

# The Children’s Hospital at Westmead

This project integrates innovative environmental initiatives throughout its lifecycle, from design and construction to continuous hospital operation, resulting in substantial environmental benefits.

## Sustainability snapshot

### Decarbonising infrastructure



The project will achieve 100% electrification with the support of 714kW of solar energy produced from nearly 1400 solar panels.

A total of 75 electric vehicle (EV) charging stations have been installed in the new Dragonfly carpark with an additional 125 charging stations planned.

### Waste Management



More than 90% of all construction waste is being diverted from landfill via recycling initiatives.

### Climate risk and resilience



The redevelopment project has provided an increase of 22% tree canopy cover across the kids hospital.

Tree plantings will assist in reducing the impact of urban heat.

### Energy and water management



The installation of a HVAC system, combined with targeted energy-efficient upgrades, will significantly reduce energy consumption. Water efficient fixtures and fittings, along with 100kL rainwater tank will reduce potable water use.

\*HVAC - Heating, ventilation, air conditioning



Artist impression: Westmead Children’s Hospital, forecourt

## Project phase: In delivery

The \$619 million Children’s Hospital at Westmead Stage 2 Redevelopment comprises of a new state-of-the-art 14-storey Paediatric Services Building housing critical care services: Neonatal Intensive Care and Paediatric Intensive Care, a new cancer centre, operating theatres, pharmacy and inpatient units.

It also includes a new multi-storey car park, refurbishment of some existing areas of the hospital and a revitalised forecourt called ‘KidsPark’.

The project is strongly committed to placemaking and sustainability.

## Environmental approach

The project design is guided by Health Infrastructure’s Environmentally Sustainable Development (ESD) principles.

This project incorporates a suite of environmentally sustainable features and practices into its design and construction.



Artist impression: Paediatric Services Building at the Westmead Children's Hospital

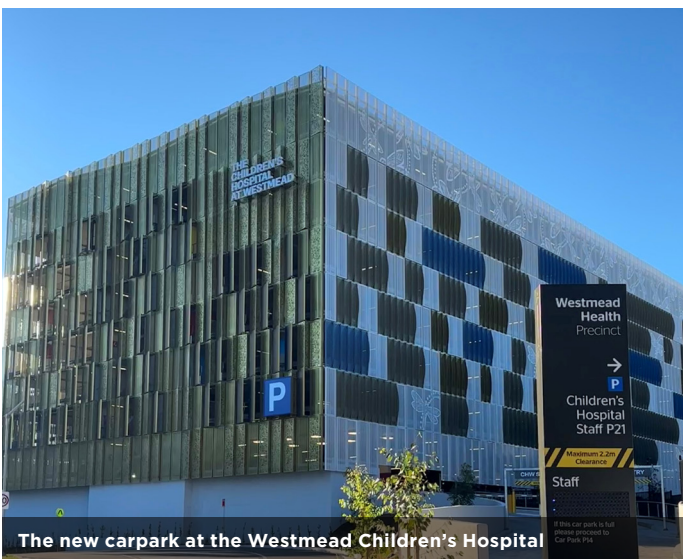
## Decarbonising infrastructure

The project will achieve 100% electrification with the support of nearly 1,400 solar panels on the new multi-storey car park, including, for the first time, vertically installed panels.

These innovative panels absorb sunlight from both sides, generating over 714 kW of renewable energy—enough to power 65 homes yearly.

The solar energy will power the hospital and 75 EV charging stations. The car park has been future proofed for an additional 125 EV stations.

“Green” concrete has been used, which significantly reduces the carbon emissions being generated.



The new carpark at the Westmead Children's Hospital

## Energy and water management

Reduction in energy and water consumption were key considerations to reduce carbon emissions and improve operational efficiency.

Energy and water saving features include:

- efficient HVAC (heating, ventilation, air conditioning) system and upgraded lights, steam boilers and domestic hot water services.
- automated building management system, LED lighting and an energy efficient mechanical system.
- natural light in every patient room plus terraces, gardens, courtyards and balconies to provide fresh air and natural light on every level.
- application of products such as paint, insulation and concrete alternatives that meet the Environmental Declaration Product standard to reduce energy use and operational costs.
- harvested rainwater via a 100 kL water tank to reduce the hospitals potable water use.
- water-saving fittings expected to reduce water use by up to 20 percent and 5-star minimum energy rating appliances (dishwashers, washing machines).

## Climate risk and resilience

The new KidsPark forecourt has incorporated shade, gardens and established trees to assist in reducing heat effects and encourage people to go outside for breaks. The redevelopment project has provided an increase of 22% tree canopy cover across the kids hospital.

## For more information

**Visit:** [westmeadkidsredevelopment.health.nsw.gov.au](http://westmeadkidsredevelopment.health.nsw.gov.au)

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