

STRATEGY 2024 - 2030

NT HEALTH





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Foreword

Thank you for reading this important Strategy.

The challenges and demands we face as a health provider in the Northern Territory (NT) are significant. It pays dividends to address these challenges with bold, creative and timely solutions.

The priorities and actions outlined in this Sustainability and Climate Adaptation Strategy are designed to:

- guide efforts to reduce NT Health carbon emissions by 47% by 2030 (based on 2021 estimated emissions)
- reduce water usage by 20% by 2027-2028
- reduce the overall waste produced by current healthcare service delivery, in particular plastics and other products harmful to humans and/or the environment.

I am pleased that the priorities in this Strategy are all designed to deliver benefits for the people of the NT (patients, staff, the planet and the budget), so I encourage you all to:

- access the learning and operational opportunities available so you can embed sustainability into your everyday practice:
- actively plan and prepare for the impact of climate change on the services you provide.



Chris Hosking NT Health Chief Executive

Introduction

This Strategy sets out NT Health's commitment to urgent and integrated action on climate change in support of NT Health's vision of "great" health for all Territorians".

People and organisations in the Northern Territory are already experiencing the impacts of climate change. Current projections show that extreme heat, floods and bushfires in the NT will continue to worsen in the coming years.¹ As human health and wellbeing depend on clean air, water, food, stable shelter and a liveable environment. Climate change represents a fundamental threat to great health for all Territorians. NT Health needs to urgently adapt to climate change.

"The climate crisis is a health crisis." [World Health Organisation]

As a health system, we need to be able to say we do no harm, but the health system globally, nationally and locally is responsible for harmful waste products, as well as greenhouse gases (which exacerbate climate change). For example, NT Health contributes nearly a third of total NT Government agency greenhouse gas emissions. This includes transport, clinical care and the purchase, use and disposal of hospital equipment, pharmaceuticals, food, medical devices and chemicals. Nationally, Australia's health system is responsible for 7% of Australia's total greenhouse gas emissions.² NT Health needs to urgently reduce its emissions and waste footprints.

The reason for the urgency is that globally "each increment of warming results in rapidly escalating hazards, such as more intense heatwaves, heavier rainfall, and other weather extremes that increase risks for human health and ecosystems. Climate-driven food and water insecurity is expected to increase with increased warming. When these risks combine with other adverse events, such as pandemics or conflicts, they become even more difficult to manage." [United Nations]³ For example the United Nations (UN) is predicting there will be a global freshwater supply shortfall of 40% by 2030.4

Think globally, act locally has never been more important. Read on to learn more!

Key terms

Carbon emissions

in this Strategy refer to greenhouse gas emissions generated by humans in the context of global warming and are measured by a single unit of CO2e (Carbon Dioxide equivalent).

Carbon footprint

is a measure of the total amount of greenhouse gas emissions (including carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and so on) that are directly and indirectly caused by an activity or service, or that which is accumulated over the life stages of a product. It is often expressed as a carbon dioxide equivalent (CO2e) which is a measure used to standardise the climate effects of all different greenhouse gases.

Climate change

refers to long term shifts in temperatures and weather patterns. These can be natural, but since the 1800s human activities have been the main driver of climate change which has accelerated rapidly in the past century.

Climate change adaptation

are the actions taken to manage the impacts of climatic events. These impacts may be those affecting individual patients, communities, or particular populations. They may also refer to the effects on health services, infrastructure, or service delivery.

Climate change mitigation

are efforts to reduce or prevent the emission of greenhouse gases (ie reduce carbon footprint), to limit the magnitude of future warming. It can also include attempts to remove greenhouse gases from the atmosphere.

Climate resilience

is the capacity for the health system to absorb stresses and maintain functions in the face of external events due to climate change; and the capacity to adapt, reorganise, and recover into a more effective state that further improves the sustainability and resilience of the system, leaving it better prepared for future climatic impacts. The health system is predictive, proactive, and responsive.

Climate literacy

refers to an understanding of the causes, harms, urgency and solutions related to the current climate change situation. Climate literacy is supported by systems-thinking which is the ability to understand complex interconnections among all components of a broader system, for example, the interdependency of human health on planetary health, the criticality of biodiversity to food and water. and so on.

Decarbonisation

is the transition to reducing or avoiding carbon emissions. Decarbonisation opportunities are possible across all parts of healthcare and include, for example, redesigning patient pathways, practices, the supply chain, infrastructure, energy sources and food service models.

Environment, Social and Governance (ESG) reporting

is the established structure for sustainability reporting which includes an organisation's impact on: the environment (including Green House Gas (GHG) emissions, toxic and hazardous waste, water use and climate change vulnerability); society (including social equity and human health and safety), and governance (which relates to trust based on ethical decision making, transparency and accountability).

Greenhouse gas (GHG) emissions

are natural and human made gases emitted into the earth's atmosphere, which let sunlight and heat come in to the atmosphere, but do not let the heat escape out of the atmosphere (called the Greenhouse Effect). These gases include carbon dioxide, nitrous oxide, methane and others.

