#### Attachment F

Green Report (Annual Environment Report) 2023/24



## Green Report

Annual Environmental Report 2023/24



The City of Sydney acknowledges the Gadigal of the Eora Nation as the Traditional Custodians of our local area.

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**Cover image**: Volunteers at Sydney City Farm (Photo by Chris Southwood / City of Sydney) Published November 2024

## Message from the CEO

The City of Sydney remains focused on a sustainable future for all. We work together to improve our operations and provide opportunities for our communities to take action. The results and stories in this report show the various ways we're responding to the climate emergency and contributing to improving environmental conditions.

This year our volunteers at Sydney City Farm worked to produce more than 745kg of fresh food for local charities. With the rising cost of living and the number of people seeking food relief I'm glad we can provide a space that teaches gardening skills, creates social connection and provides fresh food to those in need. The addition of culturally significant crops such as hops, sugar cane, babaco, plantain, taro and pandan means food relief charities can provide nutritious meals that reflect our diverse cultures.

Collaboration is so important for a sustainable future. The combined leadership event at the Art Gallery of NSW, Australia's first 6-star GreenStar rated museum, was a highlight of my year. Hearing from leaders in all our sustainability programs and partnerships was inspiring. It showed what's possible when we work together on the future we want.

I am excited about our partnership with the Royal Prince Alfred Hospital to find a second life for the clean, unused water from the hospital's dialysis water system. Our street cleaning teams are now filling up their tanks in Camperdown with water that was going down the drain. It's the first time in Australia that a hospital's dialysis water system has been harvested for street cleansing. It ensures we have more water security in a drought and reduces the distances our trucks need to travel.

We all need to stay focused on reducing emissions and regenerating our environment. I continue to be proud of our operational carbon reduction results – 76% reduction in our emissions since 2006. Our emissions reduction activities are complemented by actions to restore nature. This includes our additional park space, our continued tree canopy growth, and an increase in the number of high quality Australian Indigenous land management offsets we purchase.

There is more work to do. I look forward to continuing to address this challenge together.

Monica Barone, Chief Executive Officer

## Year in review

#### **Operational highlights**

Our operational emissions have dropped 76% since 2005/06 (baseline year). We continue to take action to reduce our emissions through electrification of our buildings and fleet.

This year we replaced 20 internal combustion passenger vehicles with new electric vehicles. This is our largest deployment of electric vehicles to date, lifting the electric proportion of our fleet to just over 15%.

Our new building electrification plan targets emissions reduction. The plan sets out when we'll transition gas hot water units to heat pumps or electric storage tanks. We'll replace gas appliances in our kitchens, in line with our pledge to the <u>Global Cooksafe Coalition</u>

Care in design and materials can reduce carbon emissions and waste while protecting ecosystems by reducing our need to extract resources. This year some of our projects showed the benefits of reusing and respecting resources.

119 Redfern Street, a centre for local Aboriginal and Torres Strait Islander peoples to share knowledge and access services opened in May 2024. The idea of 'enoughness', an Indigenous economic philosophy that there is enough in the world and that we don't need to waste resources, was put into practice in the design of the new centre. Repurposed materials include internal paving, external brickwork, bench seating and the service counter.

We completed a uniform recycling trial with 500kg of uniforms collected for reuse or recycling. The trial was a success and will be expanded to more teams in 2024/25.

We chose to repair instead of demolish on our O'Dea Avenue road upgrade project. This decision reduced total lifecycle emissions by 89% (680 tonnes CO2-e) compared to a business-as-usual upgrade and avoided 2,500m<sup>3</sup> of concrete going to landfill.

Respect for materials is underpinned by our new <u>circular economy statement</u>. It provides an explanation of what the circular economy is, why it's needed and its basic principles. It describes what we've done so far and the role of other government stakeholders.

Continued focus on efficiency in water use ensures we continued to meet our target of zero increase in potable water use against the 2006 baseline.

This year we completed comprehensive repairs of our rainwater reuse systems. These systems are now producing around 20 million litres of water each year. This is more water than we use for Redfern Park, Wentworth Park and Wynyard Park combined, resulting in significant cost savings and environmental benefits.

We're trialling a smart irrigation system to ensure we meet demand for more irrigated spaces without putting pressure on water use. This system uses real-time soil and weather conditions to determine the best time to irrigate our parks and sports fields. We're running the trial in 5 of our major parks, with water use reducing since the trial started.

#### Local area highlights

We know that canopy cover is important in our urban environment. We measure total tree canopy cover of our local area every 2 years to check if we are on track for our targets. The latest measurement in February 2024 showed our canopy is at 20.9%, an increase on our 2008 baseline of 15.5%, while total green cover is 33.2%.

This year we released our <u>access strategy and action plan</u>, the overarching framework for active transport in our local area. It contains 10 strategies to move towards our vision for a greener and calmer city with more space for people. It combines new ideas and approaches with existing programs and policies to achieve a city for walking, cycling and public transport.

We continued to improve programs to encourage our communities to live more sustainably. This includes workshops that give our communities the skills to embrace circularity, avoid waste and make things last.

