

Green Metro North Sustainability Strategy 2021-2026



Kellie Williams
Environmental Sustainability & Climate Change Manager
Sustainable Assets and Infrastructure

7 November 2024

Acknowledgement of traditional custodians

Sustainability is caring for country

value of traditional knowledge

Equity in health and ecosystem services



GREEN METRO NORTH SUSTAINABILITY STRATEGY 2021–2026



This presentation will cover:

- 1. Setting the scene for planetary health, climate change and healthcare
- 2. Green Metro North Sustainability Strategy implementation and progress
- 3. Mini workshop activity on supporting, participating or leading environmental sustainability and climate resilience in your healthcare environment

“Planetary health is a **new field, and one that needs ideas and solutions that span multiple sectors** and disciplines to guide the creative stewardship of our planet to protect our own health.” - UNFCCC

“the achievement of the highest attainable **standard of health, wellbeing, and equity worldwide** through judicious attention to the human systems—political, economic, and social—that shape the future of **humanity and the Earth's natural systems** that define the safe environmental limits within which humanity can flourish. Put simply, planetary health is the health of human civilisation and the state of the natural systems on which it depends” – The Lancet

“Planetary Health is **a solutions-oriented, transdisciplinary field and social movement** focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth.” – Planetary Health Alliance

What is planetary health?

“Planetary health is a **concept that encourages evidence-based policies to promote human health** and prosperity while preserving the environment that allows us to thrive.” - The Rockefeller Foundation

“Planetary health is defined as **the health of human populations and the state of the natural systems** on which it depends. Urgent attention and action is required to address the extensive damage that humans have created and acknowledge our health is intrinsically linked to the health of the planet” – Monash University

Complex interdependencies between ecosystems

Cross jurisdictional accountabilities

Ineffective or lacking environmental protection regulation in many parts of the world

Global supply streams contribute significantly to the problem – free markets, neoliberalism

Lack of holistic assessment of cause and effect

Lack of 'health in all policies' in all jurisdictions

What are the challenges in governance of planetary health?

The UN Sustainable Development Goals are the agreed solution to this problem but after some progress, we are now falling behind...



Climate change

The concentration of CO₂ in the atmosphere is the highest in human history

The past 9 years all rank in the 10 warmest on record according to the National Oceanic and Atmospheric Administration.



CLIMATE RISKS



Wildfires



Rising sea levels



Extreme heat



Severe weather



Air pollution



Drought

HEALTH IMPACTS



Respiratory
Allergens,
asthma...



Infectious diseases
Vector-borne,
malaria, COVID-19...



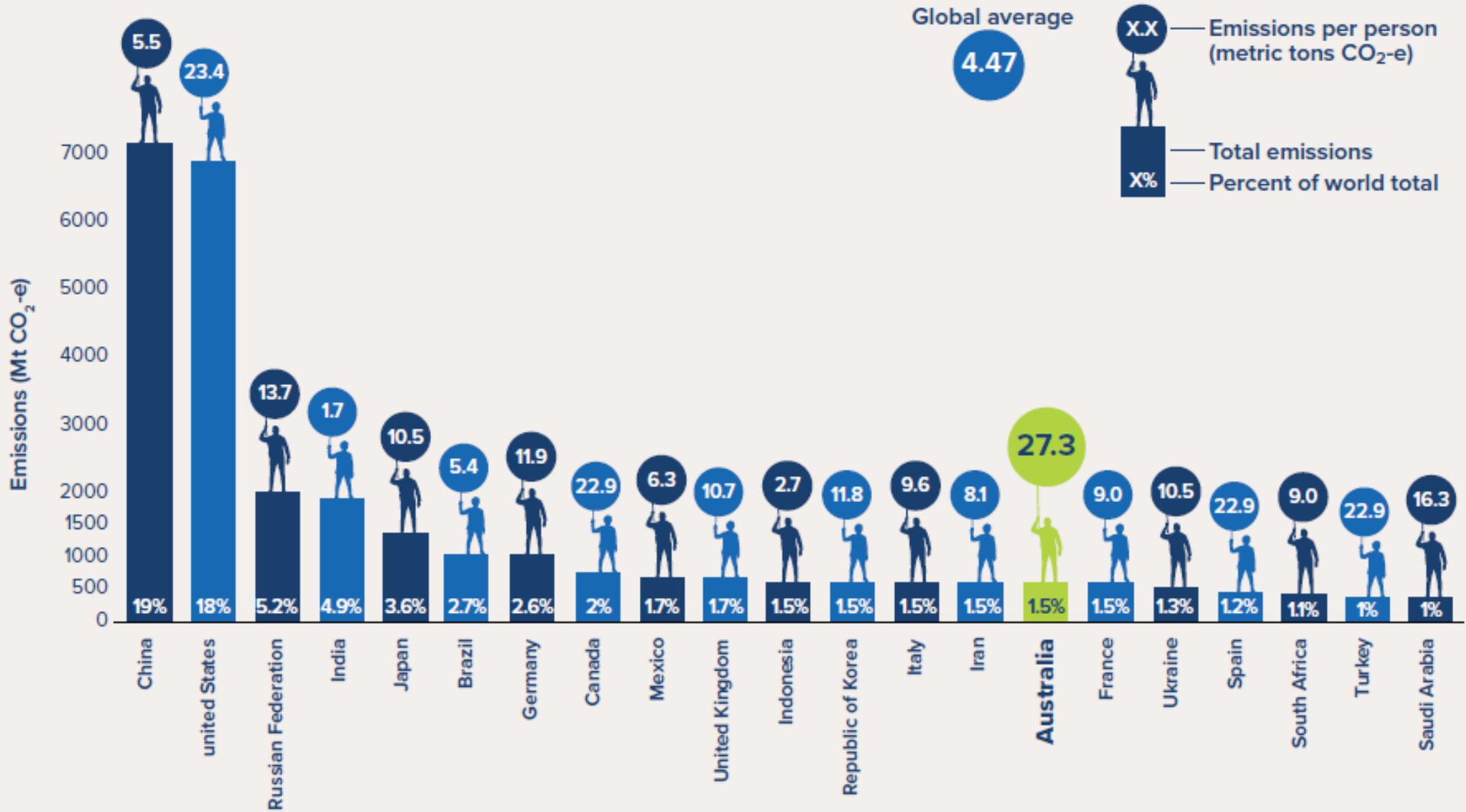
Neurological
Migration anxiety,
major storm impacts,
depression, dementia...



Gastrointestinal
Malnutrition,
Diarrhoeal
disease...



Multisystem
Heat impacts,
heart attacks,
heat stroke...