Healthcare Sustainability

is where the health system can improve, maintain or restore human health, while minimising negative impacts on the environment and leveraging opportunities to restore and improve the environment to the benefit of the health and well-being of current and future generations.

Low value care

describes an intervention which evidence suggests has little or no benefit to the patient, the risk of harm exceeds benefit and the cost of the intervention is not proportional to the benefit.

Nature positive

is a state where nature (ecosystems and biodiversity) is being repaired and restored and is regenerating. Nature positive strategies in healthcare include applying resource circularity principles, effective water stewardship, transparency and accountability in supply chains (particularly in food systems) and reducing pandemic risk. These are critical for planetary health.

Planetary health

refers to the interdependence of human health and the earth's natural systems. It is not possible to have healthy humans on an unhealthy planet. Planetary health aligns with traditional worldview values of Indigenous peoples (in Australia and around the world)

that the health of individuals, the community and the planet are all interrelated and interdependent. Stewardship of resources and natural systems is a central principle to planetary health.

Resource circularity

aims to minimise the need to extract raw materials by circulating existing products and materials at their highest value for as long as possible. This includes reusing, repairing, refurbishing, remanufacturing and repurposing. This is based on the principle of stewardship and supported by a circular economy approach which aims to stop waste from being produced at all because waste from one product or service is an input for another.

Scope 1, 2 and 3 emissions

Scope is related to the facility and its boundaries and operations, but also captures indirect, upstream and downstream emissions. Scope 1 emissions are direct greenhouse gas emissions coming from facilities and resources owned and controlled by the healthcare operator. Scope 2 emissions are indirect emissions such as electricity, gas and other utilities paid for by the healthcare facility. Scope 3 emissions are all other emissions upstream (i.e. emissions related to the supply chain) and downstream (i.e. emissions related to off-site waste management).

Stewardship

is the careful, ethical and responsible management of something. In the context of healthcare sustainability it relates to caring for the planetary health on which we depend by making ethical and responsible decisions around the design of services, and the purchase, use and eventual disposal of products needed for those services.

System

includes the resources, policies, processes, and procedures that are organised. integrated, regulated, and administered to accomplish a stated goal.

Value-based care

is evidence-based, person-centred approach to support health care decision making and system transformation, with the aim of continually striving to deliver care that improves health outcomes that matter to patients, experience of receiving care and experience of providing care.

Waste

is any substance (solid, liquid or gas) that is a discarded or surplus (whether the substance is of value or not). It can be categorised into multiple waste streams including: clinical, pharmaceutical, cytotoxic, chemical, radioactive, recyclables, organic, general and confidential waste.



Sustainability targets

The Strategy targets are intended to help minimise the impact of climate change on the health of Territorians both now and into the future. These impacts, based on scientific projections, are shown in the map below.

NT HEALTH

NT Health must meet the NT Government operational greenhouse gas emissions reduction target of 47% by 2030 (based on 2021 estimated emissions) and reduce water usage by 20% by 2027-2028.

All other targets and metrics to strategically prioritise and focus sustainability efforts and measure progress will be developed during the life of this Strategy.

NORTHERN TERRITORY GOVERNMENT

The NT Government has committed to reduce NT operational:

- greenhouse gas emissions by 47% by 2030 (based on 2021 estimated emissions)
- water usage by 20% by 2027-28 across the greater Darwin region

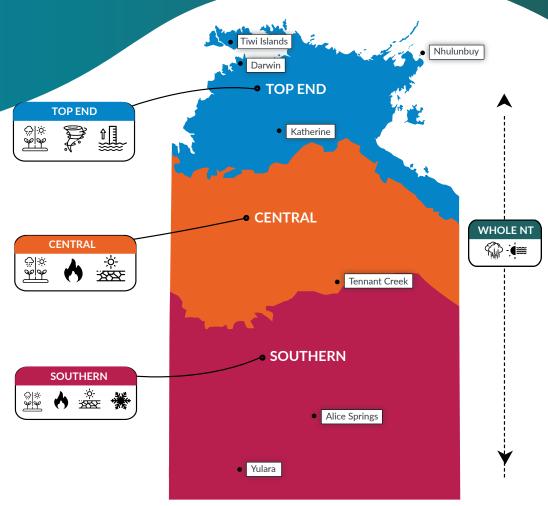
Performance against both of these targets will be reported publicly.

NATIONAL

The Australian Government has committed to reduce operational emissions to achieve net zero by 2030. The National Health and Climate Strategy sets out the whole of government plan for addressing the health and well-being impacts of climate change and the Australian health care sector contribution to climate change. This NT Health Sustainability and Climate Adaptation Strategy is aligned with that National Strategy.

GLOBAL

The United Nations (UN) members have committed to the UN Sustainable Development Goals (SDGs). The international community has also committed to the legally binding Paris Climate Agreement 2015, which aims to limit global warming to no more than 1.5 degrees celsius. Australia has signed up to deliver on both of these commitments.



