Healthy Hospitals Campaign

SUPPORTED BY:

The Royal Australian & New Zealand College of Psychiatrists

Doctors for the Environment Australia

Royal Australasian College of Surgeons

RACP Specialists. Together

Australian Federation of Medical Women
the voice of australian medical women

AIDA
AUSTRALIAN INDIGENOUS DOCTORS' ASSOCIATION

Psychology for a safe Climate

ASTHMA AUSTRALIA

Lung Foundation Australia

caha
Climate and Health Alliance

HEALTHYFUTURES
HEALTH WORKERS FOR A HEALTHY CLIMATE

All-electric hospitals are Healthy Hospitals.

Healthy Futures is calling for the rollout of all-electric, renewable-powered healthy hospitals in every state and territory in Australia.

Healthcare in Australia accounts for 7% of Australia's total domestic carbon footprint and electrification is a critical hurdle that would allow this sector to decarbonise.
To a large extent, healthcare emissions stem from fossil-fuel-based energy sources such as coal-generated electricity & fossil gas.

This work will deliver big emissions reductions and climate readiness for our healthcare system which is relied upon by every community in Australia.

We know that all electric hospitals are good for the health of patients, healthcare workers, the community, and our climate.

Whilst there are commendable sustainability plans across many health networks to reduce emissions and transform the Australian health system into a sustainable system, an important element of this work must include:

- All new health infrastructure being built fully electrified
- Retrofitting all existing health infrastructure to become all electric.

All Electric Women's & Children's Hospital, SA to be completed by 2029

How we electrify:

We are lifting up the voices of trusted healthcare workers, medical colleges and organisations across the country to drive this ambitious and inspiring work.

We are asking the Federal Government to stand with us to support every state and territory in Australia to rapidly transition to an all electric healthcare system.

"We know that electrification of hospitals is a critical step for improving the health of our communities and protecting our planet. We look forward to continued collaboration and support as we work towards a healthier, more sustainable future–enabling us to keep doing what we do best: caring for our community."

-Cassandra Mccumstie
Clinical Nurse Specialist.
Kurri Kurri Hospital

HEALTHY FUTURES

Next Steps:

Electrifying public infrastructure such as hospitals acts as a beacon of inspiration and builds awareness of the benefits of electrification.

Secure, climate ready & resilient hospitals are key to safeguarding our communities, reducing climate and air pollution and creating energy cost savings for hospitals freeing up more funding for healthcare.

This is why we need clearly laid out steps towards not only building new health infrastructure all electric but also the more ambitious goal of retrofitting the existing healthcare network.

Our Policy Asks:

1. Support for a pilot program to retrofit nine public hospitals covering every state and territory to become all-electric. With an initial commitment to fund feasibility studies for every pilot program hospital in the 2026 budget.

2. A commitment by the end of 2026 from the Federal Government to ensure that all new hospitals and health infrastructure are required to be built all-electric.

3. A long term commitment to begin a retrofitting program for all existing hospitals and healthcare infrastructure to be fully electric by 2035.

Our retrofitting hospital pilot list, covers hospitals in different climates, in both metro, regional and remote areas that face different retrofitting challenges and service different communities.

Support of the pilot program will:

- Build an important knowledge base of how best to retrofit hospitals facing a broad range of different challenges.
- Create impressive cost savings for the hospitals
- Huge carbon emission reductions across the country
- Give an incentive to state & territory governments to embrace and fund retrofitting their health infrastructure to become all-electric.

Reasons why hospitals should be built and retrofitted to be all electric:

Climate: converting to electric heating and hot water production will significantly reduce hospitals' greenhouse gas emissions, thus contributing to mitigating climate change and its harmful effect on health.

Climate Readiness and Resilience: all electric hospitals with a mix of on-site, nearby community based, and grid relayed renewable energies will be more climate resilient at times of peak energy insecurity and extreme climate events (especially if microgrids and on site generation and batteries are invested in as a matter of climate resilience).

