

NSW Health's Climate Risk response: The importance of metrics



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Climate risks

- 1) Transition risks (requiring mitigation)
- 2) Physical risks (requiring adaptation)

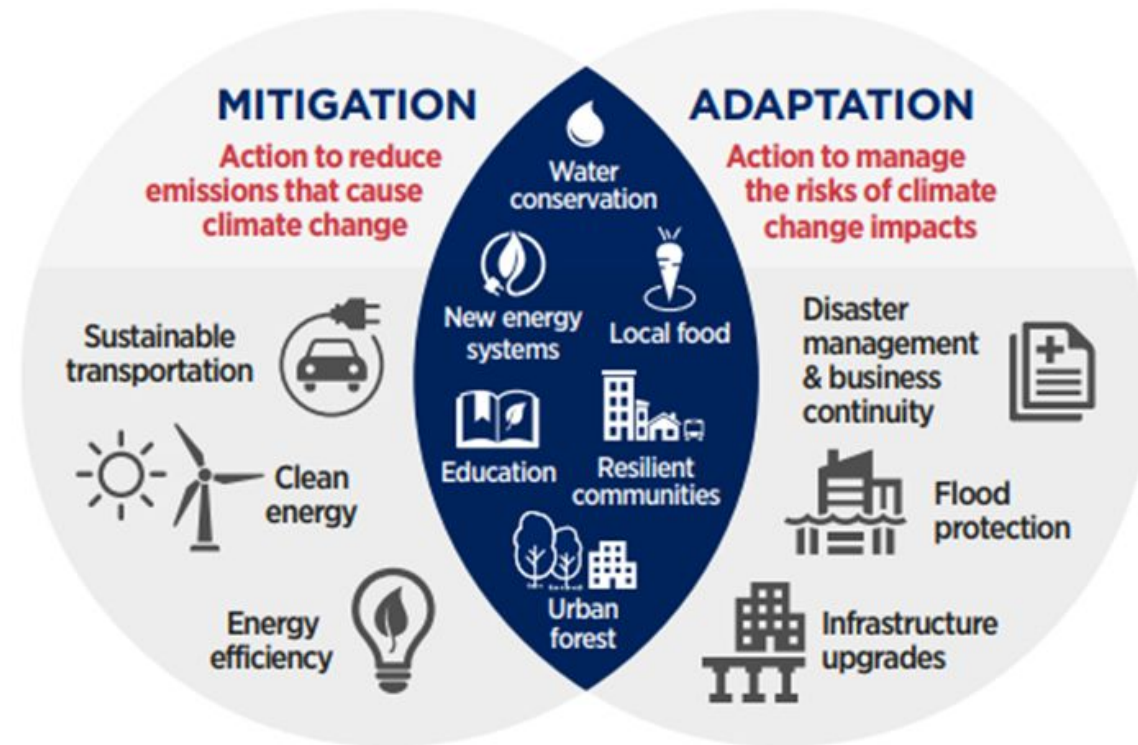


Figure 5: Examples of climate change mitigation and adaptation actions and complementary approaches.



[Home](#) > [Standards](#) > [National Safety and Quality Health Service \(NSQHS\) Standards](#) > Sustainable Healthcare Module

Sustainable Healthcare Module

Find out more about the development of a draft Sustainable Healthcare Module for consultation.

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[Why address Sustainability?](#)[Sustainable Healthcare Module](#)[How to get involved](#)

National Safety and Quality Health Service
(NSQHS) Standards

Implementation of the NSQHS Standards

Assessment to the NSQHS Standards

International best practice

Figure 1: Contribution of different sectors to the greenhouse gas emissions of the NHS England