The Northern Territory has three clear climate zones:

The tropical north has a hot, humid wet season from November to April and a cooler dry season from May to October.

The central part of the Territory experiences hot, dry summers and mild winters.

The southern part of the Territory has very hot and dry summers, with very cold winters.

Climate change is projected to result in the following impacts:5

Hot days will get hotter, more often and longer.



Tropical cyclones will be less frequent but more intense.



Rainfall will become more intense.



Time spent in droughts could increase.



Sea levels will rise.



Fire weather will become more freauent and harsher.



It could get wetter or drier depending on greenhouse gas



Frost days will increase.



Vision

Great health for all Territorians by caring for country, climate and community.

How we will do this

NT Health will embed sustainability and innovation into our everyday practice to reduce our impact on the planet and adapt to climate change so we can protect and improve the health of Territorians now and into the future.

Country

"Human health and wellbeing depend on clean air and water, food, stable shelter and a liveable environment" (ACSQHC)



Land



Water



Air

Climate

Human health depends on planetary health. We are part of a global effort.



Local



National



Global

Community

We all need to work together to achieve this vision.



Population



Patients



Staff

Caring for country, climate and community reflect the core traditional worldview values of Indigenous peoples (in Australia and around the world) that the health of individuals, the community and the planet are all interrelated and interdependent.

Aligning worldviews and priorities

Caring for country, climate and community also broadly reflect the Environment, Social and Governance (ESG) framework and priorities which organisations locally, nationally and internationally need to work towards and increasingly report on publically.



GOALS

HOW WE ACHIEVE OUR GOALS

Goals

To achieve the targets, this NT Health Sustainability and Climate Adaptation Strategy has identified 4 broad goals and top priorities for each of them. These goals align with the National Health and Climate Strategy and map to the NT Health Strategic Plan. Goals 1 and 2 describe what needs to be done and Goals 3 and 4 describe key approaches to how we will do it.

WHAT WE WILL DO



HEALTH SYSTEM RESILIENCE



COLLABORATING LOCALLY, NATIONALLY AND INTERNATIONALLY



HOW WE WILL DO IT

HEALTH IN ALL POLICIES

GOAL 1

HEALTH SYSTEM

SUSTAINABILITY

DECARBONISATION

AND ENVIRONMENTAL

Radically reimagine and transform health service delivery to achieve value based and low carbon healthcare

NT Health will achieve this by:

reducing waste.

reducing emissions.

equipping and supporting staff and leadership to innovate and adapt.

redesigning systems and practices to be nature positive.

GOAL 2

Rapidly build capacity and capability to prevent, prepare, respond and recover creatively from climaterelated impacts to the health system.

NT Health will achieve this by:

expanding public awareness and preparedness.

building a climate-informed Health workforce.

moving to climate-adapted and sustainable health infrastructure.

establishing health and climate surveillance systems and robust data. **GOAL 3**

Use a common vision and align effort to achieve effective collaboration.

NT Health will achieve this by:

leveraging collective effort and investment by prioritising action aligned with international. national and NT Government efforts.

aligning metrics and reporting with international and national standards.

planning with health system stakeholders to strengthen relationships.

GOAL 4

Pursue integrated approaches to NT Government policies and action based on acceptance of the interdependency of human health and planetary health

NT Health will achieve this by leveraging evidence and the health expertise of a climate informed NT Health workforce to:

influence whole of government policies, decision making and investment.

influence NT Government agencies to integrate public health impacts into climate adaptation and sustainability actions.

influence other stakeholders in the NT healthcare ecosystem to support initiatives which reduce demand on healthcare services.

ENRICHED BY VALUING FIRST NATIONS' WORLD VIEWS AND STEWARDSHIP



Goal 1 - Health system decarbonisation and environmental sustainability

The focus of environmental sustainability for NT Health is on transforming health operations to reduce damage to the planet. Specifically, the goal is to radically reimagine and transform health service delivery to achieve value based and low carbon healthcare. This involves action across the 14 focus areas below:



LEADERSHIP

Prioritise human and planetary health equally in decision making and actions



ENERGY

Manage energy efficiently and transition to clean, renewable energy generation



MEDICINES

Optimise the use and safe management of medicines



WORKFORCE

Build workforce climate literacy and capability to innovate



WATER

Manage water effectively to reduce waste



INFRASTRUCTURE

Optimise design, construction, use and repair options which reduce current and future damage to the planet and help connect patients and staff to nature



CLINICAL CARE

Apply a value based health care approach, reduce low value care and positively engage our patients



FOOD

Source, serve and manage sustainably grown, healthy



CHEMICALS

Substitute harmful chemicals with environmentally safer



FINANCE

Establish visibility of the financial costs of climate impacts and financial benefits of environmental sustainability



TRANSPORT

Improve transportation strategies for patients, staff and goods to reduce emissions



RISK

Establish transparency and awareness of climate change risks to healthcare service delivery



