Central Precinct Renewal Program

Environmental Sustainability Frequently Asked Questions

August 2022

A world-leading exemplar of an integrated and sustainable precinct providing far reaching environmental and social benefits.

What are the sustainability ambitions for the Precinct renewal?

The Central Precinct Renewal Program has an ambition to achieve world's best-practice sustainability outcomes. The concept of world's best practice provides a goal for the Precinct that makes environmental, social and economic sustainability priorities.

What are the focus areas for achieving world's best practice sustainability outcomes for Central Precinct?

The Environmental Sustainability, Climate Change and Waste Management Study has identified sustainability themes which aim to embed world's best practice resource efficiency, ecological stewardship, adaptability, accessibility, and well-designed infrastructure to support the ongoing operation of Central Precinct.

Sustainability themes identified for Central Precinct include energy and greenhouse gas (GHG) emissions, circular economy, climate risk and resilience, biodiversity, transport and mobility, water, and digital technologies. Each theme is supported by a series of objectives with flexibility in how they can be delivered as best practice develops over time.

How will the sustainability ambitions be measured and certified to ensure the Precinct renewal is meeting world's best practice into the future?

The Precinct renewal will meet its sustainability ambitions by using best practice industry performance targets and committing to certification under a range of sustainability rating schemes and performance outcomes. These include:

- Achieve a 6 Star Green Star Communities rating
- Achieve a 6 Star Green Star Buildings rating
- NABERS Energy 6 Star rating (Commercial Buildings)
- NABERS Water 5 Star rating (Commercial Buildings)
- NABERS Waste 5.5 Star rating (Commercial Buildings)



- NABERS Energy 4.5 Star rating (Hotel)
- NABERS Water 4 Star rating (Hotel)
- NABERS Energy 4.5 Star Residential (common areas only).

What are the Net Zero Emissions goals for Central Precinct and how will they be achieved?

Central Precinct will seek to contribute to the NSW Government's goal to reduce emissions by 50% (below 2005 levels) by 2030 and reach net zero emissions by 2050.

Going above and beyond these targets, the Central Precinct Environmental Sustainability, Climate Change and Waste Management Study sets an ambition to reach net zero emissions in construction and operation by 2030. To achieve this, the Precinct renewal will seek to eliminate the use of fossil fuel energy, use best in class energy efficiency, low carbon materials and construction processes, implement 100% renewable energy supply and offset all residual emissions from construction and operation.

How will Central Precinct embed circular economy principles?

The Precinct renewal will identify opportunities to achieve a circular economy by 2030 in the construction and operational stages of the project. This will be achieved by using renewable and/or recycled materials during construction, diverting most of the construction and operational waste from landfill to be reused or recycled, undertaking social, economic and environmentally sustainable procurement practices, eliminating single-use plastics and embedding end of life considerations into the built environment.

How will Central Precinct be designed to respond to the impacts of climate change into the future?

Our ambition is to design a climate resilient Precinct and will aim to do this by effectively mitigating chronic stresses and insulating against acute shocks through design, delivery, and ongoing operations.

A Climate Adaptation Plan has been developed as part of the Environmental Sustainability, Climate Change and Waste Management Study, which identifies how the Precinct renewal will manage future climate scenarios and improve the resilience of the Precinct to heat, bushfire smoke, storm and pandemic events.

How will the Precinct renewal become a sustainable transport network?

The Precinct renewal will seek to enable a more sustainable transport network by reducing private vehicle use and providing a pedestrian friendly environment with universal and accessible access for all. All parking spaces will have the provision for electric vehicle charging, and connections across the Precinct will provide an enhanced pedestrian experience with high amenity, comfort, ease of movement with mode change options and wayfinding.

What are the biodiversity ambitions for the Precinct renewal?

The Central Precinct aims to have a net positive impact on biodiversity through project activities by 2030. Some of the objectives to support this ambition include creating a new urban habitat for the city's ecosystem, including species that use the parks surrounding Central, and supporting projects that generate biodiversity offset credits to achieve a net-positive impact.

Will Central Precinct have trees and greenery?

Central Precinct provides an opportunity to improve the quality and extent of green infrastructure within the Precinct. An Urban Forest and Greening Strategy prepared as part of the Green Infrastructure Study identifies how the renewal can integrate green infrastructure into the development. It includes several initiatives to increase canopy cover, mitigate urban heat effects, create a comfortable public domain, provide urban habitat, and improve the Precinct's ability to adapt to climate change. The design of green infrastructure at Central has been developed to ensure key views for wayfinding and that are of heritage significance are maintained and supports pedestrian movement.

What is green infrastructure?

Green infrastructure is a network of green spaces, natural systems, and semi-natural systems that support sustainable communities. This includes waterways, bushland, tree canopy, green ground cover, parks and open spaces that are strategically planned, designed, and managed to support a quality of life in an urban environment. Well-designed green infrastructure connects vital life support systems for urban environments.

What kind of trees and ground cover will be planted at Central?

The Urban Forest and Greening Strategy includes a planting strategy to support diverse planting characters across the Precinct, each drawing from the cultural and environmental narratives of the site. The Precinct renewal will seek to plant locally indigenous flora and fauna species, consistent with those that would have naturally occurred within the area. These include Eastern Suburbs Banksia Scrub, Hawkesbury Sandstone Slopes, Turpentine-Ironbark Forest, Swamp Forest and Swamp Woodland.

How will you grow trees on the over station development?

The Urban Forest and Greening Strategy includes a strategy to ensure the volume of soil is adequate to allow trees to reach maturity across the Precinct. During detailed design, we will continue to work closely with key stakeholders on the planting strategy for the new Precinct.

Will buildings at Central have green walls like at Central Park?

Applying the principles of biophilia, creating an environment that provides an opportunity for people to connect with nature, such as green walls and green roofs, is a key component of the sustainability ambitions for Central.

Want to know more?

This Frequently Asked Questions document provides an overview of the SSP Studies. To read the technical reports associated with Environmental Sustainability FAQ see the below studies on the <u>Department of Planning and Environment webpage</u>:

- Environmental Sustainability, Climate Change and Waste Management Study
- Green Infrastructure Study

For information about Social Sustainability as part of the precinct renewal, see the People and Community Frequently Asked Questions document.

For more information about the Program visit the Central Precinct Renewal Program webpage.