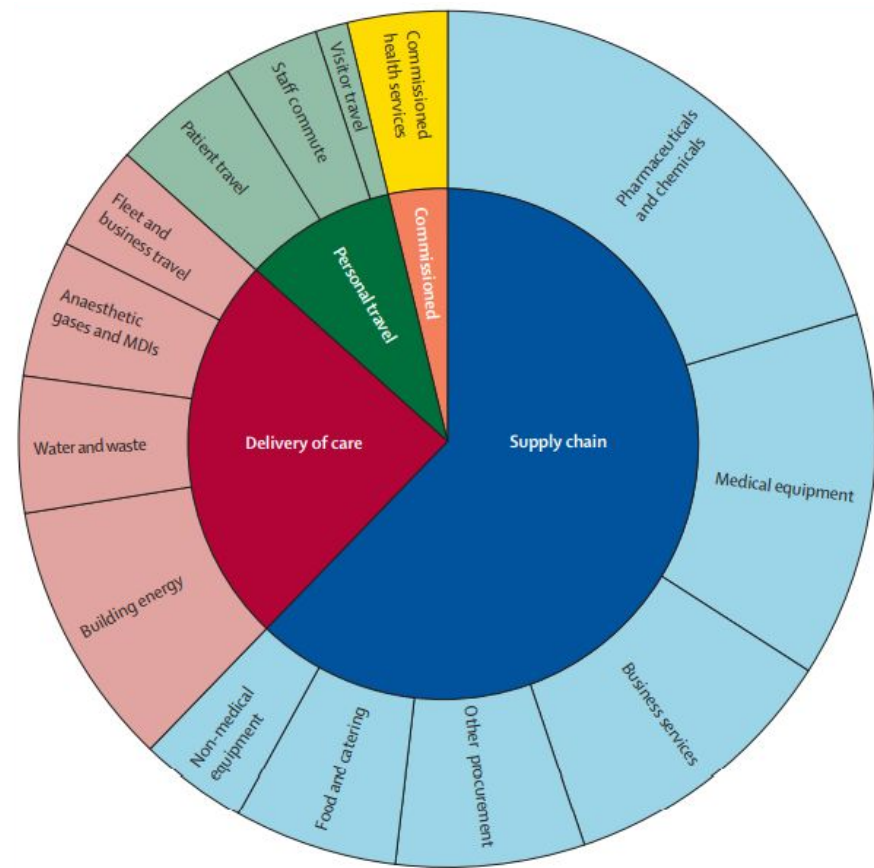
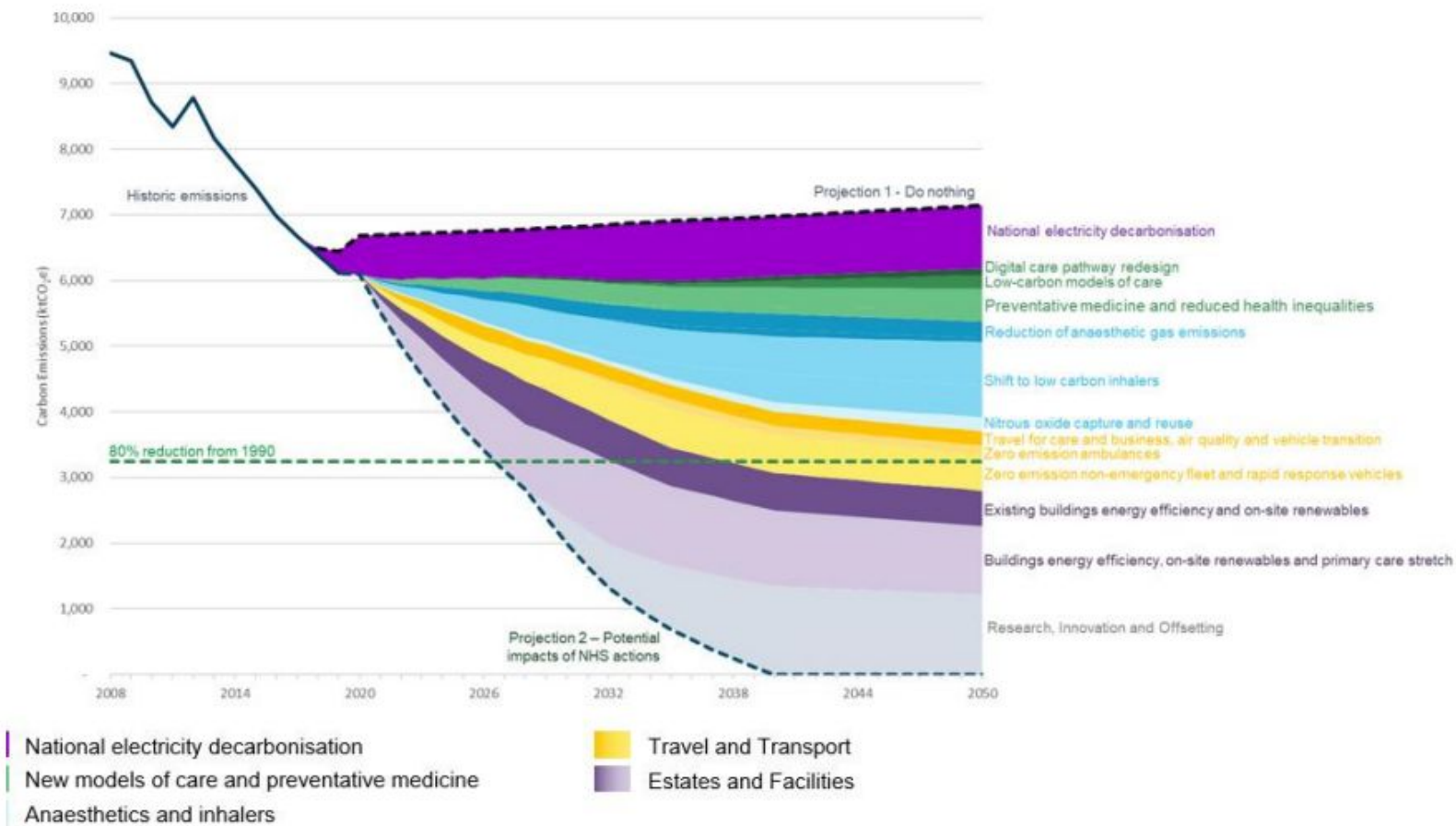