WASTE

Prevent and reduce healthcare system waste



PROCUREMENT

Use procurement design and decisions to achieve Environmental. Social and Governance (ESG) objectives (including scope 3 emissions reductions) throughout NT Health's supply chain



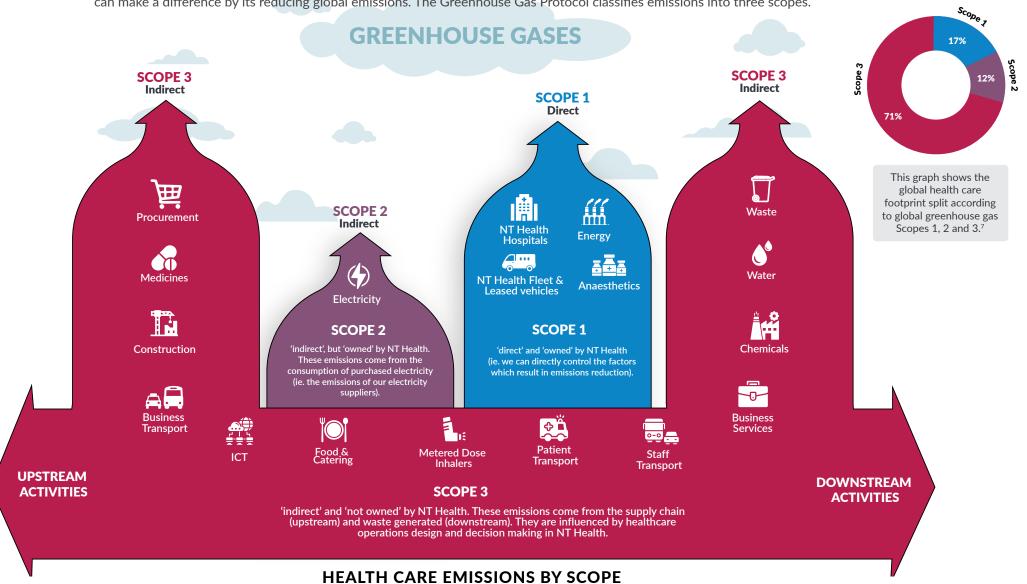
These actions are, or will be, embedded into the governance of NT Health. This will enable visibility, accountability and integrated, informed decision making. All NT Health staff are encouraged to be involved in these efforts.

In addition to leaders with accountability, there are roles for everyone: as collaborators, working group members, subject matter experts, decision makers, workplace champions or special interest group members. To learn more, email Sustainability.Health@nt.gov.au.



Where to reduce emissions in Health

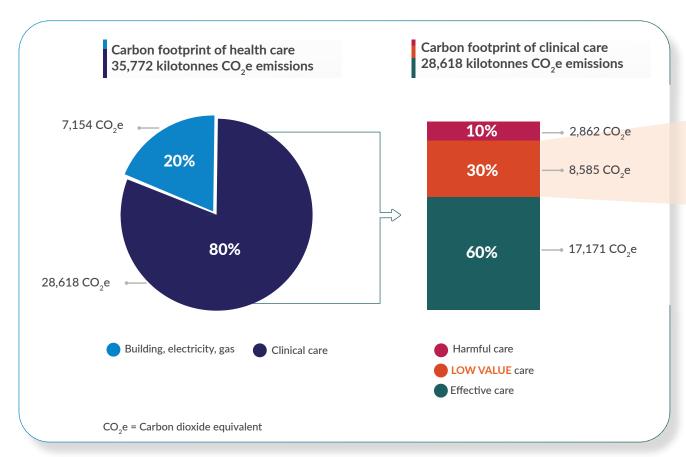
If the healthcare sector was a country, it would be the fifth largest emitter of greenhouse gases in the world. The healthcare sector can make a difference by its reducing global emissions. The Greenhouse Gas Protocol classifies emissions into three scopes.



Clinical care models are central to decarbonising the health system

The need for sustainability

NT Health has opportunities to reduce emissions by redesigning how clinical care is provided, because, according to research into the carbon emissions of healthcare, 80% of the total healthcare carbon footprint can be broadly mapped to how clinical care is provided (this is regardless of Scope 1, 2 and 3 classification).8



Where to start

Two high impact, evidence based approaches to redesigning clinical care are:

- identifying and de-implementing **LOW VALUE** tests, treatments and procedures; and
- applying a value based healthcare approach to patient pathway design.

