quantify the health burden associated with these impacts, considering morbidity, mortality, and other health-related indicators. Qualitatively engage in with a range of indicators and activities that are not easily quantified especially in local communities. Adaptation Options Identification: Identify a range of potential adaptation options to address the identified health impacts and vulnerabilities. Explore both traditional and innovative strategies that encompass primary prevention, healthcare system resilience, community-based interventions, policy and governance approaches, and technological solutions. Consider the effectiveness, feasibility, cost-effectiveness, and co-benefits of each option. • Prioritisation and Decision-Making: Develop a systematic framework for prioritising adaptation options. Consider multiple criteria, such as health impact, vulnerability, cost, feasibility, equity, and social acceptability. Utilise decision-support tools, such as multi-criteria decision analysis, to assess trade-offs and facilitate decision-making. Engage stakeholders to collectively determine priority actions based on shared values and goals. • Adaptation Plan Development: Develop a comprehensive National Health Adaptation Plan that outlines strategies, objectives, and actions to address the identified health risks and vulnerabilities. Define clear goals,

		targets, and indicators to monitor progress. Integrate adaptation into existing health policies, plans, and programs. Coordinate with other sectors, such as environment, disaster management, and urban planning, to foster a multisectoral approach. • Implementation and Monitoring: Establish mechanisms for plan implementation, coordination, and monitoring. Define responsible institutions, assign roles and responsibilities, and allocate resources for implementation. Develop a robust monitoring and evaluation framework to track progress, measure effectiveness, and ensure accountability. Regularly review and update the plan based on new evidence, emerging risks, and changing priorities. • Capacity Building and Awareness: Incorporate capacity building efforts to enhance knowledge, skills, and awareness of climate change and health among health professionals, policymakers, and communities. Provide training programs, workshops, and awareness campaigns to promote understanding of climate-health linkages, adaptation strategies, and best practices. Foster collaboration and knowledge-sharing networks among stakeholders. • Evaluation and Review: Evaluation processes setup at the very beginning of the program and conduct periodic evaluations and reviews of the NHVAA and NHAP to assess their effectiveness, relevance, and impact. Use feedback and lessons learned to refine and improve future iterations. Foster continuous learning and adaptive management to ensure the long-term effectiveness of adaptation efforts
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?	Providing a nationally consistent approach to vulnerability assessment and adaptation planning for the health system has numerous benefits, including improved coordination, equity, policy alignment, resource optimisation, and long-term resilience. It enables a comprehensive and systematic response to climate change impacts on health and fosters collaboration and partnership among stakeholders at all three levels of Government. It allows for the sharing of knowledge, best practices, and lessons learned, leading to more efficient and effective responses to climate change impacts on health. However it requires adequate capacity building inherent in the approach to enable states and territories to adapt according to their jurisdictional needs. i) identifying risk ii) prioritising risk iii) appropriate language and consistent terminology iv) consistent measurement methodologies v) national reporting requirements Providing a nationally consistent approach to vulnerability assessment and adaptation planning for the health system has numerous benefits, including improved coordination, equity, policy alignment, resource optimisation, and long-term resilience. It enables a comprehensive and systematic response to climate change impacts on health and fosters collaboration and partnership among stakeholders at all three levels of

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		Government. It allows for the sharing of knowledge, best practices, and lessons learned, leading to more efficient and effective responses to climate change impacts on health. **EXAMPLES OF EXISTING GUIDANCE**: • Climate Change and Health Adaptation Planning Guidelines from the World Health Organization (WHO): These guidelines provide a framework for assessing health vulnerabilities, developing adaptation strategies, and integrating health into climate change policies and plans. • Adaptation in Action: Case Studies from the Climate Change Adaptation for Health and Wellbeing Program in Canada: These case studies showcase examples of adaptation initiatives addressing climate change impacts on health in various regions of Canada. • Guidance and toolkits developed by Local Government, states/territories in Australia: The Western Sydney Health Alliance has developed a Local Council Guidance document for The Parks Councils for Climate, Health & Wellbeing in the Western Parkland City. This research and guidance document has been designed in partnership with the Climate and Health Alliance (CAHA) underpinned by research by the Western Sydney University (WSU). The Increasing Resilience to the Health Impacts of a Changing Climate: A local council resource for the Parks Councils Guidance document is a best practice example and provides an important framework for meaningful actions to address the impacts of climate change on health. It builds on the work already being done by many Councils who are using an evidence-based approach to help guide decision making in the coming years. The resource provides valuable examples of approaches and methodologies that can be adapted for a national context. • Other states and territories in Australia, such as New South Wales, Victoria, and Queensland, have developed guidance and toolkits on climate change and health adaptation that can also be used as reference points for a National guidance document. **INTERNATIONAL EXAMPLE** Internationally the HHS Sustainable and Climate Resilient Health Care Facilities Initiative report, *Primary Protection: Enhancing Health Care Resilience for a Changing Climate paper* and toolkit *(*Building Health Care Sector Resilience | U.S. Climate Resilience Toolkit) was developed in 2014. Its examples, case studies and assessment toolkit are a good example to replicate for Australian conditions. Some case studies show the extremes USA health care systems are going to, to maintain care in emergencies. The case study page 61 – the Southeast Louisianan Veterans Health care centre, was built to have a 7 day stay and defend in place, assuming (based on the previous emergency) that they would be on there own for 7 days, so they have 7 days of fuel, water, waste water storage, medicine, food etc.
21	What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?	**HEATWAVE PREPAREDNESS** Develop and implement heatwave preparedness plans in healthcare facilities, focusing on ensuring adequate cooling systems, staff training on heat-related illnesses, and public awareness campaigns about heatwave risks and preventive measures. This includes establishing cooling centres

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		in vulnerable communities and ensuring access to cool, safe spaces for those without adequate cooling at home. **STRENGTHENING HEALTH INFRASTRUCTURE RESILIENCE:** 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. This may include retrofitting healthcare facilities, improving backup power systems, and ensuring the availability of essential medical supplies during emergencies. • Health Workforce and Built Environment Capacity Building: Provide training and capacity building programs for healthcare professionals and built environment professionals to enhance their knowledge and skills in addressing climate related health risks through their respective remits. 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. **ENHANCING DISEASE SURVEILLANCE AND EARLY WARNING SYSTEMS** Strengthen disease surveillance systems to detect and respond to climate-sensitive diseases, such as vector borne diseases and waterborne illnesses. 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. **COMMUNITY ENGAGEMENT AND EDUCATION** Launch targeted public awareness campaigns to educate communities about climate-related health risks and promote preventive measures. This includes providing information on heatwave safety, promoting vector control practices, encouraging sustainable behaviours, and raising awareness about the links between climate change and health. Engage with community organisations, schools, and local leaders to foster behaviour change and build resilience at the community level.
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?	Affordable and available housing and town planning – supports a health-conducive environment for communities Education – Supports capacity building of health literacy and develops resilience, increases employment opportunities A Health in All Policies approach provides leverage for the health sector to influence decisions that are made by non-health sectors and ones which will have profound implications for either increasing or reducing health risks associated with climate change. It does, however, require buy-in from the non-health sector and for the non-health sector to acknowledge the primacy of health considerations. Health is not the only consideration, not even the preeminent consideration, in climate change and this poses a necessary limitation on the 'Health in All Policies' approach. In many ways Public Policy that takes a health and health equity lens is more crucial than labelling 'health in all

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		policies' which makes little sense outside the health sector and is likely to struggle for traction. Land use and transport planning, infrastructure and housing sectors need to develop policies that can multi-solve the risks associated with climate change while providing other health benefits associated with reducing carbon emissions e.g., encouraging active travel will improve air quality, reduce greenhouse gas emissions, and lower the risk of cardiovascular disease, diabetes and depression. Likewise, developing joint policies for cool suburbs, cool housing and sustainable food systems are all examples of where the health sector can collaborate with the planning, transport and housing sectors. Key areas in which we are implementing a Health in All Policies approach is through the Healthy Urban Planning and Design partnerships we have with local councils in south western Sydney. Local council policies are now starting to systematically consider the health implications of decisions, seek synergies, and avoid harmful health impacts to improve population health.
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 Department needs to consider innovative service delivery models for mainstreaming public health outcomes into the core business of local urban and transport planning systems (such as partnership models being implemented in South Western Sydney Local Health District (SWSLHD) through the Healthy Places program). This is an example of moving towards joined up policy – a Health in All Policies approach, which is demonstrating effective ways to facilitate collaboration on any number of risks to human health. The Healthy Places program was established in 2018 to facilitate collaboration and partnerships between stakeholders to maximise the synergies between local government policy and public health policy. This is achieved by jointly funded urban planners and designers in four local councils with partnership agreements to guide accountability. This program creates intersectoral leverage for integrating healthy urban planning and design into council policies and projects. These partnership positions are better placed to mitigate and plan for the health implications of climate change and decision making, policy development and service delivery that will result in well-designed adaptation measures that can prevent some health impacts of climate change at local community level. **COLLABORATIVE PARTNERSHIPS** The most effective partnerships are the ones that create c*ollaborative advantage which* is the ability to form effective and rewarding partnerships with other organisations, for mutual benefit. The co-benefits between climate policy and public health policy are clear and need to be made explicit in the development of new funding mechanisms between siloed departments. The Prevention Systems Change Framework developed by the Prevention Centre can be used to guide systems-based research planning, monitoring, study team reflective learning, and research evaluation processes to strengthen the links between research and impactful action

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		and should be used to inform purposeful partnerships and the best points for collaborative impact. **LOCAL GOVERNMENT** Local government has a key role to play in creating the conditions to enable health and wellbeing to flourish. The overarching legislative framework for local government in NSW makes it clear that councils' core functions are to create and maintain healthy places for people to live. Councils have an in-depth understanding of their local government area, its geography, environment, economy, and its people, they are well placed to take action and support the community to address the climate health challenge. **SOME EXAMPLES -ARE** SWSHD has also been part of the Western Sydney Health Alliance that has developed a set of guidance for local councils and health agencies to focus on health and climate. SWSLHD has been part of WSROC – Western Sydney Region of Councils, which developed the Turn Down the Heat Project Project: Turn Down the Heat - WSROC
24	How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?	**ENABLER 1: WORKFORCE, LEADERSHIP & TRAINING** As per Health in all policies, frontline healthcare staff should not hold singular responsibility over education relating to health impacts of climate-related events. Similarly, education of healthcare staff needs to be approached carefully as there are already considerable education (initial and recurrent) placed on healthcare staff. This needs to extend beyond the health and aged care workforce and needs to include the built environment professionals who are making decisions about the environmental and ecological determinants of health (i.e.; land use planning, transport planning, housing design and supply, food systems) **ENABLER 2-RESEARCH-Prevention.** The Prevention Systems Change Framework developed by the Prevention Centre can be used to guide systems-based research planning, monitoring, study team reflective learning, and research evaluation processes to strengthen the links between research and impactful action and should be used to inform purposeful partnerships and the best points for collaborative impact. This enabler could be improved by funding specific research which examines the most effective way to deliver whole-of-government responses to reducing the health impacts of climate change. **ENABLER 2-RESEARCH – Climate and health** The annual (since 2018) MJA Lancet Climate Countdown examines indicators across five broad domains: climate change impacts, exposures and vulnerability; adaptation, planning and resilience for health; mitigation actions and health co-benefits; economics and finance; and

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public and political engagement. It is comprehensive review of climate impact on health.

ENABLER 2-RESEARCH – BIG DATA.

The growth in medical data is accelerating. The ability to use AI and machine learning to simulate process flow or analysis underlying patterns in health (Like ESL, or location specific or event specific issues) has expanded.

SWSLHD already has a mesh data network with anonymised data on patients back to 2014 and has already highlighted issues with length of hospital stay related to English as a second language. The team have recently uploaded the Bureau of Meteorology data to allow climate related events to be analysed and the aim is to develop operational guidelines to improve work flow through the hospital in climate related events. SWSLHD has also initiated a collaboration with NBMLHD to extend this system to their LHD.

A related scheme internationally to model is the ONELondon program(2021). 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.

ENABLER 4: COLLABORATION AND GOVERNANCE.
This needs to be broadened to include funding resources that incentivise cross-jurisdictional partnerships which deliver programs to reduce emissions, strengthen climate resilience and enable physical activity, mental health, and access to healthy food systems, housing and clean air.

ADDITIONAL ENABLERS:
Innovation
is an enabler which would be recommended. Innovation needs to be fostered to develop effective solutions and initiatives.
Financial support
is critical. Inadequate funding will likely prove to be a significant barrier particularly during the pilot, implementation and planning phase
Policy Integration:
Integrating health and climate considerations into policies, plans, and strategies at all levels is an important enabler. This involves aligning health objectives with climate change mitigation and adaptation goals, as well as incorporating climate change considerations into health policies and programs. Policy integration ensures that actions in both sectors are mutually reinforcing, promoting health co-benefits while addressing climate change challenges.
Governance, Policy Consistency and Long-Term Commitment:
Governance establishes robust decision-making processes, defines roles

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		and responsibilities, and can provide adequate resources and support for implementation. Ensuring policy consistency and long-term commitment is crucial for the sustained implementation of a health and climate strategy. Enabling supportive policy frameworks, legislative measures, and institutional mechanisms provides stability and continuity. Long-term commitment from governments, organisations, and stakeholders fosters resilience, adaptability, and the ability to respond to evolving challenges and opportunities. Organisational Culture and Change Management: An organisational culture that promotes agility, innovation, and adaptability is an important enabler. It promotes a clear strategy-driven mindset, fosters a learning culture, and provides empowering processes for workers to embrace change. Implement effective change management practices to address resistance, build readiness, and support the adoption of new behaviours and ways of working. Resource Allocation and Management: Adequate resources, including financial, human, and technological resources, are critical enablers for strategy implementation. This enabler ensures resource allocation and management by conducting thorough resource assessments, aligning resource allocation with strategic priorities, optimising resource utilisation, and exploring opportunities for collaboration or resource sharing. This enabler explores innovative financing mechanisms, leveraging public-private partnerships, and accessing external funding sources that can further support strategy implementation. Risk Management and Resilience Identifies and manages risks that could impede strategy implementation. This enabler can be enhanced by conducting risk assessments, developing mitigation strategies, and building resilience to adapt to unforeseen challenges or changes in the external environment. Regularly review and update risk management plans to address emerging risks and ensure the strategy's continuity
		•
25	For each of these enablers: a) What is currently working well? b) What actions should the Strategy consider to support delivery?	a) all areas are currently functional but considerable room for improvement b) Enabler 5- tighter short term targets. NSW MOH have added sustainability targets and KPI to the Service Agreement 2023-24, and last year added sustainability target and KPI to the Conditions of Subsidy (2022-23). These are mandatory and reportable KPI target: desflurane use; nitrous oxide use; energy use; and passenger vehicle fleet optimisation and will focus attention for LHDs. (See more detail in 6) b) include funding resources that incentivise cross-jurisdictional partnerships which deliver programs to reduce emissions, strengthen climate resilience and enable physical activity, mental health, and access to healthy food systems, housing and clean air.

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		b) funding support, policy and scope guidance, dedicated project management b) funding mentioned again – because there is a distinct lack of funding in this policy.