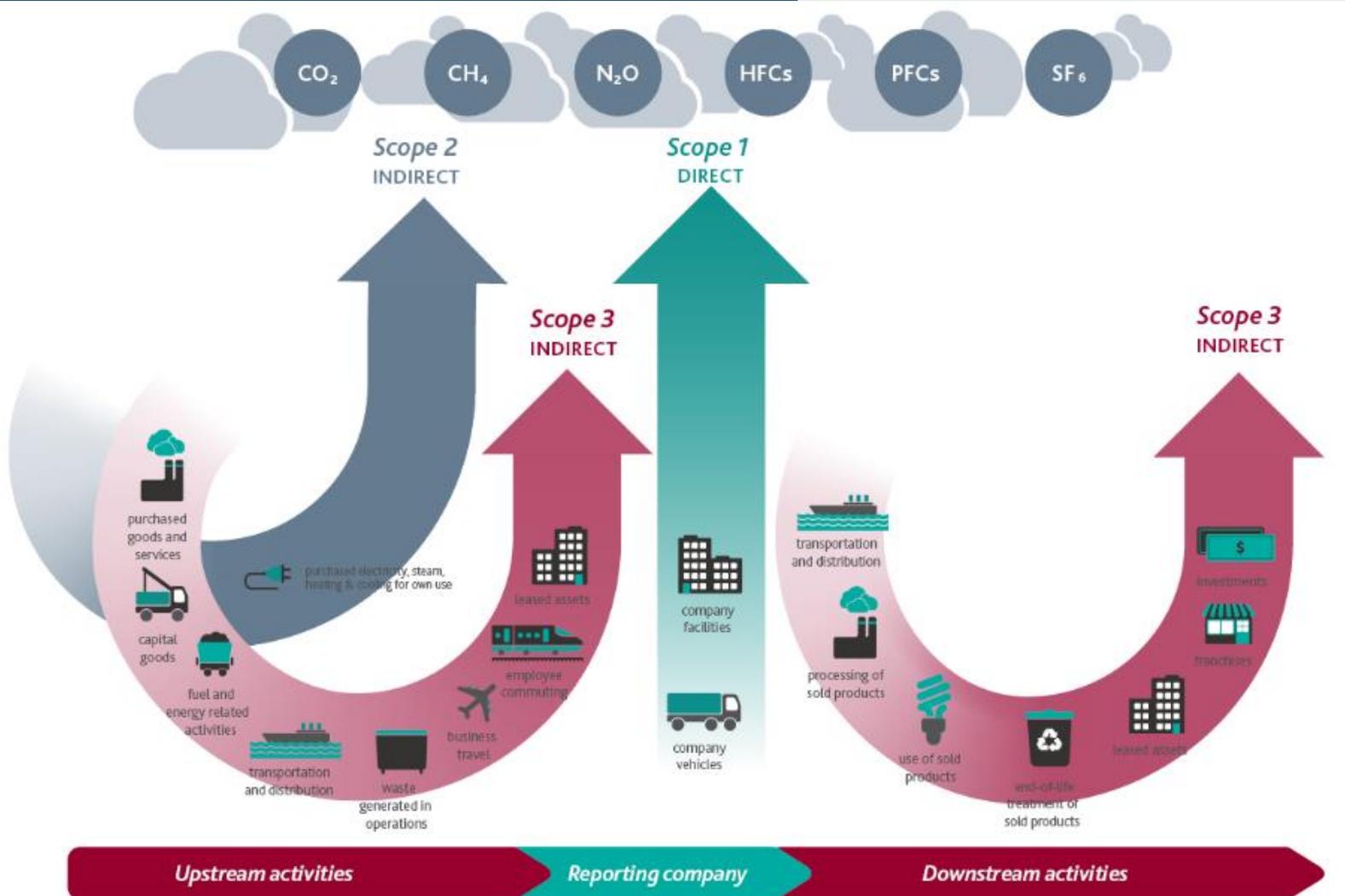


Healthcare as a sector

Public hospitals consume over half of public sector energy in most Australian states.

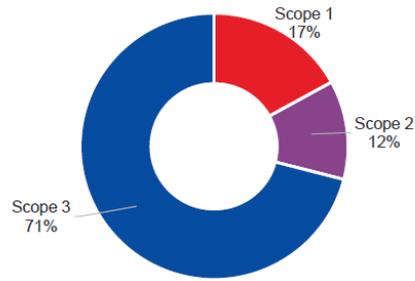
Hospitals are very energy intensive due to

- ▶ 24-hour operations
- ▶ high demands from HVAC
- ▶ healthcare specific demands such as steam for equipment sterilisation
- ▶ legacy of aged infrastructure that was not designed optimally for climate change and sustainability



Source: Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Healthcare's GHG footprint is equivalent to 4.4% of global net emissions, with Scope 1 and 2 making up approximately 30% of these emissions.



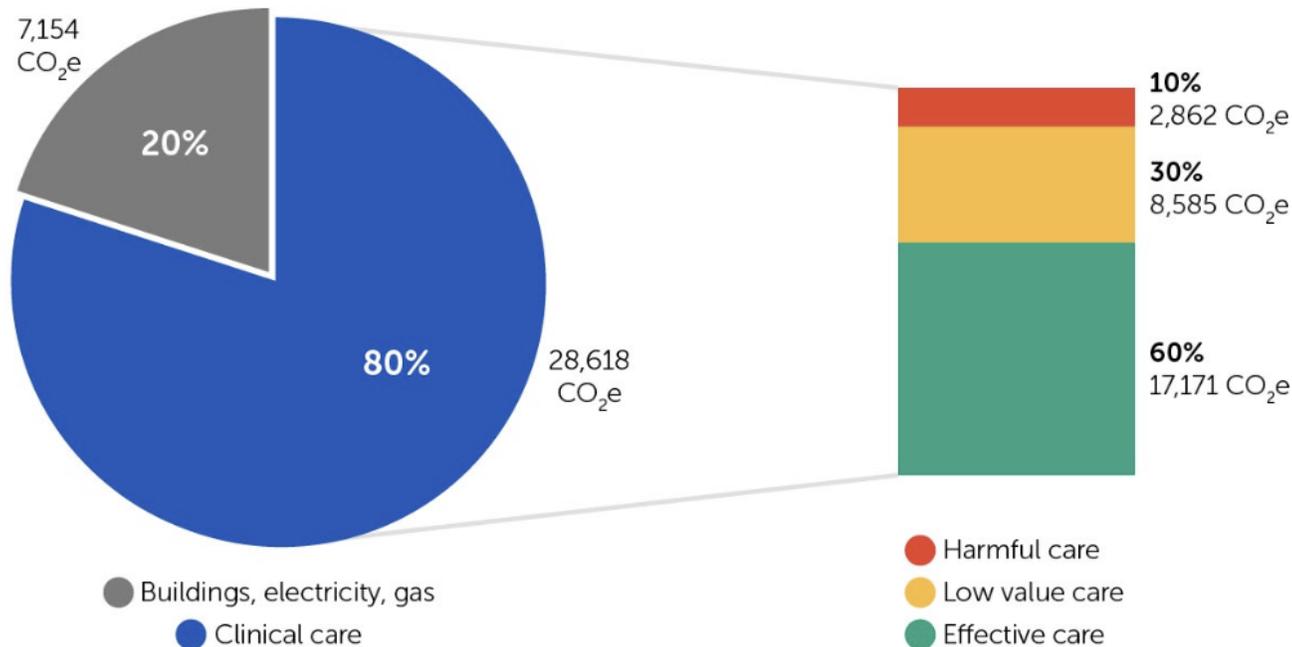
Australian Healthcare

Environmentally sustainable care reduces harm and uses our resources as wisely as we can.