Justice: a healthy public healthcare system is an extremely important feature of a just society, making sure that all people can access health care equitably, and that healthcare is both ethical and sustainable makes this a justice issue.

Economic: all-electric new builds and retrofitting hospitals now will save money in the medium to long term. Locking hospitals into an insecure energy source like gas leaves governments vulnerable to volatile price variations. Lowering the costs of energy bills for hospitals and the government is a win-win.

St James Hospital, Dublin, Ireland

Sustainability: The sourcing of renewable electricity is now viable and is often already or will continue to be a cheaper source of energy than traditional, polluting, dirty fossil fuel energy.

Health benefits: Electric heating and hot water systems produce fewer pollutants than fossil gas systems and should be understood as a cleaner alternative in public health conversations. There are significant concerns for air quality where gas is being used, and mounting a campaign for hospitals to lead by example by becoming fully electrified.

Security: guaranteeing energy reliability in hospitals is paramount, and the reliability of gas supplies is vulnerable to storms, infrastructure accidents and other events that could damage the pipes of mechanical equipment used. This could leave a hospital without heat or water, which has severe consequences for patient care.

"Fully electric hospitals are safer, more reliable and more sustainable options for the healthcare system in Australia which is why we want to see the federal government make it a priority to retrofit all hospitals to become all-electric as soon as possible."

- Dr Kate Lardner, Medical Registrar

HEALTHY FUTURES
HEALTH WORKERS FOR A HEALTHY CLIMATE

Cost/Emissions Savings:

A typical 350-bed hospital burns enough fossil gas to emit 6,000 tonnes of CO2 onsite, with associated health and community impacts.

This program can eliminate this source of emissions, plus provide further emissions reductions through additional measures such as solar installation, battery storage, EV infrastructure or micro-grids.

Retrofitting the nine hospitals on the pilot list **will eliminate an estimated 14,000 tonnes of greenhouse gas emissions per year** and other harmful pollutants, such as Carbon Monoxide (CO), Particulate Matter (PM), Nitrogen Oxides (NOx) and Poly Aromatic Hydrocarbons (PAH).

Examples from Australia:

1. Women's & Children's Hospital in Adelaide, SA
Due to open in 2031, this 414 bed hospital (56 more than the current hospital) will reduce its greenhouse gas emissions by 2,178 tonnes annually, which is the equivalent to removing around 700 cars from the road.

2. Canberra's First All-Electric Hospital Building opened in August this year.
Twenty-one state-of-the-art heat pumps will replace outdated gas boilers, reducing the hospital's carbon footprint by approximately 1,886 tonnes annually, which is the equivalent to removing 760 cars from Canberra's roads.

Casestudies from abroad:

1. St James Hospital a 1,010 bed hospital in Ireland was fully retrofitted and re-opened in March 2022
Energy and operational savings will be at least 26 million euros (equivalent to $43 million) over the next 20 years

The retrofit has:

- Reduced the hospitals carbon footprint by 118,380 tonnes per year, the equivalent to taking almost 1,300 cars off the road
- Cut it's electrical consumption by 26% per annual
- Achieved a reduction of 6,000 tonnes of carbon dioxide every year

2. Royal United Hospital a 759 bed hospital in Bath, UK has been awarded funds to be retrofitted by 2026

When completed the retrofit will:

- Create an estimated 24% annual reduction in carbon emissions. This equates to just over 3,400 tonnes of carbon dioxide annually.

3. Castle Hill Hospital, a 610 bed hospital is the first hospital in the UK to run solely from renewable energy, provided by its own 11,000 panel solar field.

The retrofit has:

- Reduced emissions by 87% annually & will be carbon neutral by 2030.
- Saved a significant amount of money on energy bills, approximately 250,000 to 300,000 pounds every month (equivalent to $484,000 to $581,000 every month) These funds are reinvested back into treatment and care at the hospital.
- The solar panels generate around 26MWh per day, equivalent to the daily energy needs of 3,250 UK households. This will almost double to 50MWh per day peak in the summer.