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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?
Your Community 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

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
Areas of support: ● Strong support for a Health in All Policies approach. ● Strong support for the Commonwealth in seeking to minimise health systems contribution to carbon emissions. ● Strong support for recognition of the importance of health systems resilience. **Areas of improvement:** ● The most effective strategies are those where tangible actions are underpinned by clear vision and purpose. The Consultation Paper does not yet contain a Vision Statement to underpin the objectives and actions of the Strategy. This should be addressed as a priority so that the objectives can be reviewed fully. It is recommended the Vision should be: 'A climate resilient community and net zero healthcare system'. ● The objectives currently lack detail to provide a fulsome review. The Strategy should outline more clearly what the objectives are and what they will do, and how they will support a fast, fair and inclusive transition. ● The intent of the Strategy—as articulated by the health and environment sector—is to secure the health of current and future generations in the context of the climate crisis. Therefore, it is recommended the current approach of the Consultation Paper be amended to reflect a health systems paradigm. It is recommended the order and emphasis be as follows: ○ 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. ● The Strategy should articulate specific emissions reduction targets, including an updated Nationally Determined Contribution that reflects the current climate crisis. Health and environment sector stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. ● The current Objective 1 should be accompanied by a list of specific elements that are to be measured. ● The current Objective 1 should be considered an enabler, and moved into revised Objective 3 (outlined above).

2. How could these principles be improved to better inform the objectives of the Strategy?
Areas of support: ● General support for the six principles outlined, particularly those that recognise First Nations leadership, and the broader determinants of health and prevention.

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Areas for improvement:
● The purpose of 'Principles' within the Strategy is to provide a lens through which the objectives and actions are evaluated. As such, it is recommended that the principles of the Strategy are primarily underpinned by the fundamental human right to health and a safe planet. They should also be underpinned by a holistic definition of health that includes First Nations understandings of health and wellbeing.
● The principles should be expanded to include intra- and inter- generational justice.
● Principle 2, 'tackling health inequalities', should include inter- and intragenerational health inequality in climate impacts. For example, young people are more impacted by the climate crisis and therefore need specific focus in policy development and implementation.
● Principle 2,'tackling health inequalities', should be strengths based, going beyond 'supporting action' to 'taking action'.
● While the inclusion of Principle 4,'One Health', is welcomed, it is crucial that the Strategy take a broad approach to the impacts of global environmental change on human health. It is therefore recommended that the Strategy adopt a Planetary Health[1] approach, which more fully captures the intersection of broader environmental impacts on human health outcomes in the context of planetary boundaries and sustainable development.
● Principle 5, 'Evidence-informed policymaking': While the inclusion of evidence in developing policy is crucial to success and impact, it is also important to recognise the type of evidence and analysis being used to justify action. The use of 'cost-effective analysis', often a useful tool in setting priorities, can often overlook the lived experience of people and the qualitative analysis that informs user experience. It is recommended that 'cost-effectiveness' is balanced with equity and justice principles to ensure no one is left behind, particularly those communities experiencing vulnerability.
● Principle 6, 'partnership-based working across all levels of government and beyond' should be expanded to include the role of the healthcare workforce across all settings including primary, tertiary, community and aged care.
● Principle 6, 'partnership-based working across all levels of government and beyond', should be expanded to include collaboration with consumers. If the principle of Partnership is to be realised, the Strategy will need to establish governance mechanisms, programs and initiatives that enable and facilitate partnership across all relevant stakeholders.

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

Areas of support:
● Unequivocal support for including scope 1, 2 and 3 emissions. The health and aged care system must do its part and be as ambitious as possible in mitigating its emissions, without compromising quality patient care. This includes a full assessment of all associated emissions and how to best reduce them[2].

Areas for improvement:
● To best provide fulsome feedback on the inclusion of certain types of emissions in the Strategy, it is important that a clear definition of 'health system' is provided. Without a clear definition, there may be key sources of emissions that are omitted from the Strategy.
● To ensure Australia, as a developed nation, does its fair share in reducing emissions, the Strategy should support an updated Nationally Determined Contribution that reflects the current health-climate emergency. Health and environment sector

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stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. To reach these targets, it will be important that the health sector includes all emissions and develops strategies to reduce them.
● While it is recognised that under the Paris Agreement Australia is only responsible for emissions that occur within Australia; scope 3 emissions in the context of the Strategy should include all emissions that arise as a consequence of the Australian health system. This includes healthcare products manufactured overseas. A high proportion of healthcare products are imported and, as such, the health system must be responsible for their associated emissions.
● The Strategy should include all emissions that arise as a result of the health and aged care system, including patient and visitor transport[3].

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?

Areas of support:
● Strong support for the inclusion of the impacts of climate change on First Nations peoples health and wellbeing.
● Strong support for the strengths-based approach of First Nations cultural knowledge.
● Strong support for coordination of goals and targets of the Strategy with other policy that impacts First Nations health and wellbeing.

Areas for improvement:
● As a signatory to the United Nations Declaration on the Rights of Indigenous Peoples[4], the Commonwealth has a commitment to including First Nations views and needs in all aspects of policy development. These should be determined through self-determination and reciprocity with First Nations Elders, leaders and communities.
● Closing the Gap is a crucial mechanism through which First Nations health and wellbeing is being addressed. The Strategy should outline how it will support the work of Closing the Gap, and how those priorities are being centred in the Strategy.
● First Nations voices should be centred in the Strategy. This should include how the Commonwealth will integrate governance mechanisms and processes for community leadership according to best-practice and with cultural safety principles.
● The First Nations response to the COVID˚19 pandemic[5-6] was recognised globally as being extraordinarily successful. The learnings from this should be amplified within goals, objectives and actions of the Strategy.
● The Strategy should clearly outline how genuine engagement with First Nations leaders, Elders and communities will occur, how leadership will be fostered, and how the health and wellbeing of First Nations peoples will be advanced through the Strategy.
● The Strategy should seek to integrate objectives and actions being developed through the Measuring What Matters Framework community consultation processes and the objectives of the Australian Centre for Disease Control related to First Nations communities.

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?

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Areas of support:
● Strong support for the co-design of governance structures for the Strategy with First Nations peoples.

Areas for improvement:
● The Strategy will only be effective for First Nations peoples if it is underpinned by genuine engagement and co-design principles. The Department should seek to listen to and learn from First Nations Elders, Knowledge holders and communities about what the priorities are for tackling the health impacts of climate change[7].
● The Strategy must ensure there is an ongoing process to embed First Nations cultural knowledge and practice into its goals, targets and actions.
● The Strategy should collaborate with First Nations peoples across Australia, including at the local, state and territory and national level.
● The Strategy should seek expertise from the National Aboriginal Community Controlled Health Organisation and its associated Aboriginal Community Controlled Health Organisations across Australia, the Coalition of the Peaks, Closing the Gap and other existing coalitions and partners.

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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?

Areas of support:
● General support for an evidence-based approach to setting priorities related to decarbonisation of the healthcare system.
● General support for Commonwealth schemes outlined in the Consultation Paper.
● General support for Commonwealth leadership that ensures coordination and collaboration across the federated system.
 	
Areas for improvement:
● Establishment of a dedicated team to collate and report on carbon emissions of the public and private health systems.
● Public annual reporting of progress on emissions reduction to the Board.
● The team should include an epidemiology team to assemble, monitor and share information on climate impacts on health to guide decision-making.
● A clear definition of what 'health system' means is required to ensure emissions from across the healthcare value chain are accounted for. For example, clarify if 'health system' includes aged care, and Australian healthcare suppliers and manufacturers.
● The purpose of the Strategy is to clearly define how the Department of Health and Aged Care (DHAC) is going to act on the impacts of climate and health. This goal must be underpinned by a Health in All Policies approach and centred on the lived experience of consumers. As such, while Objective 1 is crucial to the decarbonisation of the health system, it should be understood as an enabler to mitigation, and not emphasised as a standalone objective.
● This section should reflect the need to establish emissions reduction targets based on current evidence and be as ambitious as possible.
 	
Existing and planned initiatives:
● The Global Green and Healthy Hospitals UGGHH3 Climate Impact Checkup Tool[8] is a free carbon footprint tool available to all health facilities who are members of the international GGHH network. This tool measures greenhouse gas emissions from:
  ● Scope 1: Stationary combustion; Mobile combustion; Fugitive emissions (cooling and medicinal/anaesthetic gases); Waste on site treatment.
  ● Scope 2: Purchased electricity; Purchased steam, heat or cooling.
  ● Scope 3: Extra supply chain; Business travel; Electricity transmission and distribution losses; Inhalers; Waste off site treatment; Employee commuting; Patient commuting.
Your Community Health, as a member of the Global Green and Healthy Hospitals, utilises this tool to annually measure and report on our health orgaisations carbon emissions.
● A number of states and territories have existing or planned environmental reporting systems for public health services. The Strategy should build on these existing data sources to include bottom up data and reduce duplication of effort. For example:
  ○ Public health services in Victoria report data on energy, water, waste, paper, vehicle fleet and medical gases through the Victorian Department of Health Environmental Data Management System[9].

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

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Areas of support:
● Strong support for the inclusion of scope 3 emissions.

Areas for improvement:
● While it is crucial that the Strategy take an ambitious approach to climate action, this action should not compromise consumer experience or patient outcomes. As such, the Strategy should include data and information of the lived experience of consumers and, where possible, enable consumer-led solutions.
● All emissions that occur as a consequence of the Australian health and aged care system should be measured, including emissions from products and medications sourced from overseas, and emissions from patient and visitor travel.
● Measurement of the health system's carbon footprint should be informed by both top down data and bottom up data (where available and feasible). Measurement must not rely solely on data available through Australia's Greenhouse Gas Accounts, as emissions from entities that are below the National Greenhouse and Energy Reporting Scheme reporting threshold will not be captured.
● The Strategy should take into account the emissions reduction targets and actions already being undertaken to ensure the Strategy is aligned with best practice.
● The Strategy should provide guidance on establishing the carbon footprint of different models of care to help inform decision making.

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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?

Areas of support:
● Recognising the urgency with which we must take action, the proposed focus areas are a good starting point for emissions reduction within the Australian health and aged care system.
● The inclusion of prevention and models of care, supply chains, and medicines and gases, is positive.

Areas for improvement:
● Mitigation should include strategies outside the health system that will reduce risks to health and protect health and wellbeing.
● Mitigation and adaptation to the climate crisis is a preventive health measure, as well as a moral responsibility. The Strategy should clearly outline how it will safeguard health and aged care, by doing its part to contribute to the Nationally Determined Contribution under the Paris Agreement.
● The purpose of a mitigation objective is fundamentally to ensure that the sector is doing all that is possible to fulfil the 'do no harm' principle, and this should be highlighted from the start of the Strategy.
● The purpose of the Strategy is to ensure the co-benefit of action on climate and health is fully realised. As such, objective 2 should include how the DHAC is going to support emissions reductions that benefit health outcomes across all sectors. This should include supporting the implementation of decarbonisation strategies across sectors for the betterment of intergenerational health and wellbeing.
● Mitigation targets should be included in the National Healthcare Reform Agreement and National Safety and Quality Health Service.
● Funding should be provided for education and knowledge transfer opportunities to the sector.
● Applied research programs should be established for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants. This program encourages development of applied research proposals by research institutions in collaboration with 'industry'. Industry is required to contribute direction or 'in kind'.
● To provide fulsome feedback on the proposed focus areas, the Strategy should clearly outline the justification for the selection of the current six priorities.
● Objective 2 should clearly outline strategies to support the reduction of emissions across all sectors.
● Objective 2 should clearly set out an emissions reduction target for decarbonisation of the health and aged care sector.
● Objective 2 should include a goal to establish a pathway for ensuring the health sector achieves this emissions reduction target. This pathway should:
  - ○ Include strategies for communicating emission reduction targets and progress
  - ○ Identify carbon hotspots
  - ○ Prioritise mitigation actions
  - ○ Establish effective governance structures
  - ○ Facilitate appropriate resource allocation and policy development
  - ○ Prevent duplication of effort and set a common pathway for the decarbonisation of Australia's health and aged care system (inclusive of public, private, tertiary, and primary care, supply chains and services).
● Objective 2 should include energy as a standalone focus area considering the large contribution it has on the health system's carbon footprint[10].
● Objective 2 should include food as a focus area as it makes a significant contribution

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to the health system's carbon footprint, and there are opportunities to reduce these impacts that will have co-benefits for health and wellbeing. For example, foodservice model changes which reduce food waste and increasing patient nutrition and satisfaction, local food procurement, plant-based menus[11-23].
● Waste should be renamed to 'Sustainable resource use, circular health care and sustainable healthcare waste management'[10] in keeping with a health paradigm for sustainability.

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?

Areas of support:
● Strong support for the inclusion of actions to improve the built environment on, around and near health facilities.
● Strong support for consideration of reducing emissions from both building design and construction, and building operation.
● Strong support for transitioning to renewable energy sources and electrification.

Areas for improvement:
● Beyond the health system, the Strategy should outline how it is going to support electrification and energy efficiency in all buildings[24] to improve health and wellbeing.
● The Strategy should emphasise that built environment design and urban planning must promote active transport, which benefits health through reduction of transport emissions (as detailed in section 2.2) as well as physical activity pathways. Adequate housing density, well-connected streets, mixed land uses to create nearby destinations, and proximate public transport are key determinants of walkability[25-27], especially in outer suburban areas.
● There needs to be targets and actions to increase urban greening and tree canopy cover in the built environment, as this can reduce health impacts of extreme heat and air pollution[28].
● The Strategy should support all hospitals and health facilities to be gas free and renewably powered.
● The Strategy should set an ambitious target date for transitioning existing hospitals, health facilities and aged care facilities to be gas free and renewably powered.
● The Strategy should outline how it will enable public health services to purchase renewable energy from the grid, e.g. via Power Purchase Agreements.
● The Strategy should set out how it will support action to reduce demand for large, resource-intensive health care facilities and ensure only absolutely necessary buildings are constructed, e.g. by scaling up telehealth, health promotion and care closer to home, without compromising patient outcomes.
● The Strategy does not sufficiently address how it will actually support healthcare suppliers and manufacturers to transition to net zero buildings and facilities.
● The COVID-19 pandemic has prompted healthcare settings to address their indoor air ventilation. Whilst efficacy in reducing risk of airborne disease transmission is the primary concern, it is important to recognise energy requirements differ contingent on selected strategy[29]. It is recommended the approach to ventilation also takes into consideration the associated energy requirements, 'e' waste that may be generated and takes a precautionary approach by avoiding air purifiers that generate free radical gases as a byproduct[30].

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

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Areas of support:
● Strong support for building on existing work to improve fuel quality and to reduce air pollutants from vehicles.

Areas for improvement:
● The Strategy must include specific targets for the adoption of electric and zero emissions transport, and an ambitious fuel efficiency standard. There needs to be greater emphasis on improving urban design and infrastructure provision for active transport (e.g. walking, cycling) and public transport in Australian cities. This will have multiple health co-benefits through emissions reduction, air quality and physical activity pathways[25, 31-33].The Strategy must outline how it will respond to identified infrastructure challenges.
● The Strategy should support collaboration between state and territory government, local government and health services to improve active and public transport access and incentives for patients, staff and visitors at existing and new facilities[10], as well as to other essential services for health and wellbeing.
● The Strategy should include improvements to models of care that produce less emissions, e.g. telehealth services for rural and remote communities. This should be in the context of ensuring communities experience tailored care and that commuting can occur where needed.

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

Areas of support:
● General support for the inclusion of emissions reduction within supply chains, and leveraging joint purchasing power.