The carbon footprint of Australian health care and the share of its carbon emissions attributable to harmful, low value and effective care

Carbon footprint of health care
35,772 kilotonnes CO₂e emissions

Carbon footprint of clinical care
28,618 kilotonnes CO₂e emissions



It's not about reducing quality of care but about delivering best quality care to the right patient at the right time - better for patients and planet

Data shows up to 40% of care in Australia can be considered low value care – eg unnecessary blood tests, CXRs, prolonged surveillance of low-risk conditions

Climate Change, Sustainability and the Health System

Climate change is the **leading threat to health globally**.

Rapidly changing climate and associated environmental changes pose serious threats to human health and well-being by exacerbating existing health inequities, disproportionately affecting vulnerable populations, detrimentally **altering the social and environmental determinants of health, and damaging health-supporting infrastructure**.

Healthcare has **an important role in mitigating as well as adapting** to the impacts of climate change and reducing its own contribution to emissions and pollution.

All care has an indirect bearing on emissions through the way it is delivered. But some care delivery contributes directly to emissions, such as the potent greenhouse gases used in some asthma inhalers and anaesthetics. Care can be more or less environmentally sustainable depending on how it uses resources

Impact of climate and sustainability on health

Impact of healthcare on climate and sustainability

Future of health in a changing climate

Climate change and health





Ecosystems

- A geographic area where plants, animals, other organisms (living) along with weather, rocks, temperature, humidity, water and landscape (nonliving) form a dynamic system of interdependent parts
- All parts of an ecosystem interact directly or indirectly with other parts
- Ecosystems interact with other ecosystems
- A change in one ecosystem can lead to a change in another ecosystem eg–
 - animal relies on a plant for food
 - temperature changes and plant can no longer grow there
 - animal relying on the plant for food must either adapt, move to another ecosystem or die
 - the adaptation or movement of the animal then has an impact on other food sources or ecosystems
 - And so on...

Ecosystem functions

- Circularity in nature
- Ecosystems interact
- Water continuously cycles through rock, soil, plants and air
- Rock needs water for weathering to form sand, soil, & release minerals
- Soil needs water, plant roots and microorganisms for structure, porosity and health
- Plants need soil, water and sunlight for growth, transpiration, regeneration
- Humans and animals need plants for nutrition
- Water needs plants for purification and circulation through the atmosphere
- Microorganisms consume organic matter are a natural waste recycler in the environment
- Rock layers filter water into deep geological layers as groundwater reserves to naturally replenish rivers and springs

WHAT NATURAL AREAS DO FOR US

Islanders depend on the many goods and services that nature provides:





Ecosystem Services

- ▶ Provision
 - ▶ Food from ocean and land
 - ▶ Cotton, linen, silk, viscose, hemp, wool
 - ▶ Oil, petrol, gas
 - ▶ Drinking water
 - ▶ Recreational water
 - ▶ Timber, steel, copper, cobalt, lithium, aluminium
 - ▶ Medicines
 - ▶ Vitamin D
- ▶ Support
 - ▶ Soil formation
 - ▶ Nutrient cycling
 - ▶ Water cycling
 - ▶ Waste sinks
- ▶ Regulation
 - ▶ Climate regulation
 - ▶ Pollination
 - ▶ Waste sinks
 - ▶ Carbon sinks
 - ▶ Water purification
 - ▶ Erosion control
 - ▶ Pollination
- ▶ Cultural, social, recreational
 - ▶ Aesthetic value of natural features
 - ▶ Relaxation
 - ▶ Sport
 - ▶ Adventure
 - ▶ Spiritual elements
 - ▶ Space making

Anthropocene



- ▶ The Anthropocene is the era through which humans have made a substantial impact on planetary health. Though not described as a new geological age, it is so named as a clear timeframe evidenced by significant impact within the complex, global ecosystem.





Ecosystem impacts

- Infectious disease and environmental health professionals recognise human health but there is a disconnect with policy decisions, industry and development (land clearing, energy and transport infrastructure projects, industrial scale farming and urban development to accommodate population growth)
- Communicable diseases are deeply connected to climate and biodiversity crises, these will continue to emerge, Covid-19 pandemic a stark example
- 3 out of every 4 new infectious diseases in people come from animals - wildlife, livestock
- Governments should have been alerted to wake up to the evidence and change the way we live in the world post-covid, but globally the focus has been on getting back to business as usual.
- Unless there is change, we will continue to see catastrophic disruption to the modern way of life
- There is an unwillingness to respect the interdependence between humans, other species and the natural world



Opportunities

Healthcare professionals have power to influence sustainability in their decision making:

- medications
- medical devices and equipment
- building use including energy
- patient and staff travel
- supply chains
- use of virtual care
- reducing low value care
- reducing unnecessary use of single use gloves
- use of reusable/washable aprons, curtains instead of single use plastic
- selection of clinical consumables (influence/advise procurement)
- supporting research and innovation to enable faster decarbonisation of care

GREEN METRO NORTH SUSTAINABILITY STRATEGY 2021–2026



- 6 Hospital and Health Services in Qld, Metro North is largest health service in Australia. ~25K staff. ~1M consumers.
- MNHHS Board endorsed Green Metro North Sustainability Strategy 2021-2026
- Metro North internal targets:
 - ✓ 43% emission reduction against 2005 baseline by 2030;
 - ✓ 50% renewable energy by 2030; 70% by 2032 and 80% by 2035
 - ✓ end goal of Net Zero Emissions by 2050
- Establishment of full-time sustainability lead for Metro North
- Concurrently implementing and expanding the sustainability and climate resilience work under the strategy

GREEN METRO NORTH SUSTAINABILITY STRATEGY 2021–2026

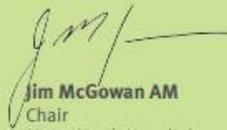
Message from the Board Chair and Chief Executive

Metro North Health is a recognised leader in the provision and delivery of world class healthcare. Our role as a leader in healthcare extends beyond caring for the community in the present, to future generations to come.

As the largest health service in Australia, we are dedicated to reducing our environmental footprint, promoting public and environmental health, and ensuring our service is resilient to climate change.

Green Metro North presents our commitment to environmental sustainability spanning over five strategic elements. This strategy represents an important step on our sustainability journey and reflects the passion of our staff to make a positive impact.

We encourage all staff to take this opportunity to imagine a brighter future and join us in taking action to create a healthier and more sustainable tomorrow.



Jim McGowan AM
Chair
Metro North Hospital
and Health Board



Shaun Drummond
Chief Executive
Metro North Hospital
and Health Service

Queensland Government targets

Metro North actions will reflect Queensland Health's **Climate Change Adaptation Planning Guidance** and progressively align with Queensland Government targets of:

- 50 per cent renewable energy by 2030
- An interim emissions reduction target of at least 30 per cent below 2005 levels by 2030
- Zero net emissions by 2050.

Our commitment

To take action towards environmental sustainability and deliver high quality health services for our community and future generations.