Figure 2: Pathway to net zero for the NHS Carbon Footprint Scope



References:
Tennison, Roschnik, Ashby et al. Health care's response to climate change: a carbon footprint assessment of the NHS in England. The Lancet Planetary Health 2021; 5:e84-92
Delivering a 'Net Zero' National Health Service. NHS England and NHS Improvement. October 2020. [delivering-a-net-zero-national-health-service.pdf](https://www.nhs.uk/england-nhs-improvement/delivering-a-net-zero-national-health-service.pdf) (england.nhs.uk)

Climate Risk & Net Zero Unit

Future Health: Strategic Framework







Guiding the next decade of care in NSW 2022-2032

Our Vision

A sustainable health system that delivers outcomes that matter most to patients and the community, is personalised, invests in wellness and is digitally enabled.

Our Values:

Collaboration
Openness
Respect
Empowerment

Strategic outcomes	Key objectives
 <p>Patients and carers have positive experiences and outcomes that matter: People have more control over their own health, enabling them to make decisions about their care that will achieve the outcomes that matter most to them.</p>	<ul style="list-style-type: none"> 1.1 Partner with patients and communities to make decisions about their own care 1.2 Bring kindness and compassion into the delivery of personalised and culturally safe care 1.3 Drive greater health literacy and access to information 1.4 Partner with consumers in co-design and implementation of models of care
 <p>Safe care is delivered across all settings: Safe, high quality reliable care is delivered by us and our partners in a sustainable and personalised way, within our hospitals, in communities, at home and virtually.</p>	<ul style="list-style-type: none"> 2.1 Deliver safe, high quality reliable care for patients in hospital and other settings 2.2 Deliver more services in the home, community and virtual settings 2.3 Connect with partners to deliver integrated care services 2.4 Strengthen equitable outcomes and access for rural, regional and priority populations 2.5 Align infrastructure and service planning around the future care needs
 <p>People are healthy and well: Investment is made in keeping people healthy to prevent ill health and tackle health inequality in our communities.</p>	<ul style="list-style-type: none"> 3.1 Prevent, prepare for, respond to and recover from pandemic and other threats to population health 3.2 Get the best start in life from conception through to age five 3.3 Make progress towards zero suicides recognising the devastating impact on society 3.4 Support healthy ageing ensuring people can live more years in full health and independently at home 3.5 Close the gap by prioritising care and programs for Aboriginal people 3.6 Support mental health and wellbeing for our whole community 3.7 Partner to address the social determinants of ill health in our communities
 <p>Our staff are engaged and well supported: Staff are supported to deliver safe, reliable person-centred care driving the best outcomes and experiences.</p>	<ul style="list-style-type: none"> 4.1 Build positive work environments that bring out the best in everyone 4.2 Strengthen diversity in our workforce and decision-making 4.3 Empower staff to work to their full potential around the future care needs 4.4 Equip our people with the skills and capabilities to be an agile, responsive workforce 4.5 Attract and retain skilled people who put patients first 4.6 Unlock the ingenuity of our staff to build work practices for the future
 <p>Research and innovation, and digital advances inform service delivery: Clinical service delivery continues to transform through health and medical research, digital technologies, and data analytics.</p>	<ul style="list-style-type: none"> 5.1 Advance and translate research and innovation with institutions, industry partners and patients 5.2 Ensure health data and information is high quality, integrated, accessible and utilised 5.3 Enable targeted evidence-based healthcare through precision medicine 5.4 Accelerate digital investments in systems, infrastructure, security and intelligence
 <p>The health system is managed sustainably: The health system is managed with an outcomes-focused lens to deliver a financially and environmentally sustainable future.</p>	<ul style="list-style-type: none"> 6.1 Drive value based healthcare that prioritises outcomes and collaboration 6.2 Commit to an environmentally sustainable footprint for future healthcare 6.3 Adapt performance measurement and funding models to targeted outcomes 6.4 Align our governance and leaders to support the system and deliver the outcomes of Future Health