Areas for improvement:
● The Strategy must include specific targets for reducing emissions from the health system's supply chain. Targets should align with the UK National Health Service Net Zero Supplier Roadmap[34]. This will provide direction and certainty for health services, manufacturers and suppliers.
● The Strategy should identify where collaboration between states and territories, and both public and private sectors, can share knowledge and networks in the interest of reducing carbon footprints associated with supply chains. This should be reflected in the actions.
● While the focus of actions 2.3.1 and 2.3.2 are positive, defined targets for each action must be included. For example, a target to establish nationally consistent procurement standards[35] that include criteria for greenhouse gas emissions, resource depletion (water, energy and material consumption), chemical and toxic impact on human and environmental health, and human rights, labour rights and gender equality, are all important areas for consideration.
● The Strategy should set about convening a supply chain group made up of state and territory health purchasing bodies, public and private health and aged care providers, and healthcare suppliers and manufacturers, to work collaboratively in reducing the health systems carbon footprint associated with supply chain.
● The Strategy should support the development of a universal methodology for healthcare's supply chain to measure and report on their emissions consistently.

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

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Areas of support:
● General support for the inclusion of emissions reduction related to medicines and gases.

Areas for improvement:
● Action 2.4.1 should include a target for eliminating the use of desflurane.
● Action 2.4.2 should include a target for reducing leakage from piped nitrous oxide.
● The Strategy should outline actions for emissions reduction of medications, including:
  ○ Investment in emerging technology platforms designed to improve pharmaceutical stock management and reduce waste.
  ○ Supporting research to determine environmental impacts of medications to establish environmentally preferred options, and communicate this to clinicians.
  ○ Support and scale up Choosing Wisely[36] to ensure preventive health is the cornerstone of mitigation actions.
  ○ Work with the Therapeutic Goods Administration to review packaging and information requirements for medicines to reduce waste and carbon emissions.

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

Areas of support:
● General support for the inclusion of emissions reduction related to waste.

Areas for improvement:
● The Strategy should centre preventive health as the mechanism through which waste is minimised in the health system.
● The Strategy should focus on minimising waste and encouraging circularity across all waste streams including plastics[37]. Actions and targets to prevent food and medical waste must be included, as both contribute significantly to healthcare's carbon footprint.
● The Strategy should set a target to establish nationally consistent procurement standards (outlined in Q11).
● The Strategy should outline how it will convene a supply chain group made up of state and territory health purchasing bodies departments, public and private healthcare providers, and healthcare suppliers and manufacturers to work collaboratively in reducing the health and aged care system's carbon footprint.
● The Strategy should meet the world's best practice standards by reviewing pollution reduction technology used in healthcare waste treatment facilities.
● The Strategy must set out how it will engage and support the healthcare workforce in sustainable resources use, waste management and segregation.
● The Strategy should establish a goal for conducting an education campaign on best disposal options for unused medications for healthcare workers.
● The Strategy should establish a goal to reduce the vast array of consumables throughout the healthcare system, e.g. packaging and personal protective equipment.
● Actions 2.5.1–2.5.4 need to go further than 'encouraging' and 'promoting' action and set targets for each action.
● The diversion of food waste from landfill incorporates more opportunities than what is already discussed in the Strategy—specifically Action 2.5.4 that mentioned compost. The Strategy should seek to classify food waste as a reusable resource to address mitigation[38-39].

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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?

Areas of support:

● Strong support for the inclusion of preventive health. One of the best ways to reduce emissions from the healthcare sector is to keep people as healthy as possible for as long as possible, and preventive health should be a core function of the Strategy.
● Strong support for the inclusion of optimising models of care. This not only improves consumer experience and patient outcomes but reduces waste of resources that exacerbate the climate crisis.

Areas for improvement:

● Non-communicable diseases UNCDs) and injury are the biggest burden of disease in the world. The Strategy should explicitly articulate how NCDs are exacerbated by climate change and how prevention will support reductions in disease and injury burden.
● Primary prevention is crucial to addressing health inequity in Australia. This includes supporting and enacting policy that addresses the social determinants of health and underlying systems of power that have led to the climate crisis.
● Climate change impacts are the intensification of a sustained colonial process[40]. The Strategy should recognise colonisation as a driver of climate and health outcomes, and that redressing this system is crucial to a healthier, sustainable and more just Australia.
● While actions 2.6.1–2.6.4 are all positive, they need to include defined targets
● The Strategy should explicitly support the commitment of the National Preventive Health Strategy to spend 5% of the health budget on prevention.
● The Strategy should explicitly include how it will coordinate action across the existing and new national strategies.
● The Strategy should explicitly include how it will support key aspects of policy in other portfolios that have an impact on health outcomes.
● The Strategy should explicitly include how it will support state and territory governments in preventive health measures, e.g. active transport.
● The Strategy should explore opportunities for health system funding reform[10] (medicare, private health insurance) to support health promotion, strong primary care, optimise high value care and prevent low value and harmful care.
● Promoting health and preventing illness are major ways to reduce emissions by reducing illness and so demand for health care services while improving wellbeing. This can be done by:

- ○ Increasing funding for primary prevention via the National Preventive Health Strategy, the National Strategy for Injury Prevention, the National Obesity Strategy and the Australian Centre for Disease Control.
- ○ Increasing funding for beneficial screening and health promotion, while regulating adverse influences from commercial entities (primordial prevention).
- ○ Reform primary care organisation and funding to support non-communicable disease and injury management (secondary and tertiary prevention) and high value primary care.
- ○ Review and reform hospital care practices to optimise high value care and prevent low value and harmful care.
- ○ Supporting policy monitoring and evaluating through funding research.

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

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Areas of support:
● General support for the inclusion of private providers within the health system.

Areas for improvement:
● The Strategy should set a goal to include climate change mitigation and adaptation requirements in healthcare accreditation standards.
● The Strategy should demonstrate leadership by developing a clear, ambitious decarbonisation plan that sets out responsibilities and opportunities for the private sector. This will provide certainty and help guide decisions and investment.
● There is much more to do in increasing understanding among health executives and boards in relation to their fiduciary responsibility ('duty of care') and potential for personal liability if they fail to account for climate risks in strategic and operational plans. The Strategy should set a goal that requires all health services and other relevant services to conduct climate change risk assessments as a core risk management strategy.

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?

Areas of support:
● General support for immediate action to reduce emissions where possible.

Areas for improvement:
● The Strategy should seek to provide an emissions reduction strategy that is informed by best practice and based on best 'bang for buck' including emissions reductions, financial costs and savings, efforts, health benefits and cost of inaction.

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

Quick wins that should be prioritised for delivery in the twelve months following publication of the Strategy include:

- Updated Nationally Determined Contribution that reflects the current health-climate emergency
- Electrification of hospitals and healthcare centres
- Development of roadmap to reduce supply chain emissions in healthcare
- Development of National Fuel Efficiency Standard
- Increased focus and funding for health prevention
- Legislation of all new builds (residential and commercial) to be gas-free as supported by the Healthy Futures open letter to the Victorian Government[41]

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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?

Areas of support:
- Strong support for inclusion of health systems resilience in the Strategy.
- Strong support for the inclusion of communities experiencing vulnerability.
- Welcome acknowledgement that impacts of climate change are here now, even if mitigation is achieved.

Areas for improvement:
Community adaptation
- While there is support for the inclusion of adaptation within the Strategy, the content within this section appears out of order with the previous objectives. It is recommended that objectives are re-organised to better reflect the purpose of the Strategy as follows:
    - 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. A climate resilient community: 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. 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.
- While there is strong support for the inclusion of health harms associated with acute disasters or crises, it is also crucial the Strategy seeks to address health harms associated with incremental climate change, including heat, sea level rise and biodiversity loss.
- First Nations knowledge and engagement is fundamental to assessing health impacts, risks and vulnerabilities in adaptation planning[42-44]. This should include adopting well-established models of excellence for the preservation of Country.
- One option could be to fund climate change adaptation workers akin to the existing environmental health worker program. Experience from other similar programs indicate that success is dependent on support and training at the local / jurisdictional level. This could be applied from remote Indigenous communities to multicultural metropolitan settings.
- Adaptation will only be effective if the wider community understands the risks to health from climate change, and are empowered to take health protective actions. As such, the Strategy should include a public education campaign that highlights the risks to health and the health benefits of adaptation as critical to the success of any adaptation action.
- Adaptation, including the protection of Australia's biodiversity, should include thriving ecosystems.
- 'Policy responses to ameliorate impacts' (page 27) should include responses across sectors and government departments including housing and education.
- The Strategy should explicitly outline the mental health impacts of climate change, including (but not limited to) climate anxiety, limited access to services during acute weather events, and limited access to open, safe spaces[45-48].
- The Strategy should recognise the overall increase in burden of disease because of climate change and include goals and targets as part of resilience planning.

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● The Strategy must focus on planning for building resilient communities—not just developing emergency event response plans.

Health system adaptation
● There needs to be a systemic analysis by all health services of the likely impacts of climate change. The Strategy should require (and support) all health services to develop a climate change adaptation plan that outlines the steps they need to take to prepare for the challenges ahead. This would include such matters as emergency preparedness, infrastructure assessment, workforce skill in managing climate related health risks in their patients. Heat waves are one example, e.g. there is limited information in the community on how patients with chronic conditions need to manage excessive heat other than drinking more water. Adaptation plans would need to encompass this kind of advice.
● The production of health service adaptation plans could be mandated in the Australian Council of Healthcare Standards, and included as a performance measure in the National Healthcare Reform Agreement.
● The Strategy should recognise that health and aged care facilities can be damaged during extreme weather events and incremental changes due to climate change, and develop goals and targets to reduce these impacts.
● The Strategy should account for supply chain disruption from climate change- related events that impact both facilities and delivery of health services.
● The Strategy should account for the health and aged care workforce facing challenges both accessing healthcare facilities during extreme weather events, and the prioritisation of their own patients or immediate families and communities during extreme weather events.
● Targets should be included in the National Healthcare Reform Agreement and National Safety and Quality Health Service to cover both community and health service adaptation.

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?

Areas of support:
● Strong support for the development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan.

Areas for improvement:
● The development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan should be conducted as part of the National Climate and Risk Assessment processes and not as a duplication of efforts. This should be executed as a whole of government assessment, and not siloed within the Department of Health and Aged Care.
● The Strategy should account for the lived experience of consumers, and all people living in Australia, as part of vulnerability and adaptation planning.
● The methodology used needs to identify policy gaps and opportunities for improving population resilience across government portfolios.

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● The Strategy should support the adoption of climate ‘and’ health assessments as a tool through which to assess vulnerability, risk and adaptation.

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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?
Areas of support: ● General support for a nationally consistent approach to vulnerability assessment and adaptation planning for the health system. **Areas for improvement:** ● The assessment should take into account the extensive range of vulnerabilities across different communities and regions, the wide variety of ecosystems and natural habitats and climates across Australia, the wide variety of health and wellbeing considerations, and how these are being impacted by climate change. ● It is recommended that guidance for the assessments take into account policies and tools that have already been developed (e.g. at the state and territory level), and action that has already occurred (e.g. at the health service level) to avoid duplication of effort. ● It is recommended that guidance is provided for a broad range of health and aged care services, and is adaptable to different service settings. ● Implementation support in the form of tools, knowledge and capacity building, and finance, is essential. This work takes considerable time and resources, requires input from multiple internal and external stakeholders, and is new territory for many people in the healthcare workforce. ● The NHSCU must be resourced to provide ongoing implementation support for health services to assess and plan for climate risks. ● The Strategy should seek to adopt existing tools. Guidance and support should be provided for assisting health services to assess and plan for climate risks to healthcare infrastructure, service provision (including surges in service demands and changing burdens of disease and injury), the health workforce, and supply chains. Relevant tools include: ○ Victorian Health and Human Services Climate Adaptation plan ○ Queensland Climate Risk Strategy and Adaptation guides ○ Human Health and Wellbeing Climate Change Adaptation Plan for Queensland ○ NSW Climate Risk Ready program ○ Resources from the World Health Organization[49]. ○ Sydney North Health Network Climate and Health Strategy
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Areas of support: ● General support for prioritisation of high-priority health system adaptation actions. ● Strong support for inclusion of a nationally coordinated surge health and medical workforce for deployment in response to climate change-related emergencies. **Areas of improvement:** ●The Strategy should support: ○ Education and capacity building among policymakers, community members, the health workforce, and within emergency and disaster preparedness services and agencies. ○ Resourcing for emergency services.

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- Food and housing systems, including food security (encompassing caloric and nutrition intake).
- Transport system.
- Support and resources for rural and remote health services to improve resilience.
- Preparedness for disruption to health system supply chains.
- Responding to escalating inequity, increasing poverty and homelessness.
- Preparedness for health threats resulting from human influence on natural ecosystems.
- Consider the full societal costs of climate inaction over short and long time-frames, and the implications of health-relevant policies in all sectors, to prevent the hidden transfer of costs to the health sector and the undermining of environmental sustainability.
- Consumer consultation.

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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?

Areas of support:

● Strong support for the adoption of a Health in All Policies approach to the Strategy. All dimensions of climate change are interlinked with human health. Therefore action to reduce the health risks from climate change requires working across all sectors and all levels of government. The current structure of the Strategy, as implied by the Consultation Paper, needs revision in order to fully address the health risks posed by climate change. Furthermore, it is crucial to health outcomes that DHAC lead from the front in the climate response, and be a key agency in the national response to the climate crisis. The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through a Health in All Policies approach and the many recommendations outlined in Healthy, Regenerative and Just, as endorsed by Climate and Health Alliance (CAHA) members and health and environment stakeholders.

● Strong support for utilisation of health impact assessments in climate mitigation and adaptation planning.

Areas for improvement:

● The Strategy should explicitly acknowledge its commitment to not exacerbate existing inequity.

● The Strategy should require the Productivity Commission to produce an evaluation of the economic costs of climate change under current emissions reduction scenarios, along with modelling the economic savings associated with emissions reductions across a range of sectors, including health benefits. For example, this should evaluate the economic savings associated with the avoided ill health and productivity gains from strategies to reduce emissions in the transport sector.

● Much greater benefits for health could be achieved through actively planning to maximise health co-benefits associated with climate adaptation and mitigation strategies at the outset when developing policies—for example, ensuring energy and transport transitions are guided by health evidence. This requires building institutional capacity and skills in other portfolios to implement a Health in All Policies approach, and for the DHAC and stakeholders to provide evidence on the determinants of health and inequity, as well as effective responses and solutions.

● Health experts should provide guidance and establish regulatory frameworks for the assessment of health risks and impacts, advise on the implementation of appropriate solutions and on monitoring progress across sectors. To ensure transparency and 'the right person for the right job', identification of appropriate health experts to assist in this process should be undertaken as a joint exercise between government and independent bodies including academic institutions, not-for-profit organisations, consumers and communities across geographical settings.

● The Commonwealth Government should:

- ○ Ensure Australia's Nationally Determined Contribution includes recognition of climate-health risks and opportunities for health co-benefits from climate action, and that these are reflected in mitigation and adaptation plans.
- ○ Ensure Australia's representation at international climate change forums includes Australian health ministers and health department officials.
- ○ Establish a national Ministerial Committee on Health and Climate Change to facilitate cooperative leadership across portfolios and levels of government.
- ○ Establish a 'Climate Change and Health' standing committee of the Australian

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Health Protection Principal Committee. ○ Include consideration of climate change and health in other significant national health plans, such as the Long Term National Health Plan and the National Preventive Health Strategy, and align the Strategy with these plans.
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?
Areas of support: ● Strong support for a collaborative approach to policy development. ● Strong support for cross-sectoral engagement and collaboration. ● Strong support for alignment with international policy, including the Sustainable Development Goals. **Areas for improvement:** ● The Strategy should seek to establish an overarching working group or National Committee that consists of experts representing the most relevant facets of health, climate science, implementation science, and Commonwealth, state and territory Ministers with portfolio responsibility for Health, Environment, Climate Change and Energy. There should also be regular engagement and Consultation with Ministers with responsibility for related portfolios, such as Mental Health, Resources, Emergency Services, Planning, and Infrastructure with respect to policies, programs and initiatives in these portfolios that align with the Strategy. ● The Ministerial Committee should have responsibility for overseeing the development of the Strategy, including setting the overall policy direction and providing final approval for the Strategy's policies, programs and initiatives. A 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee (AHPPC) should be established to provide advice to the Ministerial Committee. An appropriate national agency should be tasked with leading the coordination and implementation of policies, programs and initiatives to deliver the Strategy. The Strategy itself must be integrated with other significant national health strategies, including the Long Term National Health Plan, and the National Preventive Health Strategy. ● The Ministerial Committee should be responsible for monitoring and reporting to the National Cabinet (or any subsequent body) on the progress and outcomes from the Implementation of the Strategy, which should be outlined in detail in a publicly available annual report by the nominated national agency. ● The Strategy should engage early and often with First Nations groups including Elders, local land councils, community controlled health organisations and the Coalition of the Peaks.