Strategic elements

Metro North will deliver on our commitment by focusing on five strategic elements.

Green Monitoring

Measure, monitor and report on key sustainability metrics to track progress and identify opportunities for improvement.

- Implement Sustainability Reporting to quantify major sources of waste and energy use
- Establish sustainability baselines and targets in alignment with Queensland Government targets

Green Partnerships

Collaborate with other organisations to improve sustainability performance and innovation within the healthcare sector.

- Promote organisational collaboration as a source of research and knowledge sharing
- Foster partnerships with a wide range of partners, including government, healthcare providers, private sector, universities and peak bodies



Green Facilities

Build and maintain all facilities, plant and infrastructure to integrate environmental sustainability and resilience.

- Adopt a whole of lifecycle approach to our assets, incorporating design, construction, maintenance and redevelopment
- Cross-reference Green Building rating systems to find the right fit
- Create culturally appropriate places for people, with a focus on precinct master planning, walkability, and improving patient outcomes

Green Initiatives

Action for sustainable change, including enhancing energy efficiency and minimising waste output.

- Consolidate, showcase, scale and support existing Green Initiatives
- Identify, investigate and implement new Green Initiatives

Green Workforce

Prioritise staff engagement to champion environmental sustainability across all organisational locations.

- Grow a sustainability culture where everyone has a role to play
- Provide staff with opportunities to become more engaged and provide input through Green Teams
- Embed environmental sustainability into Metro North's governance structure to provide ongoing sustainability leadership



Our next step will be to prepare organisation-wide waste and energy implementation plans.

To join the Green Team at your facility, contact greenmetronorth@health.qld.gov.au

Metro North is proud to recognise the cultural diversity of our workforce. We recognise and pay respect to the Turrbal, Jagera/Yuggera/Ugarapul, Gubbi Gubbi/Kabi Kabi and Jinibara/Jiniburi people on whose lands Metro North Health walk, work, talk and live.

Metro North
Health



Strategic Elements: Green Facilities

 Waste Management Design

 Integrated urban ecology + landscaping

 Amenity and comfort

 Site-wide water management

 Welcoming and Inclusive

 Access & Integrated Mobility

 Renewable energy

 Whole of life considerations

 Smart rainwater

 Upfront carbon emissions

 Occupant health and wellbeing

 All electric + net zero

 Public parks, integrated ecology + light surfaces

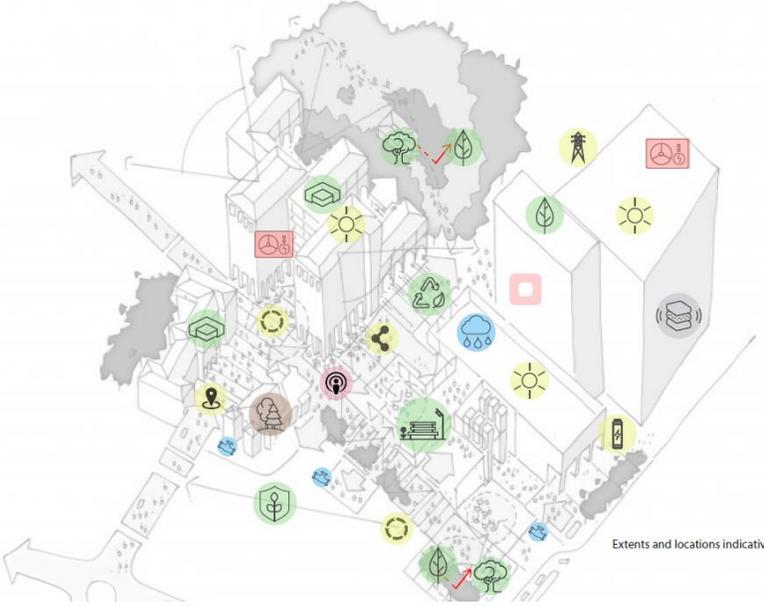
 Bespoke MNH frameworks/certification

 Material passports + design for disassembly

 Energy retailer

 Potential for increased onsite renewable energy

 Smart Hospital Precinct / Campus



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- Cross-reference Green Building rating systems to find the right fit
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Strategic Elements: Green Monitoring

- ▶ Sustainability Dashboard under development
- ▶ Workforce participation in Green Teams and engagement opportunities
- ▶ Climate Risk Assessment and Mitigation
- ▶ Decarbonisation Pathway Plan
- ▶ Clinical sustainability quality improvement projects to reduce emissions and waste associated with care delivery
- ▶ Waste diversion from landfill and recycling rates
- ▶ Hospital Stock Exchange measuring value retention and waste prevention
- ▶ Measuring nitrous oxide volume reduction and cost savings
- ▶ Tracking capital works sustainability improvements from utilisation of Metro North Sustainable Design Guideline and tracker

Green Monitoring

Measure, monitor and report on key sustainability metrics to track progress and identify opportunities for improvement.

- Implement Sustainability Reporting to quantify major sources of waste and energy use
- Establish sustainability baselines and targets in alignment with Queensland Government targets



Strategic Elements: Green Partnerships

- ▶ Qld Health Office of Hospital Sustainability
- ▶ Other health services
- ▶ HHS Sustainability Officers Network
- ▶ Sustainable Infrastructure Community of Practise
- ▶ Global Green and Healthy Hospitals
- ▶ Communities of practice:
 - ▶ GGHH Sustainable Food Community of Practice
 - ▶ Nitrous Oxide Anesthetics Working Group
- ▶ Pilot projects with stakeholders
 - ▶ Hospital Food Service Environmental Audit with stakeholders MN dietitians, Statewide Food Services, and dietetic clinical placement students
 - ▶ Electrolysed water food sanitising system with TPCH Food Services
 - ▶ Indoor air quality investigations with UQ and CSIRO
- ▶ Research project partnerships with industry, academia
 - ▶ Developing a white paper with QUT & an Engineering consultancy on use of green hydrogen in hospitals
 - ▶ Implementation science project with University of Melbourne and Doctors for the Environment using Hospital Sustainability Toolkit for QI

Green Partnerships

Collaborate with other organisations to improve sustainability performance and innovation within the healthcare sector.

- Promote organisational collaboration as a source of research and knowledge sharing
- Foster partnerships with a wide range of partners, including government, healthcare providers, private sector, universities and peak bodies



Strategic Elements: Green Workforce

- ▶ Strategic Communications and Engagement Plan
 - ▶ Intranet page for staff
 - ▶ Public facing website
 - ▶ Executive announcements
 - ▶ Social media
- ▶ Green Teams established with over 300 staff members
 - ▶ Online meetings facilitated by Green Metro North (recorded)
 - ▶ Newsletters/email updates sent to Green Team members
 - ▶ sustainability initiatives led by staff shared in meetings and newsletters
 - ▶ New plan commencing with competitions, events, guest speakers
- ▶ Developing Clinical Sustainability Framework including governance structure with SMEs and key executives, clinician led initiatives
- ▶ Investigating options for developing a Sustainable Healthcare Training Module for all staff
- ▶ Interactive SharePoint page under development with resources
- ▶ Sustainability Champions initiative under development to facilitate sustainability leadership across workforce



The graphic features a large green circular arrow pointing clockwise. Inside the arrow is a white circle containing a green icon of three stylized human figures standing on a rising line graph, with an upward-pointing arrow. The background is a light green gradient.