We added options to allow more people to benefit from <u>Sydney City Farm</u>. We formalised our City Farm <u>team activities</u>. Corporate groups can now get outdoors, work together and learn new skills while giving back to the local community. We created a self-guided <u>digital map</u> of the cropping area to enhance visitors' experiences and allow online exploration of the farm.

Our grants support our communities to improve their sustainability.

The new Greenhouse Climate Tech Hub near Circular Quay launched in October 2023, supported by a \$31 million City of Sydney accommodation grant. It's the largest green tech innovation hub in Australia, assisting emerging climate-tech businesses to find solutions to our climate problems and bring their big ideas to market.

Grants supported renewable transition for organisations that often cannot access the market. We supported Barnardos to install a 14kW solar system on their Ultimo office. We enabled renewable electricity buyers groups for businesses and for an apartment building complex in Harold Park.

Grants also supported local solutions to deal with difficult waste. Dempstah used our grant to trial a way to process used clothing that would be sent to landfill into yarn and has turned this into a business. WorkVentures distributes refurbished technology to those in need. They used our grant to explore the feasibility of a national device bank to help the program to be self-sufficient.



Greenhouse Climate Tech Hub opening (Photo by Daniel Kukec Photography)

#### **Operational targets**



#### Local area targets

#### **Target**



reduction in greenhouse gas emissions by 2030, from 2006 baseline

reduction against baseline June 2023)

#### net zero emissions by 2035

50% of electricity demand met by renewable sources by 2030



Latest result

met by renewable sources (NSW average, June 2024)





Water



**Reduce residential** litres potable water use to per person per day by 2030

221 litres per person per day (June 2023)

10%

reduction in non-residential potable water use per m<sup>2</sup> by 2030, from 2019 baseline

reduction against baseline 29% reduction a (June 2023)

reduction in the annual 50% reduction in the and solid pollution load discharged to waterways via stormwater by 2030

Gross pollutants reduced by 16%

Total suspended solids reduced by 11% against 2006 baseline (2024)

15% reduction in the annual nutrient load discharged reduction in the annual to waterways via stormwater by 2030

Total phosphorous reduced by 7%

Total nitrogen reduced by 4% against 2006 baseline (2024)

#### Local area targets continued



## Climate action



Climate change affects all of us. Bold **action** in this critical decade will help to avoid its worst impacts.

We continue to lead with **ambitious** targets and **decisive** action to meet them.

## Our operations

We measure, reduce and offset our operational greenhouse gas emissions. We became the first government authority to achieve carbon neutral certification from the Australian Government in 2011.

We've set an ambitious target and we proactively report on our progress. We're reducing emissions and we purchase 100% renewable electricity.

#### Our results

The City of Sydney's operational emissions have dropped 76% since 2005/06 (baseline year). In 2023/24 our emissions decreased slightly from 13,515 tonnes CO2 equivalent (CO2-e) to 12,554 tonnes CO2-e.





To maintain Climate Active certification, we offset remaining emissions. We've purchased high quality Australian offsets since the 2019/20 certification year. In the 2023/24 certification year, 28% of our remaining emissions were offset by credits from Indigenous savanna fire and land management in northern Australia. Our target is for 100% high-quality Australian regenerative offsets by the 2024/25 certification year.

#### New Year's Eve fireworks

The carbon emissions from New Year's Eve fireworks are part of our yearly carbon inventory. Between 2007 and 2015 we created detailed yearly emissions inventories for the whole New Year's Eve event. These showed that year-on-year event emissions didn't change significantly and are a small share of total operational emissions.

New Year's Eve event emissions in 2015 were 552 tonnes, with the combustion of fireworks contributing 4.8 tonnes – only 0.9% of the event's emissions. Since 2016 we've reported and offset 662 tonnes CO2-e each year for New Year's Eve as part of our ongoing carbon neutral certification. This is a 20% buffer above 2015 emissions, to ensure emissions are not underreported.

#### **Fleet emissions**

Emissions from our vehicle fleet increased by 124 tonnes CO2-e to a total of 2,095 tonnes CO2-e. This is a 6% increase on last year, but a 13% decrease compared to our 2014 baseline.

We expect fleet emissions to decrease as we increase the share of electric passenger vehicles in our fleet. However, we'll struggle to meet our target due to external market conditions. The electric heavy vehicle market currently can't provide the vehicles we require. We'll also need to ensure charging infrastructure is available for these vehicles. We've started work on a plan so we are ready to transition to electric heavy vehicles when the market is more mature.





#### Working towards our targets

By June 2025 our goal is to reduce emissions by 80% from 2006 levels. This target is absolute and does not include offsets. We're focused on actions to eliminate the remaining 4% required to meet this target and ensure we continue to reduce emissions beyond June 2025.

We're electrifying our plant and equipment. This includes converting gas hot water units to heat pumps or electric storage tanks and transitioning more of our vehicles to electric. We're reducing the use of our cogeneration and trigeneration systems. Where available we'll use lower global warming potential refrigerants in our heating and cooling systems, and all our new buildings will be fully electric with no new fossil fuel connections.

While our long-term agreement to purchase 100% renewable electricity contributes to environmental savings it has also protected us from recent electricity price increases. In the past 5 years this contract has saved \$5 million and is expected to bring further savings in the next 5 years.