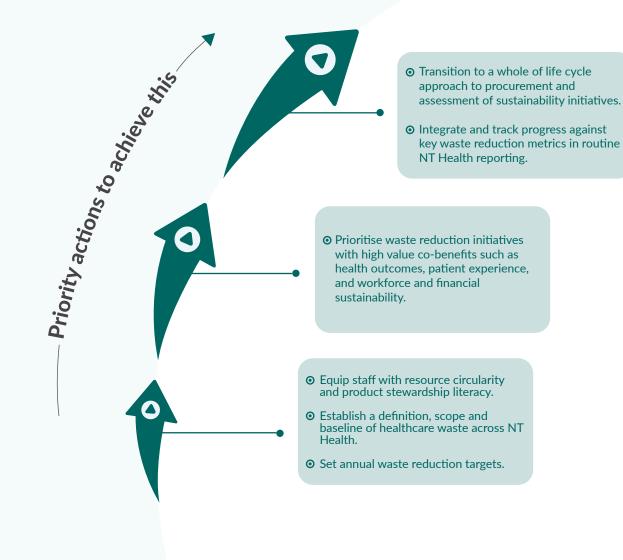
These approaches are central to NT Health's ambition to radically reimagine and transform health service delivery to achieve value based and low carbon healthcare.



Health system decarbonisation and environmental sustainability

Radically reimagine and transform health service delivery to achieve value based and low carbon healthcare through reducing waste

- applying and upscaling both existing and emerging healthcare sustainability solutions in line with NT Health sustainability priorities
- reduction efforts
- prioritising resource circularity and product stewardship in procurement design and assessment.



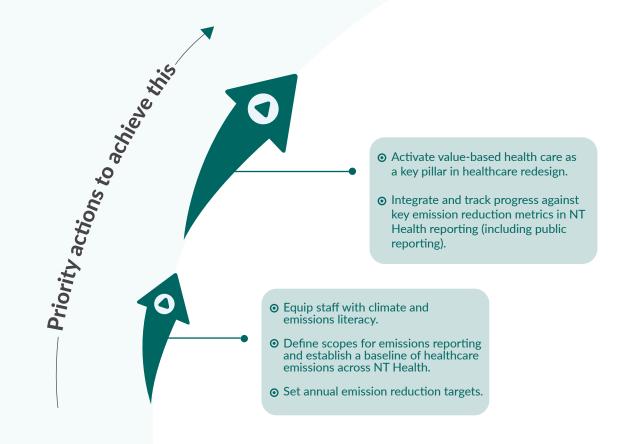




Health system decarbonisation and environmental sustainability

Radically reimagine and transform health service delivery to achieve value based and low carbon healthcare through reducing emissions

- ✓ leveraging key metrics to measure and drive emissions reduction efforts.



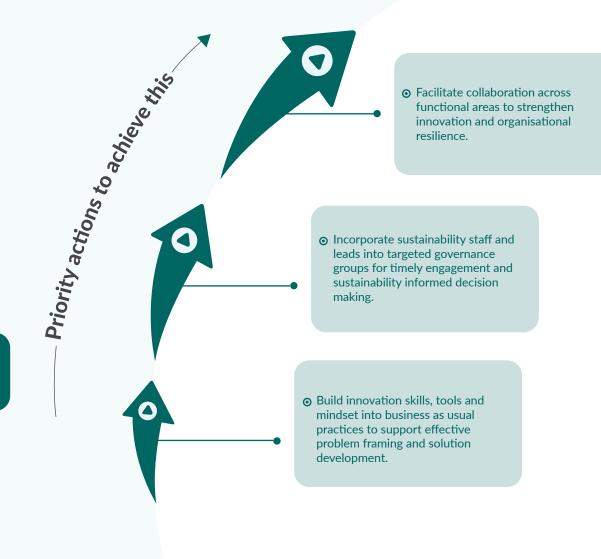




Health system decarbonisation and environmental sustainability

Radically reimagine and transform health service delivery to achieve value based and low carbon healthcare by equipping and supporting staff and leadership to innovate and adapt.

- improvement tools and approaches into operational processes and practice to enable creative problem solving and adaptability
- embedding a sustainability mindset into every day processes and practices.





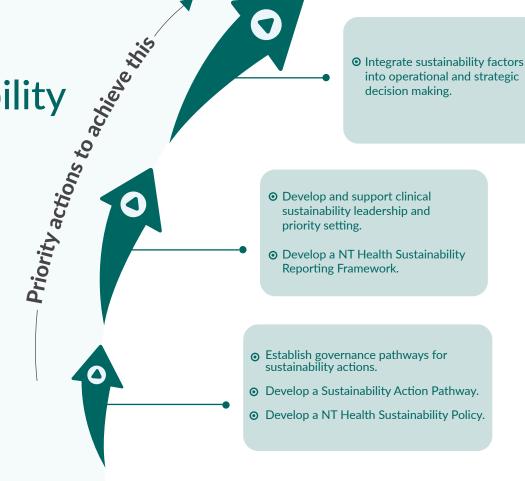


Health system decarbonisation and environmental sustainability

Radically reimagine and transform health service delivery to achieve value based and low carbon healthcare through

redesigning systems and practices to be nature positive

- @ enabling efficient authorisation, transparency and accountability of sustainability action and risk
- prioritising sustainable quality improvement standards and approaches to patient pathways and models of care
- into operational plans
- @ enabling infrastructure investments to reduce emissions
- enabling procurement decisions and activities to drive down health system emissions and waste
- o enabling NT Health financial systems and processes to accelerate the transition to environmentally sustainable operations.