Green Workforce

Prioritise staff engagement to champion environmental sustainability across all organisational locations.

- Grow a sustainability culture where everyone has a role to play
- Provide staff with opportunities to become more engaged and provide input through Green Teams
- Embed environmental sustainability into Metro North's governance structure to provide ongoing sustainability leadership

Green initiatives: 6 key focus areas



► Food

Initiatives designed to provide healthy, nutritious, sustainable food choices.

- Food preparation models
- Sustainable food supply chains
- Reducing food miles
- Quality improvement projects to reduce food waste
- Reducing energy and water footprint of kitchen equipment

► Water

Initiatives designed to sustainably manage water consumption and sources.

- passive rainwater harvesting for green spaces
- water recycling
- reducing water wastage through education
- enhancing water efficiency through infrastructure
- Flood resilience through urban greening

► Procurement

Initiatives designed to integrate sustainability criteria into procurement activities for more sustainable product options.

- product stewardship from suppliers
- project requirements for lifecycle analysis and environmental product declarations
- packaging reduction options
- tender requirements for suppliers to have verifiable sustainability governance frameworks in place.

Green initiatives: Energy

Stage 1 solar complete - 8 sites across MNHHS now generating power from solar PV

Conversion of fluoros to LEDs.

Transition away from gas to electric across hospitals

Transition all gardening equipment to electric

GREEN METRO NORTH SUSTAINABILITY IMPLEMENTATION PLAN **Energy**

OUR GREEN INITIATIVES

- Waste
- Transport
- Energy
- Procurement
- Food
- Water

Metro North Health is working toward making our health service greener and cleaner for our staff, our patients and our communities.

We want to be the sustainability leader for the health industry.

By reducing our environmental footprint and making our hospitals greener we can contribute to a brighter future for a healthier and more sustainable tomorrow. We are taking positive steps to enhance energy efficiency and to reduce waste. We are putting a range of actions for sustainable change into play across our six green initiative areas and will be supported by implementation plans to take action now.

100% ELECTRIC HOSPITAL BY 2035

50% RENEWABLE ENERGY BY 2030

70% RENEWABLE ENERGY BY 2032

80% RENEWABLE ENERGY BY 2035

ZERO NET EMISSIONS BY 2050

OUR OBJECTIVES

We are investing in a more sustainable energy future and to reduce our energy consumption and CO₂ emissions through targeted energy management, generation and sustainability initiatives.

Our Energy Implementation Plan aims to improve energy use and transition to renewable energy across Metro North Health and to also improve energy efficiency standards of our facilities.

- Improve energy use, generation and efficiency
- Improve energy efficiency standards of facilities
- Engage and collaborate to identify energy saving initiatives and improve efficiency
- Be the health sector leader in reducing energy intensity and CO₂ emissions
- Increase the percentage of renewable energy generation with and on buildings and sites
- Reduce energy demand across MNH in line with Queensland Government targets
- Embed solar PV systems in MNH buildings and facilities to reduce energy requirements from the grid. Goal of 20% of installed solar PV by 2030
- Increase staff awareness and engagement to help drive energy sustainability

WE WANT TO

- Eliminate steam as a low efficiency energy source
- Phase key buildings against NABERS for key buildings
- Measure energy use per bed per day
- Use QH's Environmental Sustainable Performance Indicators (ESPI) as a reporting tool

ASK

Visit: qheps.health.qld.gov.au/metro-north/green
Email: GreenMetroNorth@health.qld.gov.au

GLOBAL GREEN and HEALTHY HOSPITALS

Metro North Health **Queensland Government**



Green Initiatives: Transport



EOFY 24 target 141 EVs in passenger fleet

At 30 October 2024 152 EVs in fleet ahead of target

118 charging bays across MNHHS

Further charging bays undergoing rollout



GREEN METRO NORTH SUSTAINABILITY IMPLEMENTATION PLAN **TRANSPORT**

OUR GREEN INITIATIVES

 Waste	 Transport	 Energy
 Procurement	 Food	 Water

Metro North Health is working toward making our health service greener and cleaner for our staff, our patients and our communities.

We want to be the sustainability leader for the health industry and have a clean and green transport fleet.

By reducing our environmental footprint and making our hospitals greener we can contribute to a brighter future for a healthier and more sustainable tomorrow. We are taking positive steps to enhance energy efficiency and to reduce waste. We are putting a range of actions for sustainable change into play across our six green initiative areas and will be supported by implementation plans to take action now.

100%
OF OUR PASSENGER VEHICLES TO ZEVS BY 2026

50%
RENEWABLE ENERGY BY 2030

70%
RENEWABLE ENERGY BY 2032

80%
RENEWABLE ENERGY BY 2035

ZERO
NET EMISSIONS BY 2050

DRIVING TOWARDS SUSTAINABILITY | Cleaner and greener fleet

We are gearing up to a zero-emissions vehicles strategy. Metro North Health introduced Queensland Health's first zero emission vehicle (ZEV) and we are transitioning our fleet to 100% of our passenger vehicles to ZEVs by 2026. This is just one of our actions to reduce transport-generated emissions.

We are prohibiting the new purchase or lease of internal combustion engine powered vehicles where there is a zero-emissions alternative that is fit for purpose.

We aim to reduce carbon emissions in relation to transport, how we use our vehicles to do our work and support active communicating among our workforce and increase use of and access to public transport for staff, patients and visitors.

OUR SUSTAINABILITY OBLIGATIONS

ASK

Visit: qhps.health.qld.gov.au/metro-north/green
Email: GreenMetroNorth@health.qld.gov.au

Green initiatives: Waste

Implementation Plan includes 50 initiatives spanning waste reduction and recycling opportunities, stakeholder education and engagement, improved data analysis and community organisation partnerships.