#### How we do it

#### Measure and disclose

We monitor our energy consumption to identify ways we can reduce energy use and emissions.

Each year we prepare a detailed emissions inventory and verify it independently to ensure accuracy. Our emissions and activities are reported yearly in <u>Climate Active public</u> <u>disclosure statements</u> and this annual environmental report.

#### Avoid and reduce

We achieve energy and emissions savings in our buildings, plant and equipment, and public lighting through efficiency upgrades and electrification.

We have a dedicated fund for facility and equipment upgrades, and we're transitioning our parks maintenance equipment to electric options.

We're starting to focus on carbon intensive materials in our roads and buildings. We prioritise renovating and reusing structures rather than demolishing them. We consider options to reduce the amount of concrete we use and choose low carbon concrete where available. We continue to include recycled content in our asphalt.

#### **Reducing travel-related emissions**

Our travel policy requires employees to prioritise walking, cycling and public transport for work trips.

Employees use our fleet of e-bikes, e-cargo bikes and pedal bikes at Town Hall House and Alexandra Canal Depot. We offer training to build confidence and improve safety.

We prioritise use of our electric vehicles when employees require a car. We ensure our trucks and utes are the right size for the job.

We carry out trials of new electric vehicles and watch the market closely, so we're ready to transition our vehicles. We encourage our contractors to do the same.

#### Renewable energy

We've installed more than 2 megawatts of solar panels, supplying electricity directly where it's used. We purchase 100% renewable electricity through a power purchase agreement.

#### Offset

We offset unavoidable emissions, increasingly purchasing from quality Australian projects. These projects also support regional initiatives, ecosystem regeneration and biodiversity.

#### Tackling carbon in our roads

#### O'Dea Avenue upgrade

The materials we use in our civil works and buildings can contain significant embodied emissions. Care in design of a road can reduce carbon emissions and waste while protecting ecosystems by reducing our need to extract resources.

These principles were put into practice when we upgraded busy O'Dea Avenue, Zetland in November 2023. Instead of removing 2,500m<sup>3</sup> of concrete and replacing it with new materials, we decided to repair the concrete slab.

We used a lower embodied carbon concrete for the repairs before overlaying it with a new 15% recycled content asphalt surface.

This solution meant the project reduced total lifecycle emissions by 89% (680 tonnes CO2-e) compared to a business-as-usual upgrade.

This decision had other benefits. It reduced construction time from 9 months to 3 months and reduced noise for residents – asphalt is



O'Dea Avenue's renewed road surface (Photo by Sydney Civil)

significantly quieter than concrete as it reduces noise from tyres.

#### Geopolymer concrete close-out

For the past 5 years we've partnered with the University of NSW to test real world conditions for using geopolymer instead of Portland cement in concrete roads. Cement containing geopolymers can reduce emissions by up to 80% compared to Portland cement.

Two test slabs with embedded sensors to monitor conditions were laid on Wyndham Street, Alexandria in 2019.

The trial finished in March 2024. It is referenced as an informing project in a newly released technical specification (SA TS 199:2023) for the Design of Geopolymer and Alkali-Activated Binder Concrete Structures under Australian Standards.

We're proud to have supported this pioneering project in the field of low carbon concrete research.

#### Fleet transition

This year we replaced 20 internal combustion passenger vehicles with new electric vehicles. They're available for employee use from our main operational sites.

This is our largest deployment of electric vehicles to date, lifting the electric proportion of our fleet to just over 15%.

We added to our ongoing trials of task-specific vehicles by commissioning an electric footpath sweeper. Along with our electric truck and 3 electric bin collection vehicles, this sweeper will provide operational insights on how we can best use the vehicles.

As at June 2024, 36% of our fleet is either electric or hybrid.

#### Net zero buildings plan

We own, operate and maintain a diverse building portfolio that serves a broad range of community needs. It includes offices, depots, community centres, libraries, aquatic centres, and recreation facilities.

This year we developed a plan to electrify our buildings to reduce the energy they use and the emissions they produce.

Our electrification plan includes transitioning gas hot water units to heat pumps or electric storage tanks. We'll replace gas appliances in our kitchens, in line with our pledge to the <u>Global Cooksafe Coalition</u>.

Energy efficiency is critical – the more efficiently we run our operations, the more renewable energy there is available to decarbonise other parts of the economy. It also reduces our operational costs.

Energy efficiency activities already under way include replacing lighting with LEDs and ensuring all new appliances meet high energy efficiency standards.

We assessed all equipment that currently uses gas to align the upgrade program with expected end-of-life replacement. This analysis resulted in dedicated funding in our long-term financial plan for required energy efficiency and electrification works. Green report 2023/24

## Action for our city

The past year saw some significant global climate records, including exceeding a 1.5°C increase for a full 12 months for the first time in February 2024. Despite this, we know every fraction of a degree makes a difference. This is why we set a net zero target for the local area and continue to take serious action in our own operations.

While the City of Sydney can't tackle the climate crisis alone, we can lead and encourage others to do the same. Our programs, grants and partnerships support building owners, residents and businesses to improve energy efficiency and switch to renewable energy. We actively support and campaign for zero emissions transport, buildings and energy supplies. In our local area we encourage the use of transport with no emissions, or reduced emissions.

