
Sustainability

5

Human health and wellbeing are intrinsically linked to the environment in which we live.

More than ever, NSW Health is facing challenges related to our changing climate and the environmental impact of healthcare. There is considerable scientific evidence that climate change resulting primarily from greenhouse gas emissions is increasing the frequency and severity of extreme climate events.

Researchers estimate that Australia's health system contributes 7% of Australia's total carbon footprint, and hospitals represent 34% of the total healthcare carbon footprint.¹ As such, NSW Health has a responsibility, and the potential to find ways to reduce its emissions.

NSW Health recognises that it must continue to deliver high quality healthcare alongside responding to climate risk. The effects of climate change will impact the ability of NSW Health to deliver services and manage population health, while driving increasing demands on the system.

The delivery of an environmentally sustainable, climate resilient healthcare system is a key priority for NSW Health, and a system-wide program of work is already underway.

NSW Health's Strategic Framework, *Future Health: Guiding the next decade of care in NSW 2022-2032*, clearly states this commitment. NSW Health is partnering with key stakeholders to progress this work, supporting the NSW Government's commitment to deliver a 70% cut in emissions by 2035 (compared to 2005 levels) and to reach net zero emissions by 2050.

To meet these challenges, NSW Health is taking action in the areas of governance, strategy, risk management, metrics and targets.

Environmental Sustainability

Improving resource efficiency and energy management are two key ways we can reduce CO2 emissions while also reducing electricity costs for NSW Health.

A new energy management strategy for the coming decade will align with the Government Resource Efficiency Policy and the Net Zero Plan Implementation Update to ensure NSW Health will deliver its contribution to the State's targets of a 50% reduction by 2030, and net zero emissions by 2050.

Energy management

Electricity consumption decreased by 1.7% from last year, despite asset floor-space growth.

A combination of energy efficiency measures, including numerous solar installations across the local health districts, have contributed to a decrease in NSW Health's building energy consumption. On this basis, and along with a greening electricity-grid, net carbon emissions for NSW Health are falling (see table below).

1. Malik A, Lenzen M, McAlister S, McGain F, 2018 'The carbon footprint of Australian health care' *The Lancet Planetary Health*, vol. 2, issue 1, E27-E35, <<https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext>>

Energy contract use

Year	LPG (non-automotive) use KL	Natural gas use TJ	Electricity use GWh	Total electricity bill \$ million*
2021–22	6,495	1,278	786	\$120.5
2022–23	8,881	1,266	773	\$129.9

*Ex GST

Energy leadership across the system

NSW Health continues to show strong leadership within the public sector for renewable energy and energy efficiency projects. Nationally, NSW Health has the largest number of solar-power systems installed on public hospital rooftops in Australia.

In 2022-23, NSW Health rolled out an additional 10MWp of solar generated energy across the network, increasing the total generation capacity by about 30%. In addition to hospital rooftops, NSW Health now has solar installations at carparks across the state. The recently completed carpark solar systems at Liverpool and Maitland Hospitals have reduced electricity bills at each site. Together, these improvements are generating electricity each year which is equivalent to powering around 220 homes. The solar car parks also provide an opportunity to install electric vehicle charging stations. As electric vehicles become more common in NSW Health's fleet, these car park solar systems will form part of the strategies employed by NSW Health to power the new vehicles in a more environmentally sustainable way.

All 15 NSW Health local health districts have solar installations installed or in planning at their major hospitals, with a generation capacity of more than 30MWp. This is enough to power about 8,600 average Australian homes and reduces the carbon footprint by approximately 36,800 tonnes. This is equivalent to removing nearly 20,000 cars from the road every year. The combined financial savings from these solar installations will help reduce electricity costs by nearly \$9 million per year, and these savings will only increase as electricity costs rise.

During 2022-23, NSW Health continued to roll out light emitting diodes (LED lights) across the network. LEDs are a very cost effective and highly energy efficient form of lighting and can replace older inefficient lighting in most applications. An additional \$5.5 million in energy bill savings were realised in 2022-23 from using LEDs across many sites.

In 2022-23, the NSW Health passenger fleet contained approximately 6,800 vehicles with over a third of the fleet comprised of low emission vehicles (hybrids and electric). NSW Health is transitioning the passenger fleet to fully electric vehicles in line with the NSW Government fleet electrification campaign. The program will see the progressive electrification of vehicles with 50% of new leases and purchases being fully electric vehicles by 2026 and 100% by 2030.

The NSW Ministry of Health is working with the system and in partnership with the Office of Energy and Climate Change to upgrade infrastructure and install charging points across the NSW Health network. The speed of fleet electrification will intensify over the coming years as electric cars become more mainstream and charging infrastructure at garaging locations becomes more readily available.