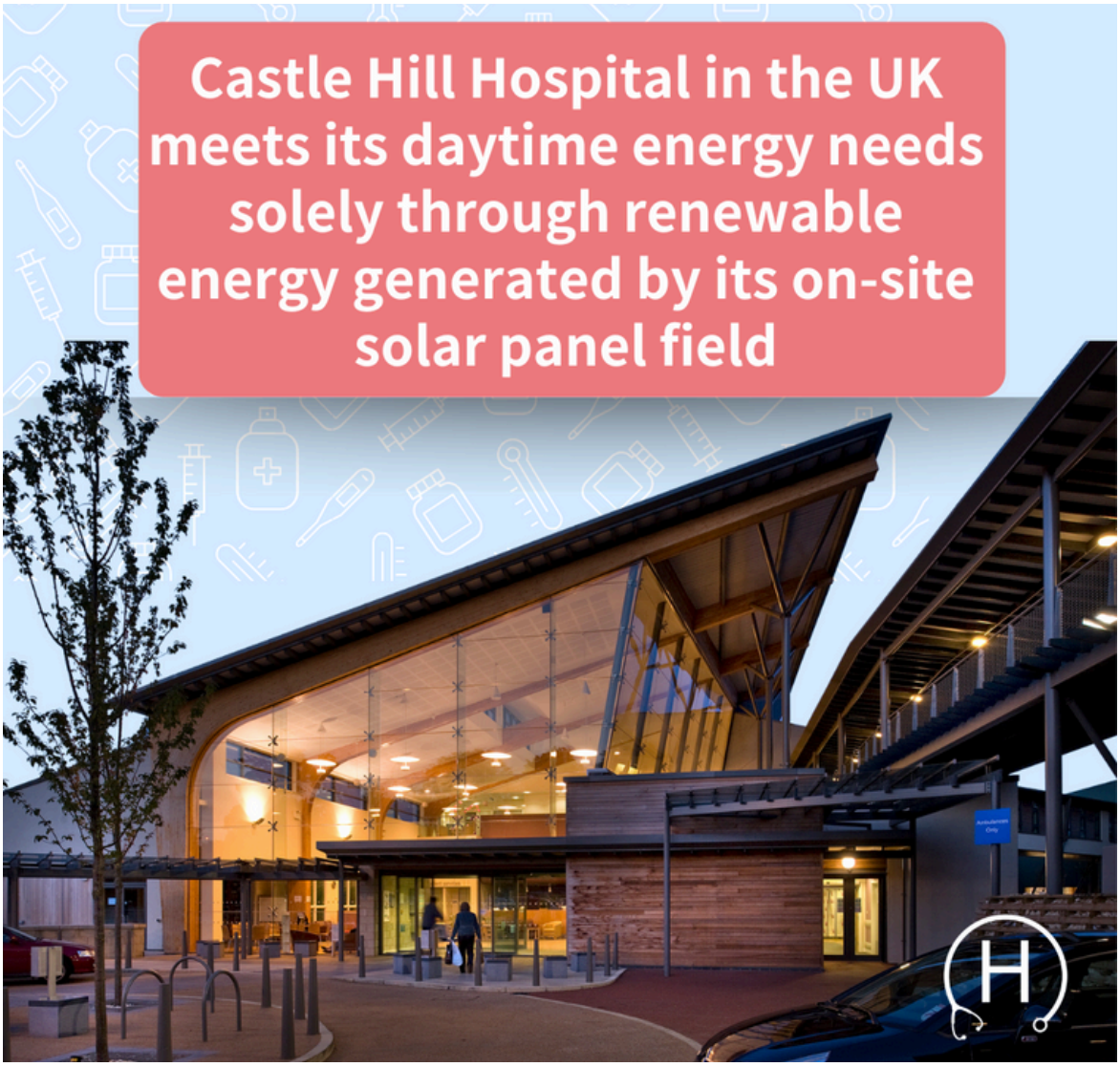
Retrofit Pilot Hospital List

Hospital	Beds	Climate	Feasibility Cost
Echuca Regional Health (VIC)	113	Cool Arid Zone 4	$130k
Williamstown Hospital (VIC)	90	Mild Zone 6	$130k
Armidale Hospital (NSW)	99	Cool Zone 7	$130k
Broome Hospital (WA)	61	Tropical Zone 1	$80k
Kurri Kurri Hospital (NSW)	52	Warm Zone 5	$80k
Redland Hospital (QLD)	170	Subtropical Zone 2	$130k
Modbury Hospital (SA)	174	Warm Zone 5	$130k
New Norfolk Hospital (TAS)	14	Cool Zone 7	$80k
Gove District Hospital (NT)	30	Tropical Zone 1	$60k

Climate Zones: https://www.abcb.gov.au/resources/climate-zone-map

Criteria used:

- Public hospital
- Small to Medium Hospitals (less than 250 beds ideally)
- Good candidate to be retrofitted from an engineering angle (Lucid Consulting)
- Need one hospital that services an Indigenous community (2 included)
- Community support for all electric new/refurbished hospital
- Hospital board support and/or strong sustainability culture/policies at hospital
- Member of Global Green Healthy Hospitals Network (GGHH)
- Select at least one in every state and territory
- We need a broad representation to build a strong knowledge base for retrofitting.The list must include hospitals in: Metro, Rural, Regional and Remote regions
- Cover several building code climate zones: Cool Arid, Cool, Warm, Warm Humid, Mild, Tropical, and Subtropical.



Feasibility studies:

We are calling for support of a pilot program to retrofit one public hospital in every state and territory to become all-electric. With an initial commitment to fund a feasibility study for every pilot program hospital in the next budget.

A feasibility study will identify the most suitable approach to achieve electrification at each site. Sufficient detail will be provided to clearly articulate the costs, staging and procurement pathway for the preferred option. These will include a detailed cost benefit analysis for various approaches to electrification for each hospital, in order to identify opportunities that present the best overall value to the hospitals.

The scope for the feasibility study includes:

- Removal of all fossil fuel assets and replacement with electric alternatives. Noting that backup generators are likely still required for resilience.