Key outcomes delivered include:

- TMS training for waste and recycling
- launching the MNH Waste and Recycling Directory
- Food Organics Recycling at all major MNH sites
- Bin-free desk initiative
- better inclusion of Waste Representatives in the Infrastructure Development process

Clinical waste
Waste with the potential to cause disease

- Items with free-flowing blood & bodily fluids (Accepted)
- Visibly soiled PPE/disposables from infectious patients (Accepted)
- Loose sharps (Not accepted)
- Non-infectious general waste and recyclables (Not accepted)

Food Recycling

- Fruit, vegetables & bakery items (Accepted)
- Meat, poultry & dairy (Accepted)
- Plastic, glass, metal & cardboard wrappers (Not accepted)
- Plastic & cardboard packaging (Not accepted)

MNEnviroWaste@health.qld.gov.au



Recycling and waste bin types



CLINICAL AND RELATED WASTE

CLINICAL WASTE	
Materials saturated with or containing free flowing blood, bodily fluid or waste with the potential to cause disease including:	
Items with free flowing/ saturated with blood or bodily fluids	
Waste with the potential to cause disease	
Disposable sharps containers	
SHARPS	
Objects or devices capable of cutting or penetrating the skin	
Accepted	Not accepted
Needles, ampoules and syringes	General waste and packaging
Scalpel and razor blades	Gloves
IV giving sets (spikes exposed)	Non-sharps
ANATOMICAL	
Recognizable human body parts	
CYTOTOXIC WASTE	
Cytotoxic drugs and substances	
Materials contaminated with cytotoxic drugs and substances	
Blood and body fluids of someone administered a cytotoxic drug	
Consumables used in cytotoxic drug administration and treatment (PPE, syringes, respirator masks, vials, air filters etc.)	
PHARMACEUTICAL	
Unused, unwanted or out-of-date medications and pharmaceuticals	
Items contaminated with pharmaceutical residue	
CHEMICAL WASTE	
Hazardous chemicals and liquid waste	

RECYCLING OPTIONS

CARDBOARD AND PAPER		
Accepted	Not accepted	
Flattened cardboard boxes	Confidential documents	
Paper		
CO-MINGLE (white lid bin)		
Accepted	Not accepted	
Steel and aluminium cans	Coffee cups, Food scraps or Liquids	
Hard plastic	Paper towels	
Glass	Plastic bags	
CONFIDENTIAL DOCUMENTS		
Accepted	Not accepted	
Documents with patient names, addresses or phone numbers	Ring binders and bulldog clips	
Documents with other confidential information	Paper that isn't confidential/with no patient information	
FOOD WASTE		
Accepted	Not accepted	
Any food waste, including coffee grounds	Food packaging and cutlery	
Compostable packaging - BIOPAK brand only	Non-compostable bin liners	
PVC RECYCLING		
Baxter IV fluid bags (with hard plastic piece cut-off)		
Oxygen masks (metal clip removed) and Oxygen tubing		
E-WASTE		
Any electronic equipment with a power cord or that is battery operated		
We also recycle		
Coffee cups	Single-use steel instruments (clean)	Aluminium crutches
Batteries	Printer cartridges	Copper cables

LANDFILL

GENERAL WASTE	
Accepted	Not accepted
Any item not listed in the above sections	Any item that is recyclable or clinical and related waste

Email GreenMetroNorth@health.qld.gov.au for more information.

Alignment with Queensland Health Policies

- ➔ Policy framework for consistent climate risk management across public health system
- ➔ Embeds climate risk management in existing business processes



Queensland Health
Climate Risk Strategy
and Planning Guidelines



Queensland Health
Capital Infrastructure
Requirements



Queensland Government
Climate Action Targets

New plans additional to the strategy



Metro North Climate Change Mitigation & Adaptation Plan

The primary ambitions of the CCMAP are to:

Provide a **strategic sub-plan** under the Green Metro North Sustainability Strategy 2021-2026

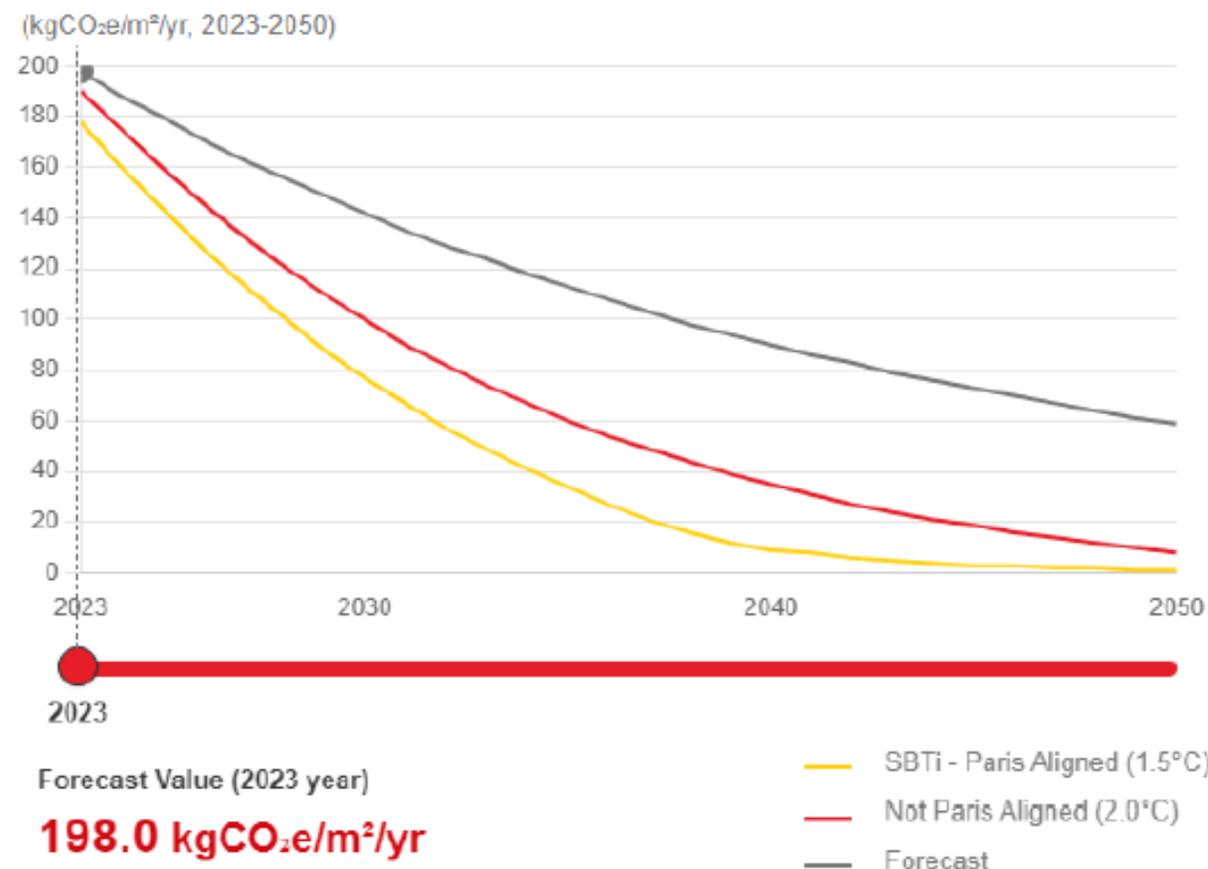
Climate Risk Assessments for all Metro North facilities, establish risk mitigation strategies are developed, supported and actioned to increase resilience and ensure business continuity in the era of climate change.

Establish a **clinical sustainability framework** that provides a structured approach to engaging clinical staff in proactive activities to reduce low value care, waste and emissions through clinical decision making and procurement across clinical areas.

Develop **decarbonisation pathway plan** for Metro North asset portfolio including timelines, cost and the ability to monitor and report on progress to achieve Metro North's net zero targets to 2050.