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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?

Areas of support:

● General support for the enablers as outlined in the Strategy.

Areas of improvement:

● While there is general support for the enablers outlined with the Strategy, there are a numbers of areas where these enablers could be strengthened:

- ○ Workforce, leadership and training: The Strategy must include adequate support for workforce involvement in the change process beyond training, and provide detail about the change theory and process. As well as retraining and managing change, the Strategy needs to recognise that in emergencies and disasters, healthcare workers are often supporting immediate family and friends. There must be contingency for workforce shortages in extreme weather events. There is also a lack of support for workforce capacity building and training. There is a need for a national cross discipline continuing professional development program on climate change and health for the health and social sector, and for people in other sectors. Current training opportunities are either discipline specific (which doesn't encourage or support collaboration) or ad hoc (therefore reaches too few people), or expensive (not everyone can afford for profit education courses). There is also a need to support and scale up existing communities of practice for sustainable healthcare to allow achievements and learnings to be shared, and common challenges to be raised. The Strategy should reflect respect for First Nations Knowledges in this enabler, and its inclusion.
- ○ Research: There is a high priority need for better data on climate-related health and wellbeing outcomes. Data can guide better investment, and disinvestment, in programs and interventions. It is crucial that First Nations peoples are tasked with conducting relevant research and that data sovereignty is an underpinning principle[50-52].
- ○ Collaboration: There is limited support for collaboration on climate change and health. The health sector has self-organised to collaborate on responding to climate change and health and health care decarbonisation, but these efforts require government investment in order to scale up and be more effective. This is reflective of the interdisciplinary nature of climate and health, and it should be a priority of the DHAC to address the barriers and foster enablers to ensure better outcomes for climate and health.
- ○ Monitoring and reporting: Regular assessment and forecasting of climate-related health impacts across the country is vital. Monitoring over long time periods with robust indicators would help governments and services understand climate change risk, identify specific vulnerabilities, highlight region-specific climate mitigation and adaptation challenges, and track how communities and organisations are responding. Monitoring of the implementation of solutions is also required, in terms of implementation progress, impact, and within the principle of data sovereignty.

● It is recommended the enablers be expanded to include governance, finance and planning. All of these are crucial aspects in the successful implementation of any national strategy. Governance should include:

- ○ A board (via an Act of Parliament) be established to advise Ministers on the implementation of the Strategy. There should be representatives from public and private hospitals, general practitioners, allied health professionals, public health specialists, consumers, climate and health experts and national climate

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agencies. The Board should be supported by a committee of senior officials from all jurisdictions. The Board should produce an annual report on Strategy progress. ● It is recommended that 'measurement' should become an enabler, as opposed to a standalone objective, and should be supported through a dedicated team that collates and reports on carbon emissions from the health sector. These should be reported through the proposed Board and should include epidemiologists who can explore the health impacts of emissions loads. ● It is crucial there is a commitment of funding. ● The Strategy lacks the inclusion of the commercial determinants of health and climate that exacerbate inequality and impact outcomes. It is crucial that conflicts of interest are recognised, and that the Strategy describes how it is going to manage conflicts of interest in the policy making process.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
Areas of support and improvements and highlighted above.

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

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Healthy Liveable Cities Lab, Centre for Urban Research

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24 July 2023

Department of Health and Aged Care
Australian Government
GPO Box 9848
Canberra ACT 2601
Australia

Dear Sir/Madam,

Re: Submission in response to the National Health and Climate Strategy Consultation Paper

Thank you for the opportunity to make a submission in response to the National Health and Climate Strategy Consultation Paper.

We are pleased to enclose feedback and recommendations for consideration from researchers in the Healthy Liveable Cities Lab at the Centre for Urban Research, RMIT University, Melbourne.

Bringing together a multidisciplinary research team, the Healthy Liveable Cities Lab examines the influence of city design and planning on health and wellbeing. Our research is developed in partnership with stakeholders to inform best practice policy and planning by simulating, modelling and assessing the health impact of planning and transport interventions aimed at creating healthy and sustainable cities.

We have focussed our submission on our areas of expertise, rather than addressing all the questions raised in the consultation paper.

For inquiries related to this submission please contact:
Dr Melanie Lowe
Vice-Chancellor's Senior Research Fellow
Email: melanie.lowe@rmit.edu.au

Yours sincerely,



Dr Melanie Lowe

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Submission in response to the National Health and Climate Strategy Consultation Paper

Authors: Dr Melanie Lowe, Associate Professor Sarah Foster, Dr Lucy Gunn, Atefeh Soleimani Roudi and Professor Andrew Butt

Thank you for providing the opportunity to comment on the National Health and Climate Strategy Consultation Paper. Addressing the human health challenges posed by climate change is an urgent and long-term process and we congratulate the Government on its efforts to develop the first national strategy on health and climate. Given the urgency to take action, the importance of the Strategy cannot be overstated. Based on the Consultation Paper, this submission summarises areas we support and provides suggestions and recommendations that we believe should be incorporated into the final Strategy.

Strengths of the Consultation Paper

We support:

- The Health in All Policies approach
- The six principles outlined, particularly those that recognise First Nations leadership, evidence-informed policymaking and the broader determinants of health and prevention.
- Recognition of the need for resilient health systems and minimising carbon emissions from health systems.
- Reducing emissions from health system building design, construction, and operation.
- Transitioning to renewable energy sources.
- Reducing emissions from road transport.
- The recognition of Research as an Enabler of action, and the need to invest in climate and health research to improve the evidence base.

Areas for improvement

The Strategy could be improved in the following four areas:

1. Include a clearer Vision statement, to underpin the Objectives and actions of the Strategy
2. Place greater priority on embedding health and climate considerations in all portfolios, sectors, and levels of government.
3. Actions to address the central role of urban and transport infrastructure provision and planning in mitigating and adapting to climate change, with co-benefits for health.
4. Include specific actions, and a detailed implementation plan with measurable targets.

Our recommendations are described further below and summarised in Table 1.

1. ***Include a clearer Vision statement*** *(Relevant Consultation Paper question: Q1)*

Strategies need to be underpinned by a clear Vision, to clarify what the objectives, principles and action are working towards. While the Consultation Paper outlines an overarching purpose, it does not contain a clear Vision statement. This should be addressed as a priority, and **we suggest the**

vision should focus on creating a healthy, climate resilient society. Such a Vision will more clearly support the Health in All Policies approach.

2. ***Place greater priority on embedding health and climate considerations in all portfolios, sectors, and levels of government*** *(Relevant Consultation Paper questions: Q1, 9, 10, 14, 22)*

As it stands, **the Consultation Paper is focused primarily on the health system and health sector**, rather than influencing and guiding activities in all portfolios and sectors to achieve better climate and health outcomes. This is evident in the emphasis placed on health systems throughout the Consultation Paper, and especially in the order of the Objectives. While the Consultation Paper includes the Objective 'Health in All Policies', it is currently listed and discussed last.

We recommend **re-ordering and re-wording the Objectives to place greater priority on prevention, mitigation, and adaptation across sectors**. This advice concurs with that of the Climate and Health Alliance:

- Objective 1. Promote and protect health from the impacts of climate change.
    - *This objective embeds health and climate considerations across all portfolios at both national, state and territory and local government level.*

- Objective 2. Develop a climate resilient community.
    - *This objective supports building community, health and aged care system resilience and capacity to respond to the health impacts of climate change.*

- Objective 3. Achieve a net zero health and aged care system.
    - *This objective guides the development of a national net zero plan for health and aged care. The current Objective 1 focused on measuring health system greenhouse gas emissions should not be a stand-alone objective, but rather an action or Enabler under our proposed broader Objective to reduce emissions from the health system.*

The Strategy needs to **more clearly outline how it will influence and drive investment and implement initiatives outside the healthcare sector** to reduce population health threats. The complex determinants of health and climate outcomes necessitate a multisectoral, systems approach that spans local, regional, and national levels. To frame a whole-of-society approach to climate and health, the strategy should **clearly articulate a holistic understanding of health**, as a systemic and interdisciplinary concept determined by inter-connections and dynamics between complex social, economic, technological, and ecological systems.[1,2]

We recommend refining the action area on prevention (2.6) to place greater emphasis on keeping people outside of healthcare systems, rather than optimising models of care. Preventing the health impacts of climate change requires addressing the 'upstream' causes of health problems such as environmental conditions and institutional and social inequities.

3. ***Actions to address the central role of urban and transport infrastructure provision and planning in mitigating and adapting to climate change, with co-benefits for health*** *(Relevant Consultation Paper questions: Q9, 10, 14, 22)*

The majority of Australians already live in urban areas and urban populations are expected to grow.[3,4] With cities being a significant contributor to emissions and facing significant climate and health impacts, the ways cities are planned, developed and managed has a central role in achieving a healthy, climate resilient future.[5,6] Action area 2.1 on 'Built environment and facilities' currently addresses emissions from building design, construction, and operation (especially health system buildings), and the need to transition to renewable energy sources. The Consultation Paper also has an action area focused on travel and transport within the health system (2.2) and mentions transport in relation to Health in All Policies (p. 31). However, there needs to be **greater**

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focus on the broader role of built environment design, urban and transport planning on preventing and reducing health and climate risks and outcomes.[7]

The Federal government has a key leadership role in cities and infrastructure policy, in collaboration with other levels of government and the private sector. The Strategy should emphasise the need for **inter-governmental collaboration on sustainable urban design, planning and infrastructure provision** for active transport (e.g., walking, cycling) and public transport in Australian cities. These sustainable transport modes have well-established health benefits through reduction of transport emissions and air pollution (as detailed in the Consultation Paper section 2.2) as well as physical activity pathways.[8-10] The transition to electric vehicles and improving fuel quality are important interventions, as detailed in the Consultation Paper. However, these motor-vehicle based transport initiatives do not offer the physical activity co-benefits of more active forms of transport.

Adequate housing density, well-connected streets, mixed land uses to create nearby destinations, high-quality pedestrian infrastructure and proximate public transport are key determinants of walkability.[11] Large areas of Australian cities currently have poor walkability and access to public transport, especially in outer suburban areas.[3,4,11-13] Recognising that the Commonwealth has a critical role in cities, particularly through infrastructure investment and housing policy, the Strategy is an opportunity to **support implementation of existing state and local strategies to deliver healthy, climate resilient neighbourhoods**, such as the Victorian state governments' 20-minute neighbourhood initiative.[14]

The Strategy should also **include actions to reduce housing and infrastructure vulnerabilities and foster built environment resilience to climate-related hazards** such as heat, droughts, bushfires, extreme precipitation, and floods. This is necessary to protect health and safety, especially for vulnerable populations. Example actions include mandates to locate housing away from flood-prone areas and bush fire zones, and ensuring thermal comfort of buildings.

The Strategy needs to include **actions to encourage urban greening and tree canopy cover in the built environment**. This can reduce health impacts of extreme heat and air pollution, promote mental health, and facilitates uptake and use of active and public transport as sustainable transport modes.[6,15,16]

4. ***Include specific actions, and a detailed implementation plan with measurable targets*** *(Relevant Consultation Paper question: Q24)*

The Consultation Paper lacks details on the actions required to implement the Strategy, which makes it difficult to assess the direction of the Strategy in full. **The Strategy should detail specific actions to be taken to achieve each Objective.**

Those responsible for implementing each action should also be clearly specified. As acknowledged in the Consultation Paper, many initiatives will require cooperation and collaboration across sectors if they are to be successfully implemented, so both the lead department/agency and potential partner agencies/departments/organisations should be identified for each action. This will facilitate accountability for a whole-of-government and Health in All Policies approach to implementing the Strategy.

The Strategy should include **targets and indicators to measure progress across sectors, on all aspects of the Strategy**. Detailed monitoring and evaluation must go beyond just health system responses (as currently detailed in Enabler 5) and measures of health system greenhouse gas emissions (as outlined in current Objective 1). Where possible, indicators and performance measures should be based on research evidence. There should also be **specific timelines** for the achievement of outcomes.

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Table 1: Summary of recommendations

1. Include a clearer Vision statement, to underpin the Objectives and actions of the Strategy
• Focus the vision on creating a healthy, climate resilient society.
2. Place greater priority on embedding health and climate considerations in all portfolios, sectors, and levels of government.
• Change the Objectives to place greater priority on prevention, mitigation and adaptation across sectors. • Drive investment and initiatives beyond the healthcare sector. • Clearly articulate a holistic understanding of health and its complex, inter-sectoral determinants. • Action area 2.6 should place greater emphasis on the benefits and role of prevention outside of healthcare systems.
3. Actions to address the central role of urban and transport infrastructure provision and planning in mitigating and adapting to climate change, with co-benefits for health.
• Emphasise inter-governmental collaboration on sustainable urban design, planning and infrastructure provision for active and public transport. • Support implementation of existing strategies to deliver healthy, climate resilient neighbourhoods. • Actions to reduce housing and infrastructure vulnerabilities and foster built environment resilience to climate-related hazards. • Actions to increase urban greening and tree canopy cover in the built environment.
4. Include specific actions, and a detailed implementation plan with measurable targets.
• Detail specific actions to be taken to achieve each Objective. • Clearly specify those responsible for implementing each initiative. Many of the initiatives will require co-operation and collaboration across sectors if they are to be successfully implemented, and collaborators should be identified. • Include targets, timeframes and indicators to measure progress on all aspects of the Strategy, including beyond the health system.

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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?
Optometry Australia
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

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About Optometry Australia

Optometry Australia is the national peak professional body for Australia's 6,000 registered optometrists, who perform over ten million eye checks annually. Optometrists are the first port of call for over 80% of people and are an integral part of Australia's primary health care system, often identifying eye disease in asymptomatic patients.

In Australia, an estimated 90% of blindness and vision loss, among both First Nations people and non-Indigenous Australians, is preventable or treatable, if detected early. Australia's eye health professionals, including our optometrists, are world-class in terms of their professional training and access to the most up-to-date technologies and drugs.

Climate change impacts our businesses, supply chains and communities. Australia's health sector, including optometry, has a role in both climate change mitigation and adaptation, and in reducing its overall environmental impacts. It is within our power to act to avoid and reduce greenhouse gas emissions, to prevent the planet from warming to more extreme temperatures, and to alter our behaviour and systems to ensure we remain able to meet the needs of the communities we serve.

In its 2021-2024 Shared Strategic Plan, Optometry Australia committed to exploring and developing initiatives in response to emerging evidence on the impact of climate change specifically on eye health. We believe that it is time for the healthcare sector, including the optometry profession, to show leadership and accelerate efforts to work towards mitigating the impact of climate change, and reduce its impacts on the environment.