#### Our results

Greenhouse gas emissions for the City of Sydney local area have decreased year on year. In June 2023 they were 41% below 2006 levels.

From 2005/06 to 2022/23, the city economy grew by 74.2% (not adjusted for inflation), residential population grew by 40% and employment by 35%, even as total emissions have significantly reduced.



Figure 3: City of Sydney local area emissions

#### Air quality

The NSW Government operates 2 high quality air quality monitoring stations in our area, one in Alexandria and another at Cook + Phillip Park. During the reporting period, local air quality was consistently reported as 'good' (the best rating). Real time air quality data is available online from the <u>NSW Government</u>.

#### How we do it

#### Measure

We measure the emissions for our local area using best-practice international standards.

#### Flagship programs

Our targeted programs enable our communities to reduce their carbon emissions. Flagship programs include the Better Buildings Partnership, Sustainable Destination Partnership, CitySwitch, and Smart Green Apartments.

#### Promote renewable energy sources

We actively encourage residents, businesses and other organisations to switch to GreenPower electricity plans.

#### Food waste collection

While targeting food waste has a waste management benefit, it also reduces carbon emissions as the food is not converted to methane in landfill. Every tonne of food waste diverted through our food waste collection program saves 2.1 tonnes CO2-e.

#### Promote active, renewable transport

We encourage people to move away from private vehicles and towards walking, cycling and public transport.

We provide on-street charging locations in our local area to encourage a shift to electric vehicles.

#### Advocacy

We advocate to state and federal governments on a wide range of issues. From improving the performance of existing buildings through ratings and disclosure, to national energy and emissions targets, supporting electric vehicles, improving fuel standards and climate justice among other issues.

#### **External factors**

The electricity grid is rapidly greening. The NSW grid was 31.6% renewable in the year to June 2023.

#### Climate action hub

The new Greenhouse Climate Tech Hub near Circular Quay has brought together innovators, investors, climate action groups, academics and corporates to find solutions to our climate problems.

The hub accommodates more than 400 people dedicated to climate action with coworking space, event spaces and meeting rooms.

Our support includes a \$31 million accommodation grant. A 10-year rental subsidy will assist emerging climate-tech businesses to grow and bring their big ideas to market. Some of the founding members include:

<u>Atlas Carbon</u> – ensuring graziers achieve their carbon farming potential.

- <u>Airseed Technologies</u> enabling reforestation through drone technology, artificial and data-driven intelligence.
- <u>Turo</u> world's largest peer-to-peer car sharing marketplace where guests can book any car they want from a community of trusted hosts.
- <u>Coolsheet</u> heating water with wasted heat from solar panels.
- <u>Loam Bio</u> enabling high quality atmosphere carbon removal at scale.
- <u>Nu-Rock Technology</u> minimising waste and increasing recyclable materials used in mining and construction.

 <u>Hiringa Energy</u> – making, moving, storing and selling green hydrogen for use in transport, industry and energy sectors.

It's the largest green tech innovation hub in Australia and was opened in October 2023. Tours can be booked through the <u>Greenhouse</u> <u>Climate Tech Hub website</u>.

#### Solar for social good

Barnardos received a \$60,000 innovation and ideas grant to install renewable energy technologies and create an education program for children in their learning centres.

They partnered with community energy provider Pingala, Solar Energy Enterprises and 100% Renewables to install a 14kW solar system on the Barnardos offices in Ultimo.

Students at the Yurungai Learning Centre in Waterloo participated in a solar science education program.

This centre provides local primary school children with after-school homework support and an afternoon meal. Many of the students are Aboriginal and Torres Strait Islander peoples and the centre provides cultural activities.

The students learnt about solar energy and sustainability and created a mural of a Dreamtime story about the sun's origin.

The project also sought to share excess solar energy across its sites in the City of Sydney area through a battery, virtual meter and community financing model. This was not possible because the older style meter in their heritage building couldn't support the battery and virtual meter.

The learnings from this project will be used in Barnardos offices across NSW.

#### Powering ahead with more onstreet charging options

In October 2023 we installed 8 more electric vehicle charging units in Millers Point, Dawes Point, Pyrmont, Newtown, Camperdown, Darlinghurst, Alexandria and Rosebery.

The units were installed on existing Ausgrid infrastructure as part of a trial to support electric



Students and educators from the solar scientist program at Yurungai Learning Centre (Photo by Barnados)

vehicle owners who don't have access to charging at home, and to encourage wider adoption of electric vehicles.

Ausgrid and its partner EVX will manage and maintain the chargers and power poles, with the chargers operating under a user pays model. Users won't be charged parking fees during the trial.

We'll continue monitoring the trial to assess the technology's success, level of demand and community support for the infrastructure and parking allocation.

### Buyers groups enable renewables transition

#### Apartment precinct collaboration

Owners corporations from 7 buildings across the Harold Park residential strata precinct came together to find ways to collaborate on sustainability projects. The precinct covers around 10 hectares and currently uses 2,000 MWh of combined common area electricity a year, the equivalent of 400 houses. Working with their strata management company, the group applied for a City of Sydney green building grant to fund a feasibility study into how they could cost-effectively run their common areas on renewable electricity.