Q2 2024 reviewed asset and portfolio (approx. 86 assets over 500m² each) to establish baseline data scope 1&2 – current emissions intensity 198kgCO₂e/m²/yr

Decarbonisation pathway planning



New plans additional to the strategy



Urban Greening Plan

Benefits include opportunities for First Nations input, cooling of sites, climate resilience, flood mitigation, supporting conservation with native fauna and flora and providing spaces for staff, patients, visitors and community for wellbeing.

The Urban Greening Plan supports GMN strategy actions for Green Facilities and Water Implementation Plan.



Nitrous Oxide (N₂O) Reduction Plan

N₂O constitutes approx. 7% of hospital emissions

298 times more potent than CO₂

Resides in the stratosphere for over 100 years directly depleting ozone and contributing to global warming.

Very prone to persistent micro leaks from reticulated systems so there is excessive passive waste estimated at 70%.

Reduction of N₂O waste is essential to reduce emissions and air pollution.

Decommission reticulated systems across all clinical areas (except birthing suites).

Establish a portable cylinder system for rare occasions when N₂O is clinically required.

First decommission completed 2024 at The Prince Charles Hospital \$10K saving/yr.

Removing reticulated N₂O from design for all new hospital buildings.

Providing leadership and advice to other health services and sustainable healthcare groups including GGHH, Doctors for the Environment, National Climate & Health team and ANZCA.

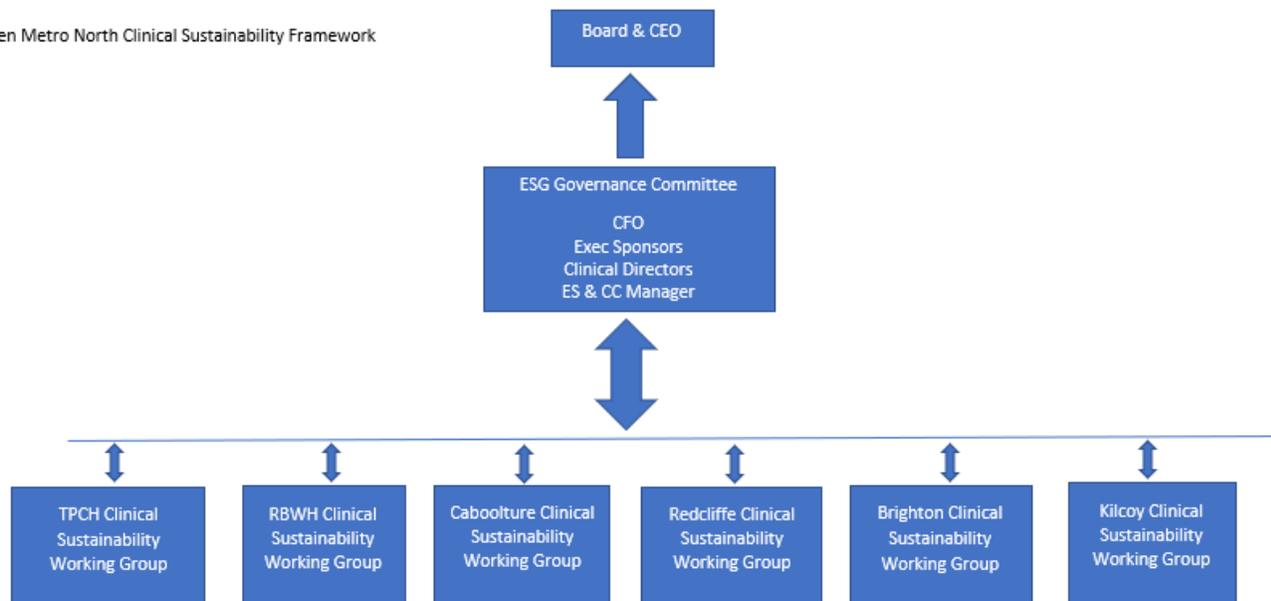


New plans additional to the strategy



Metro North Clinical Governance Framework

Green Metro North Clinical Sustainability Framework



Each hospital working group will have any of the following sub working groups:

ICU	ED	Wards
Pharmacy	Theatres	Allied Health
Radiology	Wards	Pathology
Endoscopy	Outpatients	Dialysis



Governance



Education



Quality Improvement



Engagement

- ES & CC Manager to manage coordination, database and support working groups
- Governance structure for reporting cost savings and emissions/waste reduction up to Exec committee
- Clinical Sustainability Leads working group for clinical governance
- Clinical areas initiatives via clinical staff participation working groups

Tracking progress of the strategy....

4/5 through the 5-year strategy

Development of climate change, workforce, clinical and governance perspectives have drastically increased over last 12 months

Established:

- Energy Implementation Plan
- Transport Implementation Plan
- Waste Implementation Plan
- Sustainable Water Implementation Plan
- Sustainable Procurement Implementation Plan
- Climate Change Mitigation and Adaptation Plan
- Green Metro North Communication & Engagement Plan
- Green Teams engagement strategy

Pilots underway:

- Food Service Environmental Audit – measuring the energy, water and waste footprint of food service models
- Electrolysed Water Food Sanitisation system – reducing chemicals and plastic bottle waste
- Hospital Stock Exchange – circular economy project to maximise value retention of resources and save \$
- Production Food Waste Reduction – reduce food waste before it is created
- Green Hydrogen generation plant – as part of a climate resilience toolkit of renewable energy



Under development:

- Sustainable Food Implementation Plan
- Nitrous Oxide Reduction Plan
- Decarbonisation Pathway Plan
- Workforce Activation Plan
- Clinical Sustainability Framework
- Sustainability Governance Committee
- Sustainability Data & Monitoring Dashboard

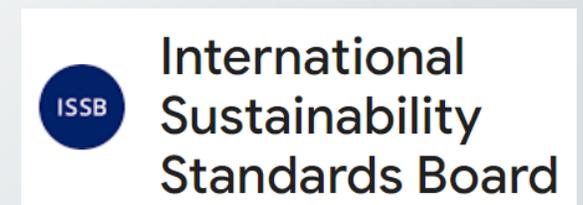
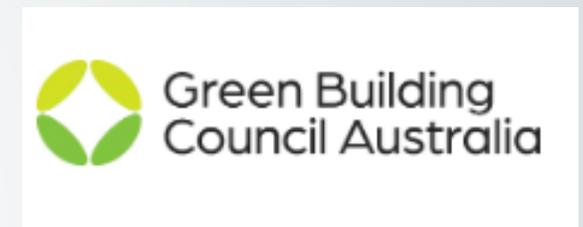
Queensland Health Awards for Excellence 2024

Winner for
Advancing
Sustainability



Critical needs to achieve sustainability progress across health services and jurisdictions

- Organisational Leadership from the top down
 - Establish a holistic, consistent approach in the form of an organisational framework and strategy that aligns with global best practice and provides for the huge requirements for health services and the challenges unique to regions
 - Update procurement policies and infrastructure requirements to embed best practice consistent with global progress on green building rating systems, sustainable procurement legislation, and mandatory climate related disclosure reporting
 - dedicated funding for sustainability staff and infrastructure projects across health services
 - Embedding KPIs across Boards, executives, clinical areas, infrastructure, finance/procurement so that it becomes an organisational priority
- Workforce participation at all levels is vital for
 - Procurement decisions
 - Clinical and operational decision making
 - Resource and asset management
 - Effective data collection and evidence-based tracking of progress including reporting
 - Embedding as key responsibility of all staff (organisational values, role descriptions, orientation, training, KPIs)



National drivers of change

National Health and Climate Strategy released Nov 2023

Key Action Areas:

- Collaboration and governance
- Workforce leadership and training
- Research and innovation
- Communication and engagement

43 follow up actions/plans being undertaken by the national team

ACSQHC hospital accreditation module

- Environmental Sustainability & Climate Resilience Module
- Pilot underway 2024
- Anticipated release 2025

Federal legislation commencing January 2025 for Climate Related Financial Disclosures mandatory reporting requirements





Questions?
Stretch break





What can you do to
understand / support / enhance / advocate for / lead
environmental sustainability in your
immediate work area / entire facility / organisation?