CORE responsibilities



Vision

NSW Health is a leading modern, low carbon, low waste, climate resilient health system by focusing on quality, value, innovation and equity.

1. Collaborate & Coordinate

- Establish ongoing collaboration with NSW Health organisations, researchers, government agencies and industry

2. Objectives & Performance

- Set objectives and targets to meet legal, government and regulatory requirements

3. Research & Innovation

- Partner with researchers, industry, and carbon accountants to measure carbon in the system

4. Empower

- Engage with staff to understand their values and their views about sustainability, and support them to act in accordance with their values

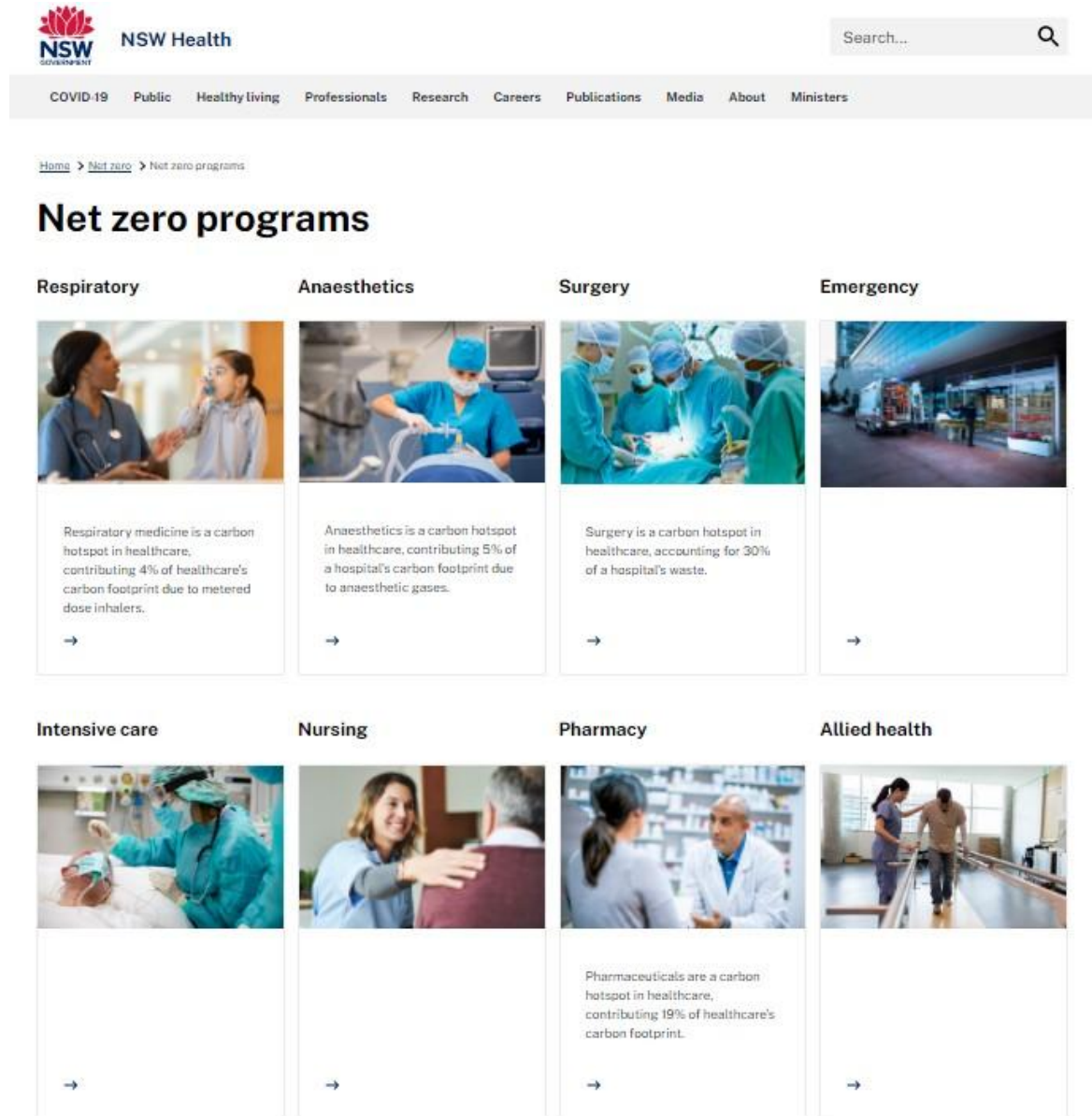


Nepean Blue Mountains Local Health District





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Net Zero Leads Program

- Lead a Network
- Act as change agents
- Redesign low-carbon models of care within their service or specialty, in line with the latest research
- Develop best practice guidance
- Co-author manuscripts for publication



The screenshot shows the NSW Health website's 'Net zero programs' page. The header includes the NSW Government logo, 'NSW Health', a search bar, and a navigation menu with links: COVID-19, Public, Healthy living, Professionals, Research, Careers, Publications, Media, About, and Ministers. The breadcrumb trail is 'Home > Net zero > Net zero programs'. The main heading is 'Net zero programs'. Below this, there are eight program cards arranged in a 2x4 grid, each with a title, an image, a text description, and a right-pointing arrow.

Respiratory	Anaesthetics	Surgery	Emergency
			
Respiratory medicine is a carbon hotspot in healthcare, contributing 4% of healthcare's carbon footprint due to metered dose inhalers.	Anaesthetics is a carbon hotspot in healthcare, contributing 5% of a hospital's carbon footprint due to anaesthetic gases.	Surgery is a carbon hotspot in healthcare, accounting for 30% of a hospital's waste.	
→	→	→	→

Intensive care	Nursing	Pharmacy	Allied health
			
		Pharmaceuticals are a carbon hotspot in healthcare, contributing 19% of healthcare's carbon footprint.	
→	→	→	→



“Carbon will be as important as money.”