Impacts of climate change on human health and the health system

In order to maintain the health of Territorians in the face of climate change, NT Health needs to radically reimagine and transform health service delivery, as well as rapidly build capacity and capability to prevent, prepare, respond and recover creatively from these impacts.

These impacts all have costs for patients, staff and the health system



More frequent and intense events

More people needing health services

More demand on the health system



Impacts of climate change on healthcare service delivery

The need for adaptation and resilience

Climate change will have both direct and indirect impacts on the health system including:

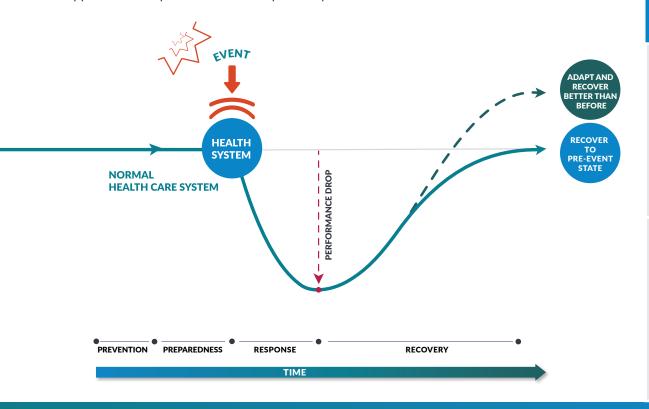
- New admission patterns due to
 - environmental changes (eg increased temperatures)
 - causes of admission (eg heat stress, poor air quality)
 - demographic profiles (eg children, the elderly).
- Operational impacts
 - facilities management
 - human resource issues, including stress and burn out
 - changes in procedures to adapt to more frequent events.
- Infrastructure impacts
 - increased maintenance and repair demands and costs
 - unsafe working conditions, including heat
 - more frequent replacement of infrastructure.
- External impacts including interruption to
 - food, power and water availability
 - transport
 - oproduct supply chains.

"To deliver auality healthcare, health facilities - infrastructure and supply chains - must be structurally and functionally resilient. They should neither contribute to climate change nor be impacted by it. The health workforce should be prepared for and capable of responding to climate risks and impacts."

Health Care Without Harm

The focus of **climate adaptation** in this Strategy is to rapidly build capacity and capability to prepare, respond and recover creatively from climate related events (such as floods, cyclones, bushfires and pandemics) in a way which strengthens and improves the health system.

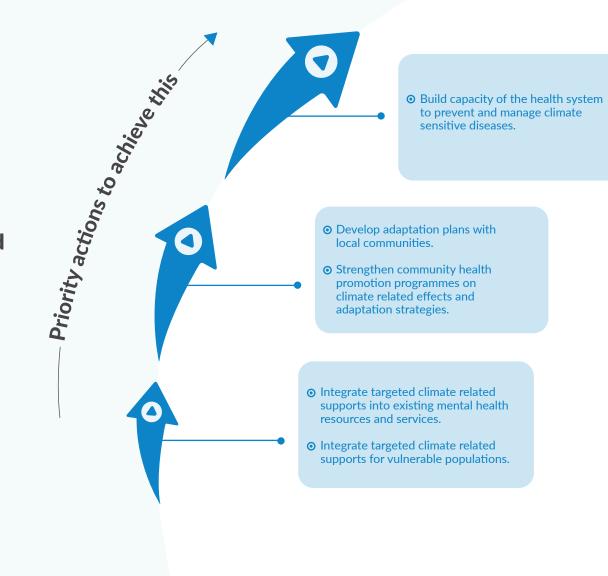
When emergency events occur, the health system shifts from best practice to safe practice as resources are stretched to meet the additional health demand caused by the event. As a result of climate change, these events are projected to occur more frequently and with greater intensity, resulting in shorter recovery and learning periods. This means the health system needs to be designed to adapt and evolve rapidly, and the workforce need to be equipped and supported to adapt and innovate responsively.



Rapidly build capacity and capability to prevent, prepare, respond and recover creatively from climate-related impacts to the health system through

expanding public awareness and preparedness

- empowering communities to prepare, adapt and respond to climate change related events
- enabling wellbeing support models to improve resilience of individuals affected by climate impacts
- developing, promoting and strengthening community health promotion programmes on climate related effects and adaptation strategies
- climate sensitive conditions.