The study recommended forming a buyers group to negotiate a power purchase agreement. While these agreements have been used for commercial electricity contracts for a while, this is the first time the strata sector has investigated the option. After assessing the advice, the precinct is now ready to make the switch.

This volunteer driven project has trialled a new pathway for large apartment precincts to transition to 100% renewable electricity.

#### Businesses buy renewable energy

Through an innovation and ideas grant the Business Renewables Centre Australia set up a <u>buyers group for businesses</u> to procure renewable electricity directly from wind and solar farms.

Purchasing electricity directly from a renewable energy generator can be complicated and options are limited if you don't use a large



New on-street electric vehicle (EV) charging space in Newtown (Photo by Will Jones / City of Sydney)

amount of electricity. This solution enables businesses to work together to contract a longterm agreement through an energy broker. This means they can reduce emissions quickly while stabilising their electricity costs. Any organisation that uses more than 1,000 MWh, around \$150,000, of electricity each year can join the group.

The project provides accessible information for businesses on how to switch to 100% renewable electricity. Business Renewables Centre Australia is now <u>introducing the program</u> <u>in the Hunter and New England regions</u>.

#### New renewables purchasing guides

Power purchase agreements are a way for businesses to purchase 100% renewable electricity while supporting the decarbonisation of our electricity grid by providing financial certainty for wind and solar farms.

We've produced 2 new guides to support our communities to purchase renewable electricity:

- <u>Renewable power purchase agreement</u> <u>guide</u>
- <u>GreenPower guide</u>

#### Climate action event

The first <u>Climate Action Week Sydney</u> (CAW.SYD) was held in March 2024. It featured a series of community-led events covering a broad range of climate action topics and formats, including talks, workshops, demonstrations, art exhibitions, films and pitch competitions.

CAW.SYD was inspired by similar events in New York, London and Singapore. It showcases climate action for Sydney and Australia and aims for stronger climate action by individuals, organisations and governments through knowledge and conversation.

We've provided an innovation and ideas grant to Innovillage Pty Ltd to run CAW.SYD for 3 years. The next Climate Action Week Sydney will run from 10 to 16 March 2025.

#### New access strategy

In late 2023 Council adopted our <u>access</u> <u>strategy and action plan</u>. It contains 10 strategies to move towards our vision for a greener and calmer city with more space for people. It explains why transport and access are crucial to creating a city that is environmentally sustainable, inclusive and economically productive. It shows how new ideas and approaches work with existing programs and policies to achieve a city for walking, cycling and public transport.

Its 17 actions embrace the relevant transformative project ideas from our long-term plan Sustainable Sydney 2030–2050 Continuing the Vision. Many are advocacy actions to the NSW Government on transport issues we cannot control, such as decisions on new public transport infrastructure. The main priorities include:

- transforming Broadway into a green gateway, with a cycleway and light rail
- a light rail connection between Green Square and the city centre
- providing electric buses to service the local area
- accelerating the Metro West extension to give Green Square residents a station at Zetland by 2030
- calming traffic on Park Street in the city centre and widening footpaths to make space for trees and people
- greening Oxford and Flinders streets with more space for people, entertainment, dining and light rail.

This integrated strategy provides the overarching framework for 3 detailed supporting strategies and action plans:

- <u>Electrification strategy and action plan</u>, adopted in 2024.
- <u>Walking strategy and action plan</u>, adopted in June 2024.
- <u>Cycling strategy and action plan</u>, last updated in 2018.

The strategy has already resulted in action, with a proposal from Sydney's light rail operator to develop light rail along Parramatta Road to

#### Green report 2023/24



George Street north pedestrianisation project (Photo by Will Jones / City of Sydney)

connect with Green Square. This idea has received significant public support.

#### Influencing for change

#### **Climate action**

We've made many submissions to federal and state governments in the past year on important climate issues. Our deliberate engagement is about voicing concerns, shaping policies and inspiring actionable change.

- Driving change: We've long championed fuel efficiency standards and we welcome the new vehicle fuel efficiency standard being introduced to slash emissions from new passenger vehicles.
- Energising change: We support the Australian Government's commitment to 82% renewables by 2030. The Australian Energy Market Operator's integrated system plan finds that coal is retiring at an accelerated pace. We support the need to increase consumer and utility-scale renewable resources.

- Building a sustainable future: Amendments proposed to the Australian Government's Commercial Building Disclosure Program directly align with our long-term advocacy. Expanding the program to all large building types and setting energy performance levels will create a more sustainable built environment.
- Concrete steps: The emissions from construction and building materials are significant and we welcome the introduction of a national standard by the National Australian Built Environment Rating System (NABERS) to certify embodied carbon, along with a national emission factors database.
- Community first: We've long been an advocate of a just transition, ensuring that no one is left behind, especially people renting, on low incomes or living in apartments. The NSW Government's program to improve energy efficiency in 30,000 social and community homes will directly benefit many of our residents.
- Empowering individuals: The growing recognition of consumer energy resources,

such as solar panels, batteries and electric vehicle chargers, reflects our advocacy for decentralised energy solutions.