To achieve progress, Optometry Australia engaged sustainability consultancy Edge Impact to develop a *Sustainability Roadmap for Optometry in Australia*. This document identified the ways in which optometrists and the broader optometry sector can take effective environmental action in the short and medium term. These include:

- facilitating collaboration to drive industry-wide sustainability action, including set decarbonisation expectations for the industry with key suppliers,
- leading partnerships to design circular solutions for problem waste streams,
- educating optometrists and optometry practice owners in sustainable procurement through the development of documentation such as common supplier code of conduct and sustainable procurement policy template for practices.

Support for peak body and association organisations, such as Optometry Australia, is critical to ensure adaptation in the health system; both in how the healthcare system adapts, and how the community adapts to the health impacts of climate change.

We are proud to work alongside colleagues from the Climate and Health Alliance and its member organisations; the National Rural Health Alliance and others to meaningfully prepare to meet the health needs of all people in Australia in the face of the climate crisis. We thus welcome the recent establishment of the National Sustainable Healthcare Unit (NSHCU) and the development of Australia's first National Health and Climate Strategy (the Strategy).

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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?
As it stands, the Strategy is focused primarily on the health system and health sector, rather than influencing and guiding activities in all portfolios and sectors to achieve better climate and health outcomes. A National Health and Climate Strategy must aim to prevent illness, injury and death associated with climate change; minimise the healthcare systems' contribution to Australian emissions; and ensure health systems resilience. This requires dedicated systems and processes to apply a health lens in a nationally coordinated approach that evaluates potential for health benefits and harms to policy development in other sectors, including energy, resources, transport, agriculture, infrastructure, planning, and environment. Optometry Australia encourages the Department of Health and Aged Care (DHAC) to implement a Health in All Policies (HiAP) approach to ensuring climate and health outcomes are be embedded across the whole of government response to climate change. Optometry Australia further supports the proposal put forward by the Climate and Health Alliance, that a clearly articulated vision and purpose would strengthen the Strategy. We note that the Climate and Health Alliance (CAHA) have proposed the following: • 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'. The Strategy must address the health threats of climate change through the wider determinants of health: social, cultural, economic, and environmental and must privilege the voices, perspectives, and expertise of those most impacted by climate change and resulting health impacts, including First Nations Australians, and those living in rural and remote areas particularly. DHAC must also set targets and timeframes for actions and implementation across its three-year timeframe, potentially through the development of an Implementation Plan.
2. How could these principles be improved to better inform the objectives of the Strategy?
Optometry Australia supports the principles as drafted, particularly noting the focus on leadership of First Nations communities and people; and tackling broader social determinants and their impact on health inequities. We call on the DHAC to ensure that First Nations Elders and communities are engaged in the development of the Strategy and its related objectives and actions. The Strategy should adopt a strengths-based, co-design model, outlining how it will engage First Nations Elders and communities and how it will incorporate cultural knowledge and practice during implementation. We further encourage the DHAC to ensure the development and ongoing implementation of the Strategy is informed by engagement with communities to understand the lived experience of all people living in Australia, including consumers and patients, rural and remote people communities, young people and those experiencing vulnerability and

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disadvantage. We encourage DHAC to consider expanding Principle 6, 'partnership-based working across all levels of government and beyond' to include the role of the healthcare workforce across all settings including primary, tertiary, community, and aged care.

Finally, it is crucial that the objectives and actions of the Strategy are underpinned by best evidence and expert guidance to maximise current efforts.

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

This question falls outside the scope of Optometry Australia's expertise.

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?

This question falls outside the scope of Optometry Australia's expertise.

As noted above, we call on the DHAC to meaningfully engage First Nations peoples, communities, and organisations in the development of the Strategy and its related objectives and actions.

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?

This question falls outside the scope of Optometry Australia's expertise.

As noted above, we call on the DHAC to meaningfully engage First Nations peoples, communities, and organisations in the development of the Strategy and its related objectives and actions.

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?

Optometry Australia broadly supports an evidence-based approach to setting priorities related to decarbonisation of the healthcare system. We support the Commonwealth schemes outlined in the Consultation Paper and call for Commonwealth leadership that ensures coordination and collaboration across the federated system.

The Strategy requires a clear definition of what 'health system' means to ensure emissions from across the healthcare value chain are accounted for. For example, clarify if 'health system' includes primary or community-based care, and Australian healthcare suppliers and manufacturers. If to be included, support is required for these providers, and their representative organisations (such as optometry, and Optometry Australia) to collect and meaningfully report data, to track decarbonisation and emissions reduction.

Work underway:

In 2022, Optometry Australia engaged sustainability consultancy Edge Impact to develop a *Sustainability Roadmap for Optometry in Australia.* It identified the ways in which optometrists and the broader optometry sector can take effective environmental action in the short and medium term. This project was underpinned by information collated from:

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- **Sector desktop research** – a scan of publicly available information regarding industry trends, challenges, and opportunities in the sustainability space. This includes looking at innovations in the sector, existing international frameworks, and businesses leading the way.
- **Practice case study** – a comprehensive carbon footprint and visual waste audit of an example optometry business to sense-check trends and stakeholder views with the reality of a practice's key environmental impacts.
- **Stakeholder interviews and focus groups** – to gain an in-depth perspective of what practitioners and industry partners view as the most important sustainability issues and are hearing from their customers, suppliers, and staff.

The practice case study found that the emissions footprint for a standalone optometry store who buy their electricity from the grid in Victoria was 880 tonnes CO2-e emissions total. This is equivariant to the emissions from 48 Victorian households per year or driving a diesel car from Sydney to Perth 1,320 times.

Overall, the project found that a total of 98% of emissions are from supply chain spending (goods and services) and capital purchases. Employee commuting and electricity use are the next two largest categories representing approximately 2% of emissions.

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

To the best of our knowledge, the research undertaken by Edge Impact, funded by Optometry Australia is the first research globally into the emissions and energy usage within optometry or primary/community-based eye care. Stronger evidence is available regarding the tertiary care sector, or eye care based in a hospital setting.

A stronger and continuing evidence base is required regarding community based primary care, to inform activity to adapt to a sustainable future and reduce emissions and energy use by optometry in Australia.

Proposed Objective 2: Mitigation

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

Mitigation should include strategies outside the health system that will reduce risks to health and protect health and wellbeing. As such, Proposed Objective 2 should include how the Department is going to support emissions reductions that benefit health outcomes across all sectors. This should include supporting the implementation of decarbonisation strategies across sectors for the betterment of intergenerational health and wellbeing.

Inclusions proposed by CAHA, and supported by Optometry Australia include:

- Mitigation targets should be included in the National Healthcare Reform Agreement and National Safety and Quality Health Service.
- Funding should be provided for education and knowledge transfer opportunities to the sector, including health care professionals such as optometrists.
- Applied research programs should be established for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants.

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Optometry Australia wish to note that peak bodies and associations such as Optometry Australia can provide effective partnership to DHAC in these endeavours. For example, the *Sustainability Roadmap for Optometry in Australia* identified several key areas for action by optometry, including:

- facilitating collaboration to drive industry-wide sustainability action, including set decarbonisation expectations for the industry with key suppliers,
- leading partnerships to design circular solutions for problem waste streams,
- educating optometrists and optometry practice owners in sustainable procurement through the development of documentation such as common supplier code of conduct and sustainable procurement policy template for practices.

The Strategy should provide the framework within which DHAC can enable and support these industry and profession led mitigation activities.

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?

These questions fall outside the scope of Optometry Australia's expertise, and we encourage the DHAC to consider the detailed feedback provided by our colleagues at CAHA.

However, as the Strategy moves to implementation, Optometry Australia would welcome the opportunity to discuss with DHAC the ways in which the Strategy enables and supports specific activity in these areas, related to optometry.

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

As previously noted, peak bodies and associations such as Optometry Australia can provide effective partnership to DHAC in these endeavours.

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?

Optometry Australia supports endeavours which seek to immediately reduce emissions where possible. The Strategy should seek to provide a framework for emissions reduction which is informed by available evidence and expert input, focused on best 'bang for buck'

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including emissions reductions, financial costs and savings, efforts, health benefits and cost of inaction.

We encourage DHAC to view industry and sector leader organisations, including Optometry Australia as partners in these endeavours, seeking to support and amplify efforts already underway, including those identified by the *Sustainability Roadmap for Optometry in Australia.*

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

We believe the activities identified by the *Sustainability Roadmap for Optometry in Australia* constitute 'quick wins' in the work of emissions reduction and climate adaption in optometry. Optometry Australia welcomes the opportunity to further detail these for DHAC and consider ways in which these could be further supported or enabled by government.

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?

Optometry Australia notes CAHA's advice that the Strategy's objectives be re-ordered as follows, to better reflect the purpose of the Strategy:

- 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. A climate resilient community: 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. 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.

We note that effective adaption will only be realised if the wider community understands the risks to health from climate change and are empowered to take health protective actions. CAHA has advised that the Strategy should include a public education campaign that highlights the risks to health and the health benefits of adaptation as critical to the success of any adaptation action. Optometry Australia encourage the DHAC to include education and upskilling of optometrists and other health care providers, both as small business owners and community leaders within this concept; with specific activities for consideration as detailed previously, built on the findings of the *Sustainability Roadmap for Optometry in Australia.*

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?

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c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
Optometry Australia would strongly support the development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan. Such an assessment and resulting plan should be executed as whole-of-government; should account for the lived experience of people across Australia; and should identify policy gaps and opportunities for improving population resilience across government portfolios.
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?
Optometry Australia broadly supports the development of a nationally consistent approach to vulnerability assessment and adaptation planning for the health system. If development proceeds, Optometry Australia supports CAHA's recommendation that guidance for the assessments considers policies and tools that have already been developed (e.g., at the state and territory level), and action that has already occurred (e.g., at the health service level) to avoid duplication of effort.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
While this question falls outside the scope of Optometry Australia's expertise, Optometry Australia strongly supports the need for prioritisation of high-priority health system adaptation actions.

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?
Optometry Australia strongly supports the adoption of a Health in All Policies (HiAP) approach to the Strategy. All dimensions of climate change are interlinked with human health. Action to reduce the health risks from climate change requires working across all sectors and all levels of government. We encourage DHAC to apply a health lens in a nationally coordinated approach that evaluates potential for health benefits and harms to policy development in other sectors, including energy, resources, transport, agriculture, infrastructure, planning, and environment.
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?
Optometry Australia supports the proposals put forward by CAHA, regarding the establishment of a 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee (AHPPC) to provide advice to a National

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Committee of relevant Commonwealth, state and territory Ministers with portfolio responsibility for Health, Environment, Climate Change and Energy. These structures should be informed by expert advice, including through privileging the perspective and expertise of First Nations peoples, communities, and organisations; and should have the ability to engage and consult with Ministers representing other relevant portfolios, including Mental Health, Resources, Emergency Services, Planning, and Infrastructure with respect to policies, programs and initiatives in these portfolios that align with the Strategy.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
Optometry Australia broadly supports the enablers outlined with the Strategy, while noting opportunities for these to be strengthened as detailed by CAHA. We encourage DHAC to consider the opportunity presented by effectively engaging and supporting the primary and allied health workforce in engaging with both consumers and suppliers. This requires empowering primary health professionals, including optometrists, with adequate training and education to support behaviour changes in both their patient bodies and their business supply chains. We also consider research to be a key enabler. There is a high priority need for better data on climate-related health and wellbeing outcomes, understanding that data can guide better investment, and disinvestment, in programs and interventions. In particular, as noted earlier, a stronger and continuing evidence base is required regarding community based primary care, to inform activity to adapt to a sustainable future and reduce emissions and energy use by optometry in Australia.
25. For each of these enablers: **a. What is currently working well?** **b. What actions should the Strategy consider to support delivery?**
Actions for consideration detailed in the above. Optometry Australia would welcome the opportunity to discuss with DHAC the ways in which the Strategy enables and supports specific activity, related to optometry.

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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Consumers Health Forum of Australia

HEALTH CONSUMERS NSW

HCQ HEALTH CONSUMERS QUEENSLAND

HEALTH CONSUMERS' COUNCIL

SUBMISSION

National Health and Climate Strategy

July 2023

Consumers Health Forum of Australia (2023)
National Health and Climate Strategy. Canberra, Australia

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List of Abbreviations

ACF	Australian Conservation Foundation
CAHA	Climate and Health Alliance
DCCEEW	Department of Climate Change, Energy, the Environment, and Water
DISR	Department of Industry, Science and Resources
DOHAC	Department of Health and Aged Care
IAP2	International Association for Public Participation
IUCN	International Union for the Conservation of Nature
NACCHO	National Aboriginal Community-Controlled Health Organisation

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Introduction

Consumers Health Forum (CHF) is the national peak body representing the interests of Australian healthcare consumers and those with an interest in healthcare consumer affairs. CHF works to achieve safe, quality, timely healthcare for all Australians, supported by accessible health information and systems. At the heart of CHF's policy agenda is consumer-centred care. CHF appreciates the opportunity to provide a submission to the Department of Health and Aged Care on their draft for the National Health and Climate Strategy. CHF is a member of the Climate and Health Alliance (CAHA) and supports calls for sustainable healthcare in Australia.

Consumers across Australia know the need for sustainable reform in healthcare. It is vital that the needs of people across Australia are both acknowledged and acted on in order to create equitable reform. As such, in preparing this submission, CHF has been joined by the following state and territory consumer peaks:

- Health Consumers Council Western Australia
- Health Consumers New South Wales
- Health Consumers Queensland

CHF's submission stands in support of the submission tendered by CAHA and supports their responses except where specified.

CHF supports the submission tendered by the Health Consumers Council of the ACT.

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General Issues

Inequity as a driver of healthcare's environmental burden

It is well established within the field of public health that inequity, not only in access to health services, but in fields as diverse as housing, food access, economic security, and even social situation, can create adverse health outcomes. Vulnerable people usually have less access to preventive health services and so are at greater risk of poor health. The burdens of both chronic disease support and acute intervention could be lessened substantially by the erasure of health-affecting societal inequity. While this is a complex issue that no single block of policies can eradicate, the issue of inequity cannot just be seen as a caveat on harm-reduction policies, but as a driver of climate change. In order to increase the efficiency of the health sector, and truly tackle preventive health, all social determinants of health, across all sectors, must be addressed.

Taking a systems perspective to explore this; for instance, using systems dynamics modelling, could help find ideal leverage points to address in order to most efficiently and effectively impact public health, inequity, and ensuing environmental consequences.

Consumer Engagement

The involvement of consumers as a stakeholder in the health system is sorely lacking throughout the document. The engagement of diverse and representative consumer groups is

critical in the development of a Strategy that is both just and effective. CHF and co-authors support the establishment of consumer-led deliberative processes to establish and guide the ways in which the Strategy will be implemented. CHF recommends looking into the IAP2 Spectrum of Public Participation to guide further development in this area. The Strategy currently sits within the "consult" or "involve" space on both streams, and CHF advises shifting towards "collaborate" or "empower".

Discussion Questions

For any question not addressed, refer to CAHA's response.

Following consultation with NACCHO, CHF recommends referring to the Priority Reforms within the National Agreement on Closing The Gap. All actions undertaken within this Strategy must be considered in light of the Priority Reforms and must meaningfully engage with the spirit of the National Agreement.

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

The Strategy lists four objectives: Measurement, Mitigation, Adaptation, and Health in All Policies. While all four objectives are crucial aspects of creating a robust strategy for Health and Climate, whether or not they make for the best suite of founding objectives for the Strategy is not clear.