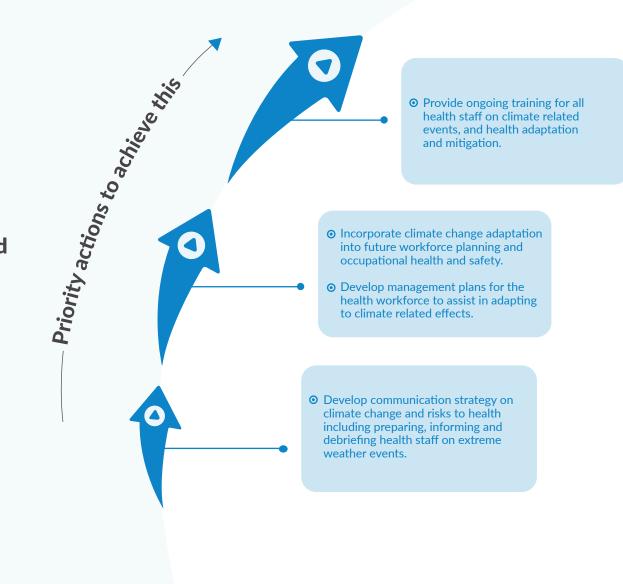




Rapidly build capacity and capability to prevent, prepare, respond and recover creatively from climate-related impacts to the health system through

building a climate-informed Health workforce.

- strengthening preparedness of the health system to assist in adapting to climate related effects
- building capability of all health staff to be responsive to climate-related events
- future workforce planning and occupational health and safety.

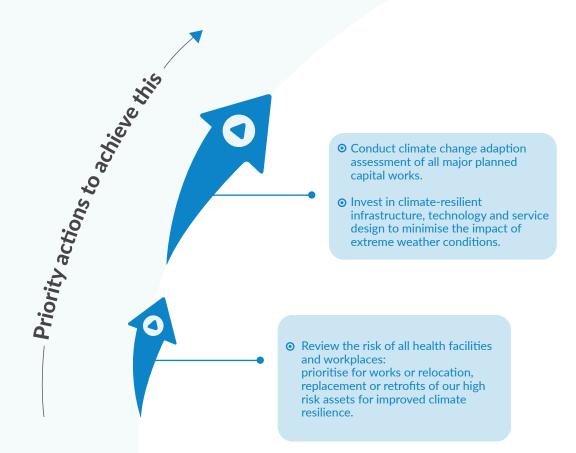




Rapidly build capacity and capability to prevent, prepare, respond and recover creatively from climate-related impacts to the health system through

moving to climate-adapted and sustainable health infrastructure.

- being involved in planning and design of all major capital works from a climate perspective
- investing in technology and infrastructure design which minimises the impact of extreme weather events.



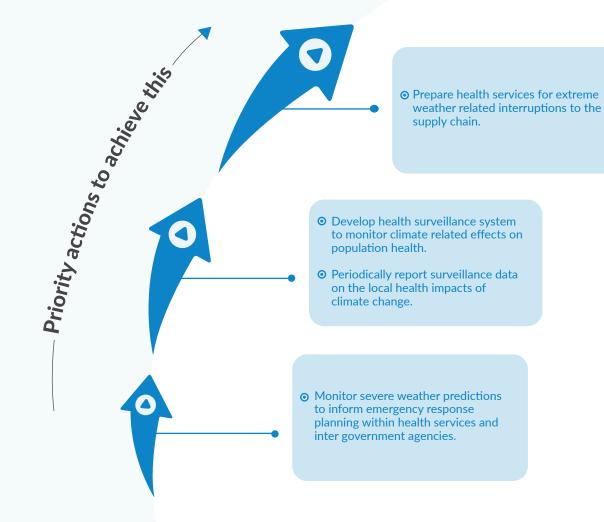


Rapidly build capacity and capability to prevent, prepare, respond and recover creatively from climate-related impacts to the health system through

establishing health and climate surveillance systems and robust data.

NT Health will do this by

strengthening health surveillance systems to monitor climate-related effects on population health.

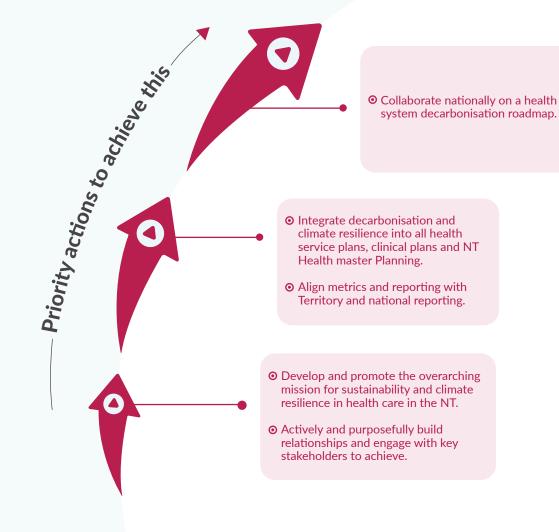




Goal 3 **Collaborating** locally, nationally and internationally

Use a common vision and align effort to achieve effective collaboration

- aligned with international, national and NT Government efforts
- standards
- strengthen relationships and understanding