- Buildings as batteries: Buildings are becoming integral to the renewable energy shift, acting like large-scale batteries. They can store energy or shift their energy use to different times, providing grid stability. We're an advocate of policies and programs that incentivise demand flexibility in buildings.
- Battery coordination: Batteries in buildings and electric vehicles are essential components for a renewable grid. They have the potential to function as energy reservoirs if we can coordinate charge and discharge. Government support through policies and programs is needed to harness the full potential of these technologies.

#### Transport

The NSW Government has conducted reviews of the transport system including rail, Sydney Metro, buses, road tolling, WestConnex, rapid transit, freight reform and the parking space levy.

We provided comprehensive submissions to all inquiries and reviews, using our access strategies and action plans to campaign for a city for walking, cycling and public transport. Our advocacy influenced the findings and recommended actions for the NSW Government.

A key success was our support for Metro West, with the project now continuing after a relatively minor delay. Metro stations at Pyrmont and Hunter Street are confirmed.

## Our strata and business programs

To improve the sustainability of our local area, we support strata communities, commercial building owners and tenants, and accommodation, entertainment and cultural venues. Together we partner to achieve our environmental targets and move towards net zero by 2035.

#### Program results

#### **Smart Green Apartments**

Since 2016, 279 apartment buildings have participated in the program. This represents 17,257 apartments and 13% of apartment buildings in our local area.

Participating owners corporations have collectively:

- invested \$4.3 million in upgrades
- saved \$11.2 million in running costs
- avoided 61,500 tonnes of greenhouse gas emissions
- reduced energy use in their buildings by an average of 36%.

#### Smart Green Apartments annual report

#### **Better Buildings Partnership**

The partnership captures 55% of commercial office space and 99 buildings in our local area.

Since 2005/06 program partners have collectively:

- reduced stationary emissions intensity by 95%
- reduced energy intensity by 55%
- reduced water use intensity by 63%.

In 2022/23 92% of base building electricity was from renewable sources.

#### Better Building Partnerships annual report

#### Sustainable Destination Partnership

The program's 33 partners operate 73 buildings, representing more than half the hotel rooms in our local area.

Since 2018 program partners have collectively:

- reduced emissions by 24% and potable water use by 24%
- achieved 50% waste diversion from landfill
- increased their renewable electricity use to 13%.

#### Sustainable Destination Partnership annual report

#### **CitySwitch Sydney**

The program provided tailored decarbonisation support to 70 CitySwitch businesses, representing 112 tenancies in our local area.

Collective results for tenancies in the Sydney program indicate:

- average emissions intensity is 14kg CO2-e per square metre
- average electricity intensity is 64 kWh per square metre
- 80% have switched to purchasing renewable electricity
- the average NABERS energy rating is 5 stars.

CitySwitch program annual report



Sustainability leadership event (Photo by Katherine Griffiths / City of Sydney)

This year we brought all our programs and partnerships together for a single sustainability leadership event. It showcased the impact of collective action and the growing momentum on climate leadership. The event was hosted by the Art Gallery of NSW, Australia's first 6-star GreenStar rated museum.

#### Green building grants

This year 31 owners corporations received a green building grant. These grants have supported \$2.6 million in building upgrades since 2016, saving \$7.9 million in running costs over their lifespan and avoiding 42,165 tonnes of carbon emissions.

Green building grants are open to apartment and accommodation buildings in our local area. They support owners to receive environmental ratings, certifications and assessments to make their buildings energy and water efficient.

#### Working with our strata communities

Our Smart Green Apartments program works with owners and strata and building managers to improve environmental performance in apartment buildings in our local area. Participating buildings receive NABERS ratings and energy action plans to inform owners corporations about opportunities for building upgrades.

This year we focused on providing information to help owners corporations understand ways to improve sustainability in their buildings. We produced 3 helpful <u>guides</u> to help owners corporations reduce their <u>energy</u>, <u>water</u>, and <u>waste</u> and 2 webinars on solar and food scraps recycling. The new <u>sustainability stories in apartment buildings</u> case study series shows what's possible. Our monthly sustainability e-newsletter has just over 3,000 subscribers.

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Goldsbrough apartment building's new solar panels (Photo by Nick Langley)

#### Sustainable strata strategies

Since joining the Smart Green Apartments program 10 years ago, Goldsbrough has demonstrated consistent sustainability leadership in the strata sector.

This year they stepped up their efforts by replacing electric boilers with new heat pumps and adding a large 391 panel, 176kW solar system. These changes have reduced building energy costs by 40%

This project builds on several efficiency and renewable energy projects completed in the past 10 years:

- Reducing energy use through common area LED lighting attached to timers and sensors, and installing variable speed drives on pumps and in upgraded lifts.
- Recovering heat from hot water and redirecting it back to the pool and spa.
- Capturing condensate from the cooling tower to be reused, reducing water top-ups from evaporation by 40%.

#### Supporting a sustainable destination

Our Sustainable Destination Partnership is a collaboration of accommodation and entertainment venues and cultural institutions working together to improve environmental performance and build Sydney's reputation as a sustainable destination.