Measurement would be better placed as a mechanism (or enabler) rather than an objective. As discussed in the strategy paper, DCCEEW prepares regular and reliable emissions estimates as it is. While a call for greater granularity of measurements is commendable, it is inappropriate for that to be an objective as opposed to a mechanism of action. If measurement is to be an objective, then there must be clear delineation of the measurement goals. What is being measured? Why? How? Why is it that this takes priority as an objective?

Mitigation, Adaptation, and Health in All Policies are commendable objectives for the Strategy to pursue. CHF has long advocated for Health in All Policies as a way of ensuring that the impact of other policies on health are explicitly taken into consideration when looking at policy reform or initiatives. CHF is pleased to see this linked to the One Health principle. This may be strengthened by presenting a parallel "Climate in All Health Policies" initiative, which would ensure inclusion of climate discussion in workforce, procurement, and other health policies.

Mitigation should include the resourcing of health NGOs to measure and reduce greenhouse gas emissions.

Adaptation must better reflect the diverse needs of the community. Different societal contexts require different adaptations. Aged care and rural healthcare are vital elements of a functioning healthcare system, and key components of a healthcare system that embeds preventive health practices. In addition, the conversation surrounding aged care as a health system burden should be reframed.

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CHF recommends the inclusion of Community Engagement as an objective. For a Strategy such as this to be effective, the activation of all stakeholders in the health system must be a priority. Consumers make up the largest group of stakeholders in the system, and climate change is an increasing priority for health consumers across Australia. Ensuring that a diverse and representative body of consumers from across communities at the greatest risk of climate change are proactively engaged in this work is essential. This includes first nations communities, rural and remote communities, and those experiencing health disadvantage.

Referring to the IAP2 Spectrum, as mentioned above, can help identify ways to increase consumer co-design and public participation within both the design and implementation of the Strategy and thus ensure that it is just, representative, and effective.

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

The principles listed could be improved in the following ways.

Principle 6: Partnership-based working across all levels of government and beyond, must be expanded to include health consumers. A strong focus on both mitigation of health inequity and also the role that health inequity has in exacerbating unsustainable health practices is necessary for any examination of health and climate change.

CHF strongly supports the inclusion of the principle of One Health and calls for explicit reference to the protection of biodiversity as a fundamental aspect of environmental protection and the safeguarding of health for both humans and the environment. Worthy of consideration is the inclusion of the health of communities into One Health, which would help solidify the concept of interconnectedness that One Health puts forward.

CHF supports evidence-informed policy making, and supports the prioritisation of actions based on cost-effectiveness, but also points out that the risks of not responding to climate change strongly enough far outweigh the cost benefits. The highest priorities must be mitigation and equity. Too often policies are put in place that protect economic interests at the cost of environmental and social concerns, and the strategy must, in the strongest terms, oppose this.

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

The strategy should include all three types of greenhouse gas emissions. The burden of healthcare emissions cannot be nominally reduced for convenience's sake down to direct emissions when it is well understood that upstream and downstream emissions are an invisible problem directly connected to healthcare. It is imperative that the strategy include decarbonising the entire chain as much as possible, and push for more energy efficient processes across the board. With the caveat that cost-effective solutions are prioritised for expedience's sake, it is not enough to focus on anaesthetic gases and inhalers and ignore the substantial energy burden of healthcare.

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

The proposed focus areas are good points to begin the reduction of emissions within the Australian health system.

It is important that emissions reduction is more accurately framed as a preventive health measure in addition to a responsibility per the Paris agreement. Climate change is the single largest health issue in the world, and by reducing emissions, the health sector is working to ameliorate that health issue.

In addition, it is vital that the Strategy acknowledge that all sectors must reduce emissions. If the Strategy is to purport that it is guiding the approach to climate-based health governance, it cannot ignore the health impacts of the emissions of all sectors. In light of the stated Objective 4, collaboration with other departments, such as DCCEEW and DISR, must form a substantial part of the forthcoming Strategy. "Health in All Policies" cannot just be "Health in All Health Policies".

CHF echoes CAHA's further recommendations surrounding food and waste.

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

In addition to the recommendations in the CAHA submission, the reduction of the necessity of consumer transport would be of benefit in reducing transport emissions. Measures such as 60-day scripts cut the amount of transport that consumers face, by reducing the number of trips that consumers must make. Reducing the level of inequity that consumers experience, and thus increasing the effect of preventive health measures, would similarly decrease the reliance on the healthcare system and need for transport. All aspects of climate change mitigation must touch on inequity for a just and holistic approach to be used.

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?

As mentioned above, a key element of effective preventive care is the reduction of societal inequity. Increasing the protections of people experiencing health disadvantage across all sectors should be a goal for this strategy in order to both increase public health and thus reduce the impact of the healthcare system. This will require a collaborative approach, engaging with diverse stakeholders, and engaging in good-faith practice to increase housing security, food security, and to reduce the impacts of the social determinants of health. As climate change will exacerbate many of the social determinants of health, this is crucial to address in both the short term and the long term. A systems thinking approach could well support both stakeholder engagement and the identification of points of leverage within the system on which to act to maximise benefit.

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

While acknowledging the potential that 'quick wins' have for providing a post-hoc validation of the Strategy, CHF views a push for quick wins as short-sighted. What is needed is a push towards a system-wide paradigm shift. It is not enough for this Strategy to prioritise a small number of high-visibility changes at the expense of greater-impact systemic change.

With that caveat in mind, in line with CAHA's recommendations, we refer to the 'menu of interventions' in development through the Alliance for Transformative Action on Climate and Health initiative (the ATACH).

It is imperative, however, that any 'quick wins' that are pursued are done so in a manner that does not put vulnerable health consumers at risk. There are already too many health consumers who cannot afford or access necessary healthcare.

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

It is crucial that whatever steps are taken for adaptation action do not widen the gaps in available healthcare to those who are already at a disadvantage. Many people already struggle to balance the costs of healthcare with rising rent and food costs. The choice between medication, housing, and nutrition is not something that anyone should have to make and yet we hear routinely from our consumers that this is a situation that many are in. Access to healthcare cannot be compromised. Quality of healthcare should not be compromised. There is a discussion that must be had about the balance between the efficacy and environmental cost of things such as multilayered packaging, single-use equipment, and consumables. This is a nuanced issue and the reduction of reliance on these products must be balanced by sustained healthcare safety.

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?

CHF has long called for a Health in All Policies approach. As mentioned above, using policies across all sectors as tools to address the social determinants of health is a key part of addressing public health and climate change. By ensuring that access to housing and food and even life satisfaction, we as a society can ensure that individuals and communities are more able to live healthily and thus reduce the burden of the healthcare sector. Increasing equity would foster resilience against the worst impacts of climate-involved natural disasters, increase the scope of measures designed to combat climate change, and generally improve

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public health. Health in All Policies is key to improving this. Incorporating One Health, and considering the health of animals and the environment, is a strong and advisable addition.

Points for Consideration

Expansion of scope

The driving factors of climate change include all emissions. The 7% of Australia's health sector greenhouse emissions are only a small fraction of the problem, and for meaningful change to come out of the strategy, it must work in concert with other sectors to reduce emissions across the board. In our consumer consultation, it was mentioned that emissions reduction sectors outside of Health do not fall under the remit of DOHAC. However, the fact that other emissions do form a substantial health risk. As such, DOHAC should place explicit emphasis on pushing to co-ordinate cross sector emissions reduction.

A further weakness of the Strategy as it stands is the singling out of emissions as the sole metric of environmental damage. The health sector uses a huge amount of plastic waste, and while this is rightly mentioned as a source of emissions, the effect of single use plastics on the environment is a health risk that cannot be understated. It presents an explicit and immediate risk to food supplies and biodiversity, as well as an as-yet undetermined potential risk to human health in the form of microplastic intake. We acknowledge that emissions must be the focus of a climate-specific Strategy, but the environmental implications outside of greenhouse gases must also be considered when developing any work centred on sustainability.

Furthermore, the proliferation of items such as single-use smart surgical equipment represents several large and seemingly unconsidered environmental burdens in the forms of mining and extraction of rare earth minerals, production labour, and sterilisation. While the operational advantages of such tools are well established, these aspects must be considered part of the scope of healthcare sustainability.

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Community-led Solutions

Enabler 3 advocates effective communication and engagement, particularly with communities that will be hardest hit by the effects of climate change to increase climate resilience. This should go a step further: those communities should be continually engaged to inform and co-lead solutions that will work in their communities and use systems and networks already in place. This should become Enabler 1, informing all subsequent actions.

Increasing the ability of the community to understand the risks, measures and mitigation strategies is key. Building climate literacy for communities to:

- Build resilience
- Take action at a local level
- Understand and interact with decision-makers at a State or Federal level

Social Determinants of health

The social determinants of health are and will continue to be amplified by the effects of climate change. Measures to lessen the disproportionate impact of climate-related conditions such as excessive heat, fire, drought and storm on vulnerable populations are essential. These include (but are in no way limited to):

- Ensuring climate-effective rental accommodation through insulation and shade.
- Incentivise solar panels on rental accommodation to reduce financial disadvantage and increase affordability of air conditioning and other appliances.
- Increased vegetation and shade in heat island areas
- Free access to facilities to manage heat stress such as water parks and pools, especially in lower socio-economic areas.
- Nationally consistent standards to ensure inclusion affected communities in design of solutions.

Equity must be a priority, both as an outcome and as a driver of change. Climate justice should be explicitly noted as a desired outcome, in addition to mitigation.

Continuity of Care in Natural Disasters

How to maintain continuity of care in natural disasters is an important consideration. Some points on this include:

- Consumers are able to access three-day emergency supply of some prescription medicines – this needs to be made clear to consumers, particularly in the lead up to, or in the wake of, a natural disaster
- Records may be lost when services such as pharmacies or general practitioners' premises are damaged or destroyed. Measures to ensure these records are backed up in some way is essential.
- How to ensure people with mobility difficulties are able to evacuate or receive care?
- Solutions to be led by those most affected.

Supporting Government with a Backbone Organisation

Objective 4 can only be achieved by effective communication and collaboration between government departments, levels of government and other organisations, in addition to the

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private sector. A "backbone" organisation that is independent to act as a coordinator across these organisations seems a practical solution to the intractable problem of siloing. This could aid in effective co-ordination across national, state, and local governance.

Resilience against the political cycle

The vicissitudes of the electoral cycle are a significant barrier to both long-term decision-making and efficacy of enacted solutions. Whatever is enacted must be resilient to potential waning of political goodwill towards sustainability. The Strategy must be focused on real long-term change, not political expediency.

Conclusion

CHF, in accordance with the state and territory consumer peaks, supports the development of a Health and Climate Strategy. However, significant work is needed to make this Strategy just and comprehensive. There must be a concerted cross-sector effort in emissions reduction, with health as a driving factor. There must be consumer engagement and involvement, not just in the consultation phase, but as a permanent part of the strategy. The recommendations of CAHA represent a good framework through which to improve the Strategy.

As this is a National Strategy, it is crucial that there is a strong partnership with the State and Territory governments, as well as with local governments. This must be partnered with involvement and consultation with consumers. In order to effect the necessary system-wide change, all levels of the system have to be working together, each aware of the role of the other. This must be clearly delineated from the beginning.

The authors of the Strategy requested recommendations for further stakeholders to consult. A significant increase in consumer consultation is needed for to ensure an effective and just approach to climate adaptation and mitigation. CHF recommends that future consultation include the following:

1. Peak bodies representing those at greater risk in the face of climate change. For example:
    a. Asthma Australia
    b. The Lung Foundation Australia
    c. Regional Australia Institute
    d. The Cancer Council
    e. Council of the Ageing
    f. Multiple Sclerosis Australia
    g. Cystic Fibrosis Australia
2. First Nations stakeholders. For example:
    a. NACCHO
    b. Indigenous Climate Change
3. The Australian Council of Social Services and affiliated groups
4. Conservation non-profit organisations (Note: While not immediately health-aligned, if the principle of One Health is to be applied, a holistic view, including protection of biodiversity, must be maintained. This is particularly important for First Nations Health, as our discussion with NACCHO highlighted. Furthermore, protection of health must

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include the protection of food supplies and water. In addition to this, conservation groups often have excellent climate modelling.)

   a. ACF
   b. Climate Council
   c. Landcare Australia
   d. Waterwatch Australia
   e. IUCN-affiliated groups

5. Healthcare Unions

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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?
Council on the Ageing (COTA) NSW
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

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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?
COTA NSW broadly supports the proposed objectives of the Strategy. It is suggested that measurement of success should be applied across both mitigation and adaptation aspects of the strategy. It is assumed that the reporting and measurement of proposed mitigation actions and outputs would be based on existing best practice scientific and quantifiable methodologies. The impacts of climate change are occurring now, with Australia experiencing a range of extreme weather events. The impetus to implement adaptation measures as a matter of urgency has become apparent. The measurement of aspects of adaptation such as community and individual resilience is challenging but should not be avoided as it will be critical component of how health and the general population will meet the significant climate change challenges in the coming years.
2. How could these principles be improved to better inform the objectives of the Strategy?
COTA NSW broadly supports the proposed principles of the Strategy. We would contend that principle number 6 be amended to explicitly include reference to citizen engagement as a core principle in developing actions related to the strategy. It specifies working closely with community, but we do not feel that this a clear commitment. We support principle number 9 within the *Climate and Health Alliance* framework that lists citizen engagement and consultation with communities as a critical pillar of the new Strategy.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
In order to achieve a significant national reduction in emissions, a reduction in all 3 scope emission categories is necessary. Health is a significant industry in Australia, that will be an important contributor to our national mitigation efforts when emission reductions are made. The measurement and reduction of these different categories are not without challenges, but if we are to meet our targets and prevent dramatic planetary warming; then all avenues must be utilised.
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?
COTA NSW defers to the knowledge and expertise of Aboriginal and Torres Strait Islander organisations and representatives to comment on this question.
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?
A response to this may depend on the result of the upcoming referendum. A Voice to Parliament would provide the framework to support the establishment of governance and consultative bodies that would enable First Nations peoples to have a say in matters relating to health and climate in their communities.

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If, however, the referendum is not successful the exploration of a similar federal legislated body may be necessary and corresponding state advisory groups established.

Additionally, the importance of local consultation with community cannot be overstated. Local Health Districts must commit to effective engagement with local Aboriginal and Torres Strait Islander communities, allowing them to have inputs into the development of policies, projects and procedures that impact them and their country.

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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?
No
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
N/A

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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?
The current suggested focus areas encompass the areas of emission reduction that Health systems have direct or in-direct control or influence on.
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?
Apart from those measures specified within the consultation paper, the importance of addressing resilience in the functioning of health services in the case of a natural disaster should be explicitly addressed. The use of alternative energy sources onsite with battery storage should be incorporated into the Strategy. This will address the reduction of greenhouse gas emissions and build some vital resilience in the case of future power outages.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
As outlined within the consultation paper, specific targets from the replacement of petrol and diesel vehicles owned by Government within the health sector should be included within the strategy and subsequent action plans. This could be extended, through the introduction of schemes that would provide financial incentives for staff to lease electric vehicles as part of a salary package. It is also critical that facilities such as hospitals and other health centres are serviced by regular and reliable public transport options. In some locations, no public transport is situated near the facility, forcing patients and visitors to use private transport options.
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
N/A
12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?
N/A
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

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N/A

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 release of the inaugural Australian Government wellbeing framework is an important first step in measuring a range of economic, social and environmental outcomes that all public policy should be measured by. Within these initial indicators is the measurement for the prevalence of chronic health conditions, with an upward trend indicated across the Australian population. We know that many chronic health conditions can be mitigated or prevented by a range of lifestyle decisions and access to early health care support. However, the percentage of health funding that is provided to preventative health care policies is extremely low. There needs to be a significant investment by Governments in both primary and secondary prevention strategies. This would produce a range of individual, societal and economic benefits – leading to a healthier society and reduced demand for the utilisation of the health system.

