### About your submission

**Are you responding on behalf of an organisation or group?**

- [ ] No
- ☒ Yes

**If yes, please identify the organisation:**

### Your contact details

The following information will not be published without your permission but enables the Inquiry to contact you about your submission if required.

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### Publication of submissions

Submissions will be published with the name of the submitter unless otherwise indicated below. Do you consent to be identified in the published submission?

- [ ] Yes, I / my organisation agree to be identified
- ☒ No, I / my organisation request to remain anonymous

### Terms of Reference

You are encouraged to address at least ONE of the Terms of Reference as listed below. Please select which item/s you will address:

- ☒ 1. Establish current knowledge on the implications of climate change for health in Western Australia (WA) and recommend a framework for evaluating future implications.
- ☒ 2. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will protect the public from the harmful health impacts of climate change.
- ☒ 3. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will strengthen the preparedness and resilience of communities and health services against extreme weather events, with a focus on the most vulnerable in the community.
☐ 4. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will reduce the contribution of WA health services to climate change and other detrimental impacts.

☐ 5. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will enable WA Health services to implement change, including energy efficiency, to a more sustainable model.

☒ 6. Evaluate the likely benefits (health and wellbeing, social and economic) arising from climate change mitigation strategies, with a focus on WA health services.

☒ 7. Define the role of the Department of Health in leading public policy on climate change and health.


Submissions response field

Please type your response to the item(s) selected above into the field below. Alternatively you may provide your submission as a separate attachment (suggested maximum 5 pages).

Submission to the Climate Health WA Enquiry

Address to Parts 1-7

Author: 

Position: 

Department: 

1. Establish current knowledge on the implications of climate change for health in Western Australia (WA) and recommend a framework for evaluating future implications;

   The Department of Health should enact practices that record, mandatorily disclose data summaries and track:

   A) The number of hospital admissions, Accident and Emergency Presentations and GP visits against either the:
      Daily Maximum Temperature (November – May); OR
      Daily Minimum Temperature (June – October),
   As recorded by the Bureau of Meteorology.

   This data collected should be used to inform the Department of Health, other health care providers, Local Governments and researchers how best to plan and deliver services to ensure that in the future climate, which will include more extreme temperatures, the damaging health outcomes resulting from extreme weather conditions are minimised.
**Submissions response field**

**Please type your response to the item(s) selected above into the field below. Alternatively you may provide your submission as a separate attachment (suggested maximum 5 pages).**

B) That the number of hospital admissions Accident and Emergency Presentations and GP visits during heat waves and natural disasters.

This data collected will inform the Department of Health, other health care providers, Emergency Services, Local Governments and researchers to plan for, resource and provide adequate care during heat waves and natural disasters.

C) Mandatory reporting by GPs and other healthcare providers of illness related to climate change

D) That the data collected in 1A), 1B) and 1C) (above) is used to calculate a financial cost, resource cost, liveability cost and health burden cost during climate change driven weather and climate change driven natural disasters.

2. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will protect the public from the harmful health impacts of climate change;

   **AND**

3. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will strengthen the preparedness and resilience of communities and health services against extreme weather events, with a focus on the most vulnerable in the community.

   **AND**

4. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will reduce the contribution of WA health services to climate change and other detrimental impacts.

   **AND**

5. Identify and recommend a program of work to manage the implications of climate change for health in WA, which will reduce the contribution of WA health services to climate change and other detrimental impacts.

   **A)** Employ a dedicated and experienced professional sustainability officer in your organisation to assess:
   - The financial and cost implications of inaction and action on climate change, particularly in relation to increased expenditure in health services during heat waves
   - The real human cost of inaction
   - Opportunities, costs and barriers in your organisation to implementing initiatives to increase energy efficiency, increase renewable energy and decrease waste
   - Create a green purchasing and procurement policy
   - Report under an accredited climate framework, for example the Global Reporting Initiative Standard (GRI)
Please type your response to the item(s) selected above into the field below. Alternatively you may provide your submission as a separate attachment (suggested maximum 5 pages).

- Create and advise on corporate emissions reduction targets
- Prepare advice for ministers
- Comment on prospective climate policies from an epidemiological perspective
- Baseline the Department of Health WA performance against national and international Departments of Health or similar services

B) Undertake sustainability reporting using GRI (Global Reporting Initiative) standards or similar