WORKSHOP





“

What you do makes a difference, and you must decide what kind of difference you want to make. You cannot get through a single day without having an impact on the world around you. ”

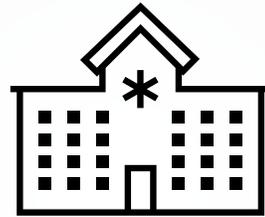


Jane Goodall





Mapping



Own

Scope 1



Buy

Scope 2 & 3

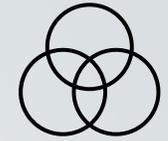


Do

Scope 2 & 3

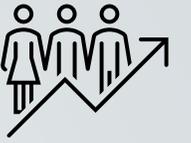


Mind Map



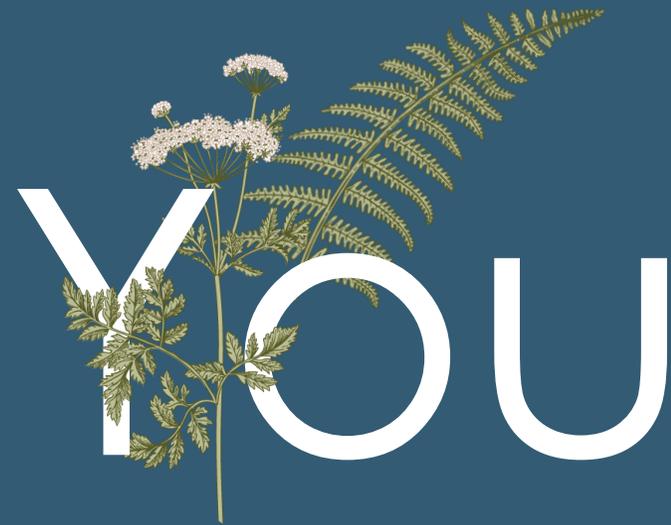
- Map your work area, facility or organisation
 - Geography
 - People – staff, patients, external, community
 - Energy
 - Transport
 - Procurement
 - Infrastructure
 - Asset Management
 - Governance
 - Water
 - Waste
 - Clinical services
 - Medicines and gases
 - Climate risks to buildings, people, services, supply streams
 - Climate Resilience to withstand heatwaves, storms, flood
- Each one of these could be a mind map

Participate



Participate, continue to enquire connect

- ▶ Continue ongoing professional development
 - ▶ Climate and Health Alliance (CAHA)
 - ▶ Global Green and Healthy Hospitals (GGHH)
 - ▶ Green Building Council of Australia (GBCA)
 - ▶ The Lancet Countdown Community
 - ▶ Doctors for the Environment Australia (DEA)
 - ▶ United Nations Training School (CIFAL)
 - ▶ Green NHS
 - ▶ Centre for Sustainable Healthcare
 - ▶ Various university courses being developed in Sustainable Healthcare
- ▶ Join membership bodies, attend conferences and webinars, subscribe to newsletters and read them and share the content
- ▶ Power in numbers and great minds thinking alike - If you are particularly inspired by a speaker, look them up on LinkedIn, email and stay in touch, seek opportunities to collaborate



YOU

And tell
your work
friends!



What can You as an individual do at work?



- Find out whether there is a **Green Team** at your organisation and join it, read up on what they've done so far
 - If there isn't a Green Team, start one
- Commit to learning about sustainability within your organisation and apply a sustainability lens over everything you do
 - Ask questions and find opportunities for improvement
 - Share them with the green team
 - **Identify the stakeholders with influence** and take a proposal or list of priorities to them, asking them to partner with you to work on improvements
 - Respond to regular **staff surveys** that ask what you value, and EMPHASISE sustainability and planetary health as a health professional value
- Bring sustainability into your team
 - Introduce Sustainability as a **standing agenda item** in team meetings, share info with colleagues and invite input
 - Identify **quality improvement projects** within your scope of work and include sustainability parameters/targets
 - Invite your leaders to commit to advocacy and action, including implementing into **annual planning, strategic plans**



Share

Story telling is powerful

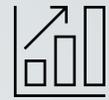


- ▶ When you do something **Green**, share it
 - ▶ Take photos
 - ▶ Count time savings
 - ▶ Count cost savings
 - ▶ Count waste reduction
- ▶ Strategic communications
- ▶ Staff updates
- ▶ Reports
- ▶ Enter Sustainability competitions
- ▶ Apply for sustainability awards
- ▶ Inspire and influence!





Drive market change



One of the most significant challenges in addressing planetary health and climate change, is global supply streams which need system change

“Supply and demand” is the biggest driver of market change.

Government departments are significant customers with power to influence the market offerings. Healthcare has buying power.

Buyers and users of products rely on materials and goods that are available on the market, and every single item has an environmental footprint.

Procurement processes should preference the most sustainable and transparent, accountable suppliers and products.

Government policies and regulations, insurance requirements (such as public liability and disaster coverage), industry standards and organisational factors such as strategic plans, procurement and finance, need to be updated to include meaningful, measurable sustainability parameters such as:

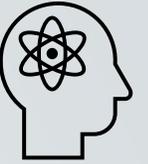
- Cradle to grave environmental footprint
- Social impact
- Emissions criteria
- Participation within a circular economy

If these standards are demanded, the market will respond, more sustainable design, production and supply will result, and competition will impact pricing and availability.

Future



Future career and roles



- Consider whether you would like to support or lead sustainability and climate resilience efforts
- Consider where your passion lies within the complex system you have chosen to pursue a career in
- Today we are on the brink of a significant increase in workforce demand for Sustainability leads
- New roles are being established to tackle the increasing requirements across health sector to reduce climate change, address the impacts of climate change, to attend to the increasing governance requirements such as reporting, and to develop strategies and action plans to increase resilience



YOU

personally

What can You as an individual do personally?



- Remember the value of individual choice!
 - Every decision you make can contribute to sustainability and mitigate climate change –
 - the food you eat
 - your mode of transport
 - the clothes you buy
 - your banking and superannuation choices



Thank you
for joining me



Image: <https://www.istockphoto.com/illustrations/woman-laying-in-field>

Kellie Williams

kellie.williams9@health.qld.gov.au

[Kellie Williams | LinkedIn](#)