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

A possible action to involve private providers within the health system to reduce their emissions is through modification of contracts to include mandatory reporting requirements on a range of mitigation methods. These measures should be negotiated with providers, with achievable implementation dates incorporated into new provider contracts.

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?

COTA NSW is a consumer policy and advocacy peak and as such is not an expert in the field of emissions reduction. We would however, prioritise action in relation to the built environment and facilities – to build resilience into individual buildings, lessen reliance on the grid and reduce emissions. From a holistic perspective, the reduction in demand for health services by investing significantly in preventative health care and education would create broader societal benefits through a healthier community that is essential to ensure that the standard that we expect within our health care system can maintained.

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17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
We would suggest the installation of renewable energy generation on the grounds health facilities with adequate battery storage would provide measurable reductions in emissions and improve resilience of the buildings against possible energy disruptions.

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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?
Australia is highly vulnerable to the impacts of climate change. We will see an increase range of significant natural disasters, such as bushfires, cyclones, and flooding but there will also be the insidious creep of heatwaves, spread water and vector borne diseases. Drought will result in food insecurity, mental health, and the longevity of regional and rural Australia. It is difficult to prioritise a particular impact or risk, as all these negative outcomes of climate change will impact a large proportion of the Australian population – particularly the most vulnerable. As mentioned within the discussion paper, older people are particularly vulnerable to all these climate related events. As these impacts increase, there will be a greater reliance on the health system to provide health care and support to this group. All Governments (inc. Local) must work with the community to identify risks and commence planning and implementing pre-emptive measures to protect the health and wellbeing of residents across the country. This will involve identifying local resources and human capital, communities of risk and commence building connections and resilience. This extends beyond the responsibility of a Health and Climate Strategy to a more holistic approach that encompasses science, infrastructure, community cohesion and health. A number of state jurisdictions are developing or have developed a range of metrics to measure adaptation. It would be prudential that a common set of measures be agreed to across state and territory jurisdictions to ensure confidence in the methodologies and the resultant indicators across.
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?
COTA NSW supports the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan. Any methodology should align with the United Nations Climate Change Adaptation Framework. Within Australia, the Victorian State Government has comprehensive adaptation plans in a number of areas, including health and community. The state plan links to regional adaptation plans that have been developed in partnership between the State and Local Governments, with community input.

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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?
Yes, as outlined previously.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
The development and implementation of robust plans and procedures for preparedness, response and recovery in relation to climate-related disasters and extreme weather events should me mandated across all public health facilities. COTA NSW also notes with concern the high probability of a strong El Nino emerging in the 2nd half of 2023. Extreme high temperatures and dangerous heat waves have occurred in the Northern Hemisphere summer. There is a high risk that Australia will experience similar levels of heat in our summer. Heatwaves can be deadly to older people and planning within the health system must commence now to manage increased presentations of older people with illness related to heat or exacerbated by it. This may mean Health working with local councils to identify cooling spaces for people without the ability or financial capacity to cool their homes. Education of the community must also be implemented before the start of summer.

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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?
As mentioned within the Discussion paper, a Health in All Policies approach would acknowledge the need for adequate shelter, food and water security and safety and the interplay of these basic necessities on an individual's health and wellbeing and their consequence level of vulnerability to climate change events. This would necessitate the acceptance that we must address these overarching social determinants of health, before other actions can be implemented to improve resilience and adaptation of those vulnerable members of our community.
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?
As outlined previously, it cannot be overstated how critical it is to involve the community in any planning or implementation of climate or health policy or projects. It must be acknowledged that community has the connections, the knowledge and the strengths to address many of these challenges. Adequate funding for local or regionally led initiatives must be established to enable resources to be allocated and prioritised for this critical work.

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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?
The proposed enablers within the Discussion paper are essential to the success of a proposed strategy and subsequent action plan. However, without an enabler that specifically relates to resourcing then it will be difficult to achieve any of the strategy to the standard that it needs to be in order to address the proposed objectives. As mentioned previously, a Health and Climate Strategy should align and inform the Australian Governments wellbeing framework that informs economic policy and measures broader outcomes within the community, including health.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
As outlined within the Discussion paper – the establishment of governance structures (that includes partnering with local communities) and engagement will be critical to the successful implementation of the Strategy and subsequent action plans. The publishing of annual key metrics will be essential to ensure that the Strategy stays on track. Finally, a mechanism to regularly review the Strategy will be needed to ensure that it can be updated to be responsive to changing circumstances.

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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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?
Roche
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

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Questions for feedback from the Consultation Paper

Introduction

For 125 years, sustainability has been an integral part of Roche's business. Roche follows a holistic approach when managing sustainability, and integrates the three dimensions of Society, environment, and the economy.[2] Roche believes that these three dimensions need to be considered to continue to contribute to a better future, minimise our impact on nature, and to create medical advancements, create jobs and ensure livelihoods.

Roche is aware that this cannot be done alone, and that the key to sustainable value and growth lies in partnering with stakeholders and engaging in open constructive dialogue. At Roche, we have been working to mitigate our environmental impact for many years, proactively seeking new, more sustainable technologies and processes to achieve this goal.

We have set ambitious goals to reduce our impact on the environment and play our part in addressing climate change. Our efforts have been recognised by the Dow Jones Sustainability Index which has rated Roche as one of the most sustainable healthcare companies in the world for 14 years.[3] As part of the Roche Group ten-year ambitions, we are working towards reducing our total environmental impact by half globally by 2029.[4]

We are committed to reaching absolute zero for our scope 1 and 2 emissions by 2050.[5] This means reducing our emissions to true zero, and not relying on off-setting (as with a net zero target). We have implemented science-based strategies to improve efficiencies across our business and supply chain, and ultimately drive down greenhouse gas (GHG) emissions.

Since introducing this process we have set ourselves increasingly ambitious science-based targets, aligned to the Intergovernmental Panel on Climate Change (IPCC)'s recommendation to limit global warming to 1.5 degrees. Our approach means we expect to deliver earlier and faster than the models the IPCC considers necessary to limit global warming to 1.5°C. Time is of the essence and reducing emissions as quickly as possible is critical.

In Australia, we are working to reduce the emissions generated through our local operations and switching to clean/renewable energy at our premises, in alignment with the global Roche target for Roche facilities to be powered by 100% sustainable energy by 2025.[6]

Roche notes that the three main areas that drive emissions from the healthcare sector are the supply chain (products) > 50%; patient care settings: < 35%; patient use and travel: <10%; and R&D: < 5%.[7] Roche believes that emission reduction strategies, frameworks and targets should focus on these key areas to reduce emissions. This would align with international collaborative efforts outlined further below.

Sustainable Markets Initiative (SMI) Health Systems Task Force

As a member of the Sustainable Markets Initiative (SMI) Health Systems Task Force, Roche is collaborating with private and public sector entities to deliver net zero, for patient-centric health systems that improve individual, societal and planetary health.[8] The SMI Health Systems Task Force was launched at the 26th United Nations Climate Change Conference (COP26) and comprises representatives from the bio/pharmaceutical sector, NHS England, and the World Health Organisation (WHO).

In November 2022, the SMI Health Systems Task Force released white papers on:

- Accelerating the delivery of net zero health systems;
- Decarbonising healthcare supply chains

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- The digital solution for sustainability in clinical research
- Decarbonising Patient Care Pathways

White papers contain practical actions that can be implemented by all healthcare stakeholders including: Government and policy makers, regulators and regulatory bodies, health authorities and payers, health technology companies, clinicians and service providers, and patients.

Roche recognises the need to protect patients' health through adaptation measures and from decarbonisation across the health sector as a contributor to global emissions. As part of the SMI Health System Task Force, Roche is working alongside other industry leaders in accelerating the delivery of net zero health systems.

1. How could these objectives be improved to better support the vision of the Strategy?
Roche is supportive of stated objectives as a mechanism to outline what this strategy should achieve. Roche believes that it is also important that these objectives are aligned to an aspirational vision statement, which would present an ideal sustainable health system in Australia. Currently the consultation document does not articulate a vision, even though an overarching purpose is outlined in the 'About' section. Roche believes that Australia's strategy vision could ensure it aligns with the vision for the health system as articulated by the SMI Health Systems Task Force - namely: *"To deliver a net-zero, patient-centric, health system to improve individual, societal and planetary health*." Roche would support a vision for the health system which incorporates these themes, as this would enable the strategy to align with broader measures which are well underway at a global level. Roche also believes that this strategy needs to clearly outline and identify how it will work in the overall Government strategy for emissions reductions, and in meeting Australia's national emission reduction targets. It would be ideal to include a direct link to the overarching strategy, and an explanation how this strategy will contribute to the overall national emission reduction ambitions. To ensure that the strategy achieved the overall aim which is outlined in the vision, the strategy should also include some action items, or key milestones of success listed under each objective. This will ensure policymakers are able to measure the successful impact of the strategy, and make any adjustments necessary when required.
2. How could these principles be improved to better inform the objectives of the Strategy?
Roche is supportive of principles to be used as a guide to how the overall objectives of the policy are pursued. Roche supports the principles that are outlined in the consultation document, but believes that other principles should also be considered, notably from a health perspective. This includes: • *Patient-centricity*: It is important that patients and their needs be at the centre of this strategy to ensure that they continue to have access to the care when and where they need it.

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- *Simplicity*: The strategy should be designed to maximise efficiency, and be administratively simple, so that it can be sustainable and achievable on an ongoing basis.
- *Flexibility*: The strategy should recognise that a one-size fits all approach in the healthcare sector can be difficult due to its complexity and diversity.
- *Incentives for change*: There should be recognition that the healthcare sector is designed to save, prolong, and better the lives of those suffering from the burden of disease. Roche believes that positive incentives should be used as a first step, moving towards firmer compliance approaches as a second option. There is the opportunity for collaborative, constructive co-created incentives which would reduce the need for penalty based approaches. The strategy for the health sector should be guided by incentives along the healthcare value chain to reduce emissions to ensure reduction measures are taken, but not at the expense of patient care and sector innovation.

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

On a global level, Roche has committed to the Science Based Targets initiative (SBTi) and has joined the Sustainable Markets Initiative (SMI) Health Systems Task Force to further strengthen the commitment to climate action. Roche's commitment to the SBTi and the SMI is to achieve net zero for scope 1, 2, and 3 greenhouse gas emissions.[9]

By committing to achieve net-zero in line with the external framework provided by SBTi, Roche continues its successful carbon reduction journey on Scope 1 and 2, but now extends this to scope 3 which is up and downstream of the value chain. While Scope 3 emissions can be difficult to capture, Roche believes that this strategy should include them as part of emission reduction efforts.

Health companies can reduce emissions of their products and activity by decarbonising their facilities and engaging suppliers to address upstream emissions. Companies can continue to invest in prevention, early detection and diagnostic technologies to improve patient outcomes, reduce healthcare demand and increase efficiency of care.[10]

Roche believes that it is imperative for the strategy document to consider a consistent framework for measurement of emissions in the sector, for consistency and transparency to ensure that it will fit into the accounting mechanisms of other sectors of the economy, but can also work alongside international reporting frameworks. This should be equally applied and expanded to a system that includes all sectors so that there is consistent application across the economy and all are held to the same level of accountability.

Having a consistent and transparent framework is vital to a company for long-term planning and for company reporting expectations and requirements as part of broader emission reduction strategies. Roche pursues long-term goals with a staggered approach by continually setting mid-term targets, and having a consistent framework will assist in business planning.[11]

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?

Roche believes it is fundamentally important that the strategy reflects and embeds the expertise and cultural knowledge of First Nations Peoples in the development of policies and initiatives that will impact them, and that inclusion should mean genuine partnership and co-creation in the development and implementation of the Strategy.

Roche supports the strategy seeking to incorporate the strengths of First Nations cultures, and looks to embed their unique connection to the land and their historical expertise in sustainably managed

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resources. The principles of self-determination, cultural safety, and a strengths-based approach should be embedded in co-designing the approach with First Nations Peoples.

The National Aboriginal Community Controlled Health Organisation (NACCHO) is the national leadership body for Aboriginal and Torres Strait Islander health in Australia. NACCHO exists to provide advice and guidance to the Australian Government on policy matters and advocates for community-developed solutions that contribute to the quality of life and improved health outcomes for Aboriginal and Torres Strait Islander people. NACCHO would be an important and relevant body to consult.

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?

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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?

As outlined above, Roche has taken significant steps to reduce emissions globally and in Australia. Roche has put forward a commitment to reduce our total global environmental impact by half by 2029, and a commitment to reaching absolute zero emissions by 2050.[12] In Australia, we are working to reduce the emissions generated through our local operations and switching to clean/renewable energy at our premises, in alignment with the global Roche target for Roche facilities to be powered by 100% sustainable energy by 2025.[13]

Roche is making significant emission reduction steps as part of the joint action of the SMI Health Systems Task Force at a global level. This collaboration with private and public sector entities was launched at COP26, and is already taking scalable action to collectively address emissions across supply chains, patient care pathways, and clinical trials.[14]

Of particular note for measurement of emissions, the Task Force members will build an end-to-end care pathway emissions calculation standard tool that allows stakeholders to measure and track emissions across the care pathway. This Task Force will also publish product-level life cycle assessments (LCA) data to increase transparency on treatment emissions, and will agree upon a common framework to measure the emissions from clinical trials.

This includes a commitment to a common framework by 2023 and subsequently start to measure greenhouse gas emissions in phase 2 and 3 clinical trials, and companies aim to report phase 2 and 3 trial emissions for trials starting in 2025. It also includes a decarbonisation pathway and set trial emissions reduction targets for 2030 at the latest, to incentivise clinical research organisations and clinical trial-related suppliers to commit to a framework to measure and reduce emissions, including through the use of digital solutions. This also includes a target of 90%+ of trials starting in 2025 to include a review of how digital solutions can reduce emissions.[15]

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

As outlined above in question 6, the SMI Health Systems Task Force is committed to build a standard emissions calculation tool, and to agree upon a common framework for measuring emissions. Roche believes that this is important for scalable action, and is something that could be considered in Australia to avoid duplicating efforts, and to close the gaps with international frameworks.

Measuring emissions accurately will require standardised data recording and reporting mechanisms to ensure data is meaningful, and as highlighted by international examples, the first step may be agreeing on a calculation tool and a framework for how to capture the data. This is vitally important to address transparency for Scope 3 emissions across the supply chain.

The strategy will also need to recognise the broad diversity in the healthcare sector. There needs to be a clear understanding of who delivers what services from where, the manufacturing processes, the different technologies, and waste disposal. Within each of these aspects there may be some areas with a higher emissions output than others, and there would be real value in the Government having a detailed map across the system to understand the interactions, and where the 'high-value' areas are that exist across the healthcare system.