C) The Department of Health should acknowledge that emissions resulting in global temperature increases exceeding 1.5°C will result in negative health impacts. Following on from this set organisation wide emission reduction targets to limit global warming to 1.5°C, or less, by 2030. The target should be in absolute value (for example decrease emissions by 20% compared to 2005 levels) rather than a business as usual value (for example decrease emissions by 20% compared to taking no action). Carbon emissions reduction can be achieved by:
  - Improved energy efficiency through:
    - Building design
    - Building use (e.g. higher occupancy)
    - Appliance efficiency
    - Building user education
    - Replacement of HFC air conditioning/refrigerant gases
  - Increased installation of renewable energy
  - Improved fleet (car/truck/other) efficiency
  - Decreased waste. Waste sent to landfill or incineration is a major contributor to global greenhouse gas emissions. By reducing the use of single use items in hospitals, correctly sorting items for recycling and disposal and including recycling collection at all levels of the organisation greenhouse gas emissions can be reduced
  - Implement a revolving energy fund, where savings in energy from emissions reduction projects are reinvested into new emissions reduction projects (see https://betterbuildingsinitiative.energy.gov/solution-roundup/green-revolving-funds) for an explanation of this model. I note that this model has been used successfully by many local governments across Perth for over a decade and [NAME] can provide further explanation of how this operates and the benefits of such a system

D) In addition to absolute climate targets, outlined above in 2C), create organisational targets that align with the UN Sustainability Goals

E) The Department of Health WA should comment on the health impacts, health
costs, morbidity and mortality for all Western Australians when Federal and State Climate Policies are open for comment. Furthermore, the Department of Health WA should lobby for climate targets, carbon targets and carbon abatement actions that will result in an increase in global temperatures that is safe and healthy for all Western Australians.

F) Lobby State and Federal departments to improve building codes to reduce the impact of excessive heat.

G) Lobby State and Federal departments to ensure new residential building do not rely on mechanical heating and cooling to remain a health thermal range.

H) Lobby all levels of Government to manage urban heat island effect.

I) The Department of Health WA should plan for and appropriately resource health care services during heatwaves and natural disasters

J) Build facilities, or replace during renovation, with light coloured roofs. Research by [City of Gosnells, City of Armadale and Shire of Serpentine Jarrahdale] has found that in Perth the internal temperature of homes can be reduced by up to 5°C by changing only roof colour. This would decrease the air-conditioning load, improve air-conditioner operational efficiency and improve productivity of solar panels

K) Undertake community education about preventative health care in heatwaves and natural disasters

L) Charge internal or external building managers at all Department of Health WA buildings with monitoring the performance of energy efficiency in the buildings and providing an annual report to the Department of Health WA.

M) Employ a minimum standard of building and retrofit in WA Health facilities, in particular dictating:
   - Use of LED lighting
   - Replacement of HFC gases in air-conditioners and refrigerants
   - Installation of renewable energy
   - Investigation into the installation of batteries to supplement than emergency generators at facilities, with review every of the return on investment every 5 years as the cost of battery storage decreases
   - Undertake an investigation of solar panels on all WA Health Facilities and pursue any array which has a payback period of 3 years (36 months) or less. For facilities where the payback period exceeds three years (36 months), revisit the payback period every three years (36 months) as the cost of solar panels is declining rapidly
6. Evaluate the likely benefits (health and wellbeing, social and economic) arising from climate change mitigation strategies, with a focus on WA health services.

The Department of Health should include metrics and costs which:

A) Measure the Health Department WA financial and staff resource cost during heatwaves and natural disasters against the cost of running during “normal” weather

B) Using the cost generated in 6A) (above), use modelling to assess the total financial and resource cost over climate scenarios of temperature increase of 1°C, 1.5°C, 2.0°C and 3.0°C

C) Measure the social, health and wellbeing cost arising from heat exhaustion, heatwave related morbidity or mortality under modelling to assess the total cost in climate scenarios of temperature increase

D) Use the results of 6B) and 6C) (above) to inform the Department of Health WA’s internal climate goals and the feedback they provide to state and federal climate policy.

E) Measure the decreased cost in treatment of chronic illnesses, with particular attention given to informing research on how chronic respiratory conditions exacerbated by increased particulate matter in the atmosphere and conditions exacerbated by heat and humidity

F) Measure increased admissions, Accident and Emergency presentation and GP visits during heatwaves and natural disasters

7. Define the role of the Department of Health in leading public policy on climate change and health.

A) The Department of Health should comment on the health costs and financial costs of public policy including: increased morbidity and mortality, time lost from work, and cost in increasing health services to address climate change. Specifically these comments might be framed around increasing temperatures, increasing frequency of heat waves, increasing natural disasters and increasing air particulate matter. These comments should be addressed to all state and federal policy suggestions.

8. Recommend the Terms of Reference, scope and preferred methods for
Submissions response field

Please type your response to the item(s) selected above into the field below. Alternatively you may provide your submission as a separate attachment (suggested maximum 5 pages).

- undertaking a climate change vulnerability assessment for the health sector.
  - No Comment


  - No Comment

Please complete this sheet and submit with any attachments to: Climate Health WA Inquiry