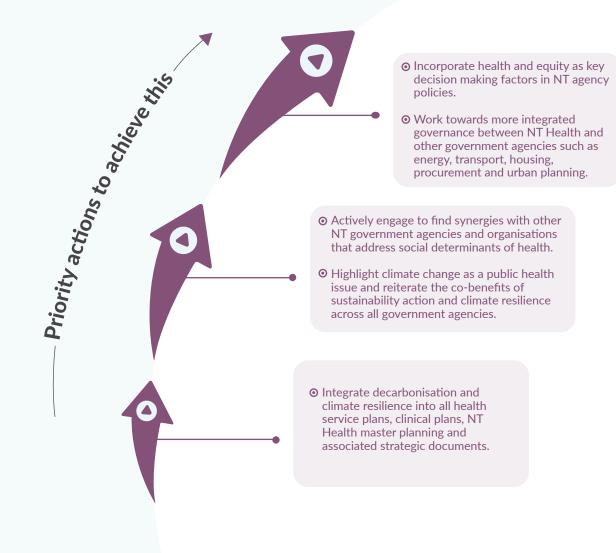
Goal 4

Health in all **Policies**

Pursue integrated approaches to NT Government policies and action, based on the interdependency of human and planetary health

NT Health will achieve this by leveraging evidence and the health expertise of a climate-informed NT Health workforce to:

- and investment
- influence NT Government agencies to integrate public health impacts into climate adaptation and sustainability actions
- ecosystem to support initiatives which reduce demand on healthcare services.







Key success factors

Achieving these goals and priorities will require all staff to work together, supported by a number of key success factors outlined below:

Governance pathways and leadership

a clear authorising pathway for early decision making, transparency and accountability

2.

Systems thinking approach

to integrate and align sustainability into everyday practice (and avoid competing or duplicating effort)

Valuing First Nations knowledge

for world view and direction setting.

Climate informed and responsive workforce

for targeted effective effort.

Evidence and data

to inform prioritised action.

What this looks like in practice

- Accountabilities for action and progress on sustainability and climate adaptation are explicit and accepted in NT Health.
- Sustainability and climate adaptation committees driving targeted actions in each Health Service
- Sustainability and climate adaptation as a standing agenda item for all NT Health committees
- NT Health compliance with the Australian Commission on Safety and Quality in Health Care Environmental Sustainability and Climate Resilience Module.

What this looks like in practice

- Factoring planetary health into all decisions across NT Health, in particular when setting priorities and mobilising resources
- Influencing NT Government priorities and investment through a 'health in all policies' approach to interagency engagement

What this looks like in practice

- Local knowledge and local Aboriginal people driving local solutions
- Operating in line with the National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health
- Elevating and integrating Aboriginal holistic world views as central to sustainability action.

What this looks like in practice

- Building climate literacy so staff understand the reason, the urgency and the opportunities for sustainability and climate adaptation action
- Building innovation mindset and skills so staff are equipped to adapt and problem solve creatively

What this looks like in practice

- Using available data and develop a reporting framework to produce metrics which help to focus strategic efforts and measure progress
- Leading targeted research to drive informed local changes
- Participating in relevant research to build knowledge
- Monitoring emerging research to adapt policies and practices responsively.
- Targeting and supporting collaboration across diverse organisational and professional areas for effective problem solving and innovation



What's next

Achieving NT Health Goals

Goal 1

NT Health has developed a Sustainability Road Map 2024-2027 to focus on the highest impact deliverables in the first three years of this Strategy. These are integrated or aligned with existing priorities across all parts of NT Health and led by the relevant leaders with sustainability subject matter expertise support (where applicable) and tracking by the NT Health Sustainability team.

Goal 2

Priorities will be led or supported by the Public Health area of NT Health.

Goal 3 & 4

These goals describe the approach NT Health will take to implementing Goals 1 and 2.

Alignment with the global mission

Through this Strategy, NT Health is contributing to the national and global healthcare sector efforts to minimise the damage of the healthcare sector to the planet as well as adapt to the impacts and increased health demand resulting from climate change which are being experienced now.

NOW

THIS STRATEGY

NEXT STRATEGY

Globally, the healthcare sector is responsible for 4.4% of global net emissions.9

Sustainable healthcare is where the health system is designed and managed to improve, maintain or restore human health while minimising negative impacts on the environment. It includes taking opportunities to restore and improve the environment for the benefit of the health and wellbeing of current and future generations.

It is a sustainable approach which **minimises damage** to the planet.

Nature positive healthcare is where the health system is designed and managed to **simultaneously** improve, maintain and restore human health and the environment for the benefit of the health and wellbeing of current and future generations.

It is a nourishing approach which regenerates the planet.

Globally, 24% of all human deaths in the world are already linked to the environment¹⁰ due to factors such as heat waves, poor air quality, water, severe weather events and disruption of food systems.

Climate **adaptation** in healthcare is the actions taken to manage the impacts of climatic events. These impacts may affect individual patients, communities, or particular populations. They may also refer to the effects on health services, infrastructure or service delivery.

Health system climate **resilience** is the capacity for the health system to anticipate, prepare for and absorb stresses. and maintain functions in the face of external events due to climate change. It includes the capacity to adapt, reorganise, and recover from events into a more effective state (that further improves the sustainability and resilience of the system), leaving it better prepared to cope with future climatic risks and impacts. A climate resilient heath system is predictive, proactive and responsive.



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