Partners have defined and are implementing best practice waste management, including engaging their kitchen staff on food waste avoidance strategies. Renewable electricity procurement is a priority, with members collaborating to define a pathway to net zero emissions.



Salter Brothers and ReLove team members (Photo by Mei McNamara, Salter Brothers )

#### Hotels leading the charge

Salter Brothers is an Australian investment manager that owns and operates several local hotels, including Novotel Sydney City Centre. The 283-room Haymarket hotel was one of 11 of its hotels due for refurbishment in 2023. The project included a strip out of all furniture, fixtures and equipment. Instead of sending good quality items to landfill, Salter Brothers looked for project partners that could redistribute to people in need, by setting up relationships with 3 charity partners: ReLove, Vinnies and GIVIT.

These partnerships helped Salter Brothers redirect almost 100 tonnes of furniture, appliances and household items from landfill by providing them to at risk groups and displaced families. Some items went to the Wise Foundation, a registered charity which provides hospitality training to refugees and asylum seekers.

This project diverted more than 80% of refurbishment waste from landfill and sourced more than 80% of the new furniture, fixtures and equipment from local NSW suppliers.

#### **Global Destination Sustainability Index**

Each year Sydney enters the Global Destination Sustainability Index where it is ranked among other global destinations against a set of sustainability criteria.

In 2023 Sydney was ranked 29th in the index and received its highest score of 77.21%.

Sydney ranked 5th globally in the metropolis category, ahead of other cities such as Berlin, Barcelona and Montreal. Business Events Sydney, a Sustainable Destination Partnership associate member, won the first Social Impact Award at the 2023 Global Destination Sustainability Awards.

#### Commercial building leadership

The Better Buildings Partnership is a collaboration of leading property owners and industry influencers. The partnership provides green leadership and sustainable innovation for Sydney's commercial and public buildings. It brings together industry stakeholders to understand problems and develop best practice standards and guidelines.

This year the partnership produced:

- a circular fitout tool for offices, supported by the Green Building Council of Australia
- a resilience strategy and the creating resilient communities guide.

#### ISPT partners with Circonomy to reduce waste to landfill

While the circular economy gains traction, around 30,000 tonnes of commercial office furniture goes to landfill across Australia each year. For its refurbishment project at 255 Pitt Street in Sydney, property fund manager ISPT was determined to avoid contributing to this waste problem.

They engaged Circonomy, a social enterprise that refurbishes, repairs, repurposes, resells and recycles goods, to tackle refurbishment works across 5 of its floors. The work included stripping out all furniture, appliances, flooring and other equipment such as commercial kitchens.

A staged approach was developed including:

- Asset log: outlined the quantity and condition of the products and materials onsite.
- Rehoming strategy: identified how ISPT could maximise the reuse of products and materials.
  Where possible, refurbishing and repairing items for reuse in the fitout of ISPT buildings and other projects were prioritised.
- Pre-works: identified what work could be done before removal began to reduce costs and prioritise efficiency.
- Strip out: removal of all items across 5 floors.
- Rehoming works: rehome products to keep them out of landfill.

This project removed 2,769 pieces (109 tonnes) of furniture and 43 tonnes of carpet tiles from the site. The goal is to save at least 95% of this material from landfill. Two commercial kitchens were dismantled and reinstalled for charity Turbans4Australia, helping to feed people in need across Sydney.

Before the strip out began, 34% of furniture items were 'pre-homed' as new homes and uses were identified. This reduced project costs by reducing the need for storage and extra transport. A further 12% will be reused by ISPT.

#### Improving sustainability in Australian businesses

CitySwitch is a national program to support improved sustainability in office tenancies. It's managed by the City of Sydney on behalf of a national steering committee, which includes the City of Melbourne, City of Adelaide and North Sydney Council. In 2023/24 the program supported 213 businesses managing 744 tenancies to work towards net zero emissions, representing 10% of all Australian office space.

This year the CitySwitch program started its new approach of asking members to work on a defined net zero pathway by focusing on 3 areas each year. This year's focus areas were 'reduce your energy', 'reduce your waste' and 'green your supply chain'.

Members were supported through events and webinars. Associated resources and tools were produced with industry partners and promoted through the CitySwitch website.

The annual report shows 85% of signatories are measuring scope 1 and 2 emissions, 47% have shifted to renewables, 95% are implementing resource recovery programs and 65% are quantifying scope 3 emissions.

Achievements of CitySwitch signatories were celebrated at events in Sydney, North Sydney, Adelaide and Melbourne. Twenty-four businesses were recognised as the first CitySwitch Champions for their progress and efforts in this year's focus areas.



CitySwitch Champions recognition event (Photo by Koshka Media)

# Waste and materials



We promote **responsible** material management, encouraging reduced consumption, waste minimisation and resource sharing.

Goods and materials used in our city create environmental impacts locally and where they're sourced.

## **Our operations**

We focus on reducing our waste and maximising resource recovery to ensure materials aren't just used once and discarded. We've set targets to increase recycling and resource recovery and dramatically reduce how much waste goes to landfill.

We're responsible for managing waste and recycling from our own buildings, our construction and asset management projects, and the parks and public spaces we manage.