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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?
Roche supports the key emissions reduction focus areas that are covered in the consultation document. Roche notes that there are other opportunities which could be highlighted by the strategy as focus areas of emission reduction. This includes a focus on digital health tools, and incentives to bring low emissions technologies to the market. There are opportunities to reduce emissions from clinical trials and disease management settings by better utilising digital health tools. Such tools can reduce trial timeframes and reduce the number of patients that need to be recruited to a trial by creating synthetic patient cohorts based on AI analysis of clinical records, real world evidence or historic trial data.[16] Digital health tools also enable the capture of physiological or behavioural data to use as a clinical measure of efficacy in a trial[17], and they can help patients with disease management and monitoring and tracking, which can lower travel, transport and energy usage. They can also reduce patient travel and facilitate patient recruitment and retention rates. The extent to which digital health technologies can contribute to the decarbonisation of healthcare will be reliant on regulatory acceptance of the evidence derived through digitally enabled R&D.
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?
Roche notes in the consultation paper a focus on identifying and making use of policy levers to reduce emissions from the operation of the built environment and facilities, with a focus on a renewable source transition. Roche supports this, and has been proactive in investing in sustainable energy technologies such as solar and geothermal, or purchasing sustainable energy.[18] However, Roche would also like to highlight the benefits of improving energy efficiency as a lever to reduce emissions, and believes the strategy must highlight greater opportunities in this area. Roche has an established framework and defines fundamental requirements to optimise energy use, which covers all energy consuming items, which includes motors through buildings, processing plants and equipment.[19] To foster investments in energy optimization, Roche uses 'life-cycle analyses' that ensure the true balance of costs/risks and benefits of energy efficiency investments are being captured. The objective behind this approach is to direct investments towards the most efficient and financially competitive options.
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
Roche believes that it's appropriate for the existing policies and initiatives to include consideration of technologies and infrastructure (which will be continually improving) to support Electric Vehicles (EVs). Additionally, Roche believes that it is important that this strategy link to the existing Government efforts to reduce transport emissions through the National Electric Vehicle Strategy. Roche is already making huge improvements globally in reducing emissions from transport. For Roche Diabetes Care, we have transitioned to a more climate-friendly transport and support the

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third parties we work with in achieving the same high sustainability standards that we apply to ourselves. 40% of Roche's overall energy consumption has been reduced since 2004, and we are now shipping more via sea as we plan to reduce CO_2 emissions by 70% by the end of this year.[20]

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

Roche supports the detailed action areas relating to supply chain emissions, and Roche has been making notable progress in reducing emissions along the supply chain. This is essential as supply chain emissions drive over 50% of overall health care emissions.[21]

The majority of our CO_2 emissions, (over 94% in 2020) were from Scope 3 emissions (generated from within our supply chain). We are therefore working with our suppliers to help them put in place plans to reduce their emissions, and establishing sustainability targets and KPIs within supplier contracts. We are aiming to reduce scope 3 emissions by 18% by 2025.

Recognising that Scope 3 emissions require broader effort, the SMI Health Systems Task Force has committed to address emissions across supply chains.[22] The White Paper completed by the Task Force outlines nine levers to decarbonise supply chains[23], and this may assist when identifying policy levers in the Australian strategy.

This includes reducing and avoiding emissions in:

- Product and packaging redesign
- Process efficiency

While there are also levers to abate remaining emissions including:

- Renewable power
- Renewable heat and steam
- Renewable heat (high temp)
- Clean transport
- Carbon capture and storage
- Regenerative agriculture
- Feedstock switch

Reducing emissions across the supply chains is extremely difficult in the bio-pharma sector, as approximately 50% to 80% of greenhouse gas emissions are generated by upstream suppliers in the early stages of materials extraction and processing.[24] There are also other challenges including:

- Calculating biopharma supply chain emissions.
- Supply chains are complex with multiple layers of suppliers.
- Much of the early stage product manufacturing takes place in parts of Asia in areas of high fossil fuel power grid use.
- The healthcare industry is highly regulated and processes are long and complex.
- Decarbonisation levers are currently expensive.

Government and policymakers can help to address these challenges to assist the biopharmaceutical sector to reduce emissions. This can be achieved through creating the right incentives and business environment to accelerate the transition across supply chains, while also setting standards for energy efficiency, and setting carbon prices.[25]

Roche, like other healthcare companies, is investing significantly to decarbonise its supply chain operations, as outlined through its commitment to the SMI Health Systems Task Force initiatives, and at a local level as a signatory to the Australian Packaging Covenant Organisation (APCO)

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(detailed in Question 13).[26] Changes to local policies can support global initiatives to decarbonise the supply chain.

Specifically:

a) Ensuring regulatory hurdles are minimised to support initiatives to improve product and packaging redesign - these barriers can include cost and time taken to have the applications assessed by the regulator.
b) Include sustainability as a criterion in procurement and reimbursement decisions
c) Setting of ambitious green supplier standards.
d) Ensuring local requirements for emissions reporting and standards are aligned with what is already occurring globally.

In March 2023, Task Force members committed to the following joint targets[27] to address supply chain emissions:

- Assess and disclose Scope 1, 2 and 3 emissions - by 2025;
- Set near term targets aligned with the 1.5 C pathway - by 2025 - and commit to achieving net zero by 2045.
- Set targets to reduce waste (including solvents) and energy and reuse materials in manufacturing - by 2025;
- Commit to switch to at least 80% renewable power and make the commitment public- by 2030.
- Explore options to source green heat - by 2030.
- Commit to set standards for own suppliers to cascade targets upstream - beyond 2025.
- Set targets to increase water efficiency and commit to adopt water stewardship standards - beyond 2025.
- Transition car fleets to zero emissions vehicles by 2030 and explore green transportation corridors by 2025.

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

Pharmaceuticals are developed to treat or prevent human disease, and Roche acknowledges that pharmaceuticals may enter the environment from production, from patient use and excretion or from improper disposal. While such releases are generally unintended, Roche believes that the presence of pharmaceuticals in the environment is undesirable, and should be minimised whenever feasible.

Roche believes that the evidence available today indicates that the benefits derived from the use of active pharmaceutical ingredients far outweigh the risks arising from their presence in trace amounts in the environment.[28] Those releases that still occur must be assessed in a careful, scientific and differentiated way; if indicated such releases must be actively managed, treated and reduced.

CO_2 originating from the combustion of fossil fuels for energy purposes constitutes the major part of Roche's emissions, and Roche does not operate processes that emit large quantities of other greenhouse gases.[29] Hence, the focus for Roche is its energy strategy, and Roche does this through holistically addressing all issues revolving around energy use.

A minor contribution to Roche's greenhouse gas emissions (less than 2%) originates from halogenated hydrocarbons used for cooling and refrigeration equipment, but there are established plans to eliminate this to defined timelines.[30] Roche tracks and monitors greenhouse gas emissions as part of the annual key-figure reporting and this inventory follows the Greenhouse Gas Protocol,

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the acknowledged corporate accounting and reporting standard stipulated by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI).

Roche acknowledges the mitigation actions proposed, and notes that Roche do not currently produce these types of product.

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

Roche agrees with the consultation document that consideration should be given to waste, and to innovative approaches for minimisation, with a greater emphasis on re-use and recycling. However, Roche believes that for the healthcare and biopharmaceutical sector this strategy will need to look at mitigation in this area from a global perspective, and that the strategy will need to work alongside global initiatives.

When considering the packaging of pharmaceutical products, Roche is already innovating to reduce the carbon footprint of our products. A recent advancement in one area allowed us to use 40% fewer raw materials and weigh less to provide a smaller carbon footprint while being transported.[31]

Other incentives may be the need to consider aligned approaches from different regulatory agencies to avoid regulatory hurdles to changing packaging. Currently, if a company were to change a product packaging to be more sustainable (such as through reducing the amount of packaging), there are a number of regulatory hurdles to overcome, which act as a disincentive to change.

While shipper boxes can be adjusted, pharmaceuticals are strictly controlled by medicines regulation, particularly the immediate containers (glass vials and blister packs) that come in contact with the medicines, which can create an extra barrier to sustainability initiatives. Roche already has obligations to comply with the APCO initiatives for improving the environmental impact of its product packaging[32], but targeted pharmaceutical initiatives are difficult due to regulatory compliance.

From a diagnostics perspective, there are numerous opportunities to reduce waste in the healthcare sector, ranging from the reagents and consumables used in the laboratory along with their packaging, to recycling and recovering valuable materials from instrumentation.

Ensuring sufficient robust and quality infrastructure onshore with government or regulatory oversight, to improve local recycling capacity for the numerous health technologies would assist more companies to reduce environmental waste. The strategy should outline local incentives to manage waste (or components of) all along the value chain which currently may need to go overseas and are therefore contributing to emissions.

Additionally, the greater encouragement of re-use, recycling, and reprocessing needs to be considered, but it needs to be considered in the context of local safety and quality regulations. Medical devices need to be fit for purpose, and while refurbishing may be a good solution, this may create added burden to ensure that devices still perform within the manufacturer's specifications and local regulatory, quality and safety standards.

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?

Roche supports the inclusion of optimised models of care as a way to also reduce emissions. Improving prevention and changing to new models of care can assist with decarbonisation given that around 45% of CO_2 emissions arise from the care the patient receives.[33]

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As diagnostic and digital health technologies can assist in this regard, they can contribute to decarbonisation. However, broader and faster adoption and access to such innovation will be required to maximise the contribution these technologies can make.

Prevention

There are significant opportunities to prevent disease onset, prevent its deterioration when onset occurs, diagnose diseases earlier when they are easier to treat, and optimise disease management to ensure patients get the right care. Innovation in diagnostic technologies is enabling earlier diagnosis of diseases with increasing application across the broader healthcare continuum (i.e. screening, monitoring, treatment identification, risk stratification, prognosis and prediction).[34]

New models of care

New models of care to improve the efficiency of interventions, deliver care closer to the patient and using lower emission treatments can also help decarbonise the care pathway. Introducing new models of care such as early diagnosis, optimising disease management, improving the efficiency of interventions, and delivering remote care, can all assist in lowering emissions.[35]

The evolution of anatomical pathology technologies can help reduce the use of toxic chemicals used in these laboratories. As an example, Roche has committed to removing substances of very high concern (SVHC) wherever technically possible within 10 years of these substances being added to the candidate list of the European Chemicals Agency.

Enabling anatomical pathology laboratories to access digital pathology slide readers, for example, can reduce the risk of slide handling errors,[36] allows digital images to be shared between remote laboratories where a second opinion is required (replacing the need to transport fixed tissue specimens to other laboratories) and can increase access to learning and training for healthcare professionals

Roche agrees that the strategy should support the National Preventative Health Strategy as outlined, and supports the inclusion of updated models of care by encouraging environmental considerations in health strategies and policies pursued by the Government.

At a global level, there is already work underway in this area. To support emission reductions in patient care pathways, the SMI Health Systems Care Task Force members have committed[37] to:

- Engage and collaborate with health stakeholders globally to raise awareness of decarbonisation needs and opportunities.
- Build an end to end care pathway emissions calculation standard and tool for specific diseases to measure and track emissions across the care pathway and assess decarbonisation pathways.
- Align on a common framework to perform life-cycle assessments to publish data for products to increase transparency on treatment emissions.

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

Roche is supportive of this consultation and further engagement with private stakeholders in the health system. As previously noted the healthcare sector is diverse and complex, and this strategy needs to include considerations from across the different parts of the sector.

Additionally, it would be helpful for the strategy to identify the different stakeholders and their role in the healthcare ecosystem and identify actions that can be taken by each as responding to the challenges from climate change are a collective responsibility. It would also be ideal to have a

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stepped introduction of any new policy to allow the healthcare sector to make adjustments where required.

There also needs to be clarity around how any initiatives being undertaken under the Health Climate Change Strategy link to broader strategies to address climate change and environmental issues to reduce duplication, ensure alignment and potentially augment or accelerate existing initiatives. A mapping exercise of what these initiatives are and who is responsible and the stakeholders involved would be of value and provide transparency for all involved.

Again, as previously noted, Roche is part of the SMI Health System Task Force, which is a collaboration of private and public sector entities which have put forward commitments and actions to deliver patient-centric, net zero health systems. A similar approach should be considered in the Australian context which works alongside the developments at the international level.

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.

Roche is strongly supportive of an approach that looks to strike a balance between prioritising emissions reductions in the areas of direct control and where the emissions are highest. However, Roche believes that this also needs to follow a principle of putting patients first, and noting that striking a balance between areas of direct control and high emissions areas should not be a policy which negatively impacts on patient care.

Roche also believes that there needs to be a focus on what can happen locally as well as what is already happening at a global level. There are many strategic actions already occurring at the global level, and this strategy should look to balance where it can make the greatest impact at a local level by targeting areas which are specific to creating local emissions.

b.

Roche agrees that the six sources of emissions outlined in the consultation document are the key areas of focus in the health sector, and this aligns with the identified priorities from the SMI Health System Task Force. Roche recommends a strategic approach to addressing the priority areas, and that putting the six areas into a priority list may not be a simple solution.

Roche believes that a full mapping exercise is required to identify what areas are well advanced and widespread, which require more action, which are being addressed globally, and which need to be addressed locally. There also needs to be further consideration about the risks posed along value chains, including how best to align on standards and reporting requirements.

Roche suggests that a mapping exercise should also include a matrix of what actions are required in the short-, medium-, and long-term. This would need to be linked to what actions will likely have a low, medium, or high impact, and what the identified risks in each category would be of not progressing action.

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

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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?
Roche agrees with the consultation paper that there are likely to be numerous negative health outcomes related to climate change. Some of the decarbonisation initiatives to improve patient care pathways and clinical trials outlined above in the previous section will contribute to building the baseline health of the population, which will enable them to be more resilient to the impacts of climate change. It is clear that the health technology sector is going to continue to be a key stakeholder in delivering better healthcare to patients through decarbonisation and adaptation efforts, and that health technologies are a fundamental enabler for this Strategy. Roche believes that for the strategy to be successful, each healthcare stakeholder will need to contribute to efforts to support mitigation and adaptation measures, and the Strategy should assign actions that can be undertaken by each stakeholder group. When it comes to adaptation, Roche is a supporter of a strategy which plans for better access to healthcare services (including pharmaceuticals and diagnostics) when they will be required. Furthermore, It is important that no initiatives under this Strategy impede patient or clinician choice, restrict patient access to care or delay access to quality care.
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?

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

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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?
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?
Roche again notes the collaborative approach as part of the SMI Health Systems Task Force. While it may be too early to measure the success of this collaboration, the group has committed to targets aligned to the 1.5 degree pathway, and have identified industry-specific actions needed to achieve this goal.[38] If this does not already exist within Australia, the Government could consider recommending the same approach for Australia's largest healthcare companies as an avenue for broad Australian industry commitment to reducing emissions in the sector, targeting the areas of most need of emissions reduction. The international SMI Health Systems Task Force includes representatives from government and non-government organisations, and this could be replicated at the local level to push for local action.

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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?
Roche is supportive of the enablers outlined in the consultation document, however Roche would recommend one update. Roche suggests that for Enabler 5: Monitoring, evaluation and reporting, there should be a harmonised end-to-end pathway calculation tool for reporting. This was identified by the SMI Health Systems Task Force as a key requirement for the sector internationally as a standard stakeholders needed to measure and track emissions across the care pathway and to assess decarbonisation strategies.[39] Roche recommends that this is an update required for Enabler 5 to ensure there is consistency and transparency in the local setting.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
As outlined above, Roche believes that Enabler 4: Collaboration, is working well at an international level at a cross-jurisdictional and cross private-public sector level. As mentioned, Roche's commitment as part of the SMI Health Systems Task Force is a fantastic example of industry-wide collaboration, with an aim to achieve the target goal of reducing emissions to the 1.5 degree level through a mechanism of self-regulated actions. Additionally, Roche is taking enormous steps to be an industry leader of Enabler 1: Workforce, leadership and training. Since 2004, Roche has been implementing CO_2 reduction measures that have led to a combined decrease of over 70% in tons of CO_2 per employee.[40] Roche is supportive of Government measures to encourage medical colleges and other training education institutions to ensure the impacts of climate change on health form part of the training curriculum.

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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