- Maximising renewable energy generation onsite.
- Installation of electric vehicle infrastructure to support the adoption of electric vehicles for fleet, staff, patient and visitor transport.
- Where practical, the creation of microgrids to support greater resiliency and increased renewable energy uptake.
- A comprehensive review of existing conditions, opportunities and constraints at each site. Working with hospitals to define the objectives for any selected option.

Key impacts are expected to include:

- Capital cost and operational cost. Financial analysis of options
- Accessibility of equipment locations, and the creation of new equipment areas.
- Additional electrical capacity required at the grid and within the site.
- Additional structural works required.
- Acoustic impact of construction activities and operation of plant.
- Minimising hospital disruption during construction
- Minimising hospital disruption during operation and maintenance
- An assessment of any other risks or benefits posed by the proposal.

Planning for Implementation:

For the preferred option, prepare a practical implementation plan clearly articulating the scope and staging of any works required for success. Outline processes for procuring, monitoring and evaluating works. If multi-year program intended, nominate anticipate spend per over the period nominated.

We would love you to champion this work by joining us and other health allies in publicly supporting electrifying our healthcare system.

We would like to work closely with you to get a create a plan to retrofit a hospital that is in your electorate.

These commitments will safeguard the health of our communities, directly and indirectly lower carbon emissions and create healthier outcomes for both people and our climate.

We will continue to build support for these asks within our health and climate networks to bring a strong message that healthcare workers, medical colleges and organisations want a plan put in place to create an all electric, healthy and climate resilient health system for all.

Canberra's new all electric hospital, opened August 2024

Ursula Alquier
Healthy Hospitals Campaign Coordinator
0474 803 740
ursula.alquier@healthyfutures.net.au

HEALTHY FUTURES
HEALTH WORKERS FOR A HEALTHY CLIMATE