#### Our results

We have separate targets for waste from our properties and from the public spaces that we manage. We have more control over waste management in our properties, offering greater recycling opportunities compared to public spaces. The 2 graphs below show these differentiated targets and results. See an <u>explanation of our waste data</u>, including definitions.

Total waste generated from our properties was 946 tonnes in 2023/24. Food dehydrators across 3 locations processed 7.4 tonnes of food waste, generating 1.3 tonnes of soil conditioner.



Target: 90% diversion from landfill, with 50% source separated recycling, from City-managed properties by end June 2025.

■ Source separated recycling ■ Recovered waste ■ Landfilled waste Note: Data collection for source-separated recycling commenced 2020/21





In 2023/24, 7959 tonnes of waste was generated from our parks, streets and public places was. This is down by more than 400 tonnes compared to last year.

Figure 5: Waste from public spaces that we manage

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Landfill diversion rate, City of Sydney properties	37%	29%	44%	92%	93%	90%	92%
Source separated rate, City of Sydney properties				52%	54%	51%	49%
Resource recovery rate, parks, streets and public places	26%	42%	46%	55%	53%	57%	51%

Table 1: Operational waste recovery rates

#### Construction and demolition waste

In 2023/24 we achieved a 96% resource recovery rate for our construction and demolition waste. This result is split into civil construction (roads and stormwater systems) and building construction.

The building construction data was added in 2020/21. We expect results to fluctuate for a couple of years as we improve data collection accuracy for these capital works projects.





2019/20 2020/21 2017/18 2018/19 2021/22 2022/23 2023/24 Resource recovery rate, 100.0% 100.0% 95.0% 99.7% 99.9% 99.9% 99.9% civil construction Resource recovery rate, 92.8% 88.4% 93.8% 84.7% building construction

#### Table 2: Construction and demolition waste recovery rates

#### Understanding our waste data

We're responsible for managing waste and recycling from our own buildings, our construction and asset management projects, the parks and public spaces that we manage, and residential homes. We've set landfill diversion and recycling targets for each of these areas, and we actively monitor and track the waste and materials managed.

While we're not responsible for collecting and managing the remaining commercial, industrial, construction and demolition waste generated in our local area, we recognise the significant impacts of these waste streams. Action for our city sets out what we do to promote waste reduction and improve resource recovery in areas we don't manage or control.

When considering our waste results, we split the total waste collected into recycling, recovery and materials sent to landfill.

Recycling is where a product or material is processed to make the same or different products. Source-separated recycling is a more specific term. It refers to materials placed into specific bins that are then collected to be recycled.

Recovery is where a product or material cannot be made into another product or material but can be processed to reduce its environmental impact before landfilling or to generate energy. It is a process usually applied to materials in our red bins.

#### Green report 2023/24

Landfill diversion refers to the sum of recycled and recovered materials.



Figure 7: Understanding our waste data

#### How we do it

#### Measure

We're continually improving our reporting processes for our operational waste streams. We receive monthly reports from our waste contractors in line with the Better Buildings Partnership guidelines for operational waste. This data lets us track and manage our waste performance.

#### Avoid and reduce

We aim to avoid creating waste. We've substantially reduced the use of paper towels in buildings such as Town Hall House, we use paperless solutions for records management and Council business, and we've enabled follow-me-printing.

We provide information about avoiding singleuse items. Our merchandise policy ensures we only produce these items when there is a demonstrated benefit and the item meets our single use guidelines.

We encourage employees at Town Hall House to reuse coffee mugs, supported by a reusable

cup library, and to take a container when visiting a local business to buy takeaway lunch.

#### Source separation

Mixed recycling, paper, secure paper and food scraps collections are available in all office locations.

Food scraps from Town Hall House, Eveleigh Early Learning and Preschool and Ultimo Community Centre are recycled onsite. This food waste is converted into a soil conditioner for our green spaces.

We run regular internal communication campaigns to ensure everyone is aware of what to do.

#### **Building design**

We developed guidelines to ensure our community buildings are designed to avoid unnecessary waste and enable increased source separation.

#### Uniform recycling

Clothing in Australia has a huge carbon footprint, largely due to the unsustainable ways we make, use and dispose of our clothes. While it will take all of us to reverse this trend, as a local council we can lead by example with sustainable choices. Recently we've done this through a new recycling program for employee uniforms.

From April 2023 to June 2024 we trialled a uniform recycling program with our cleansing and parks teams, by sending their old uniforms to an Australian textile recovery company.

Upparel sorts the uniforms at its facility. Nonbranded garments in good condition are donated to a charity for reuse. Items with logos or in poor condition are recycled into infill fibre for pet bedding, furniture and insulation.

By the end of the trial more than 500kg of uniforms were collected for reuse or recycling.

Encouraged by the enthusiastic response from employees and supply chain benefits, we've

made the uniform recycling program permanent. We plan to expand it to more teams across the organisation.

### 119 Redfern Street – salvage, supplement, reimagine

The idea of 'enoughness', an Indigenous economic philosophy that there is enough in the world and that we don't need to waste resources, was put into practice at 119 Redfern Street.

This centre for local Aboriginal and Torres Strait Islander