Carbon Footprinting for Healthcare

This carbon footprinting course will help health professionals, quality improvement leads and medical students to become carbon literate. You will gain an understanding of what a carbon footprint is, how it can be used in the NHS's endeavour to go net zero and how it is measured.

- **Workshop: *FULLY BOOKED* 13 July (Wed) 8.00-12.00 BST**
 - Self-study period opens: 22 June
 - Work-in-progress session: 6 December (Tues) 8.00-10.00 GMT



The carbon footprint of hospital diagnostic imaging in Australia



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Summary

Background Pathology testing and diagnostic imaging together contribute 9% of healthcare's carbon footprint. Whilst the carbon footprint of pathology testing has been undertaken, to date, the carbon footprint of the four most common imaging modalities is unclear.

Methods We performed a prospective life cycle assessment at two Australian university-affiliated health services of five imaging modalities: chest X-ray (CXR), mobile chest X-ray (MCXR), computerised tomography (CT), magnetic resonance imaging (MRI) and ultrasound (US). We included scanner electricity use and all consumables and associated waste, including bedding, imaging contrast, and gloves. Analysis was performed using both attributional and consequential life cycle assessment methods. The primary outcome was the greenhouse gas footprint, measured in carbon dioxide equivalent (CO₂e) emissions.

The Lancet Regional
Health - Western Pacific
2022;24: 100459
Published online xxx
<https://doi.org/10.1016/j.lanwpc.2022.100459>

These surgeons have performed the first 'net-zero' cancer operation





AdaptNSW



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An aerial photograph of a park area. A river flows through the center, with a bridge crossing it in the lower-left. The park is filled with green grass, trees, and a path. A road with a line of trees runs along the right side.

NSW Climate Change Adaptation Strategy

NSW is already experiencing the impacts of climate change. Most recently these have included the unprecedented cycle of heatwaves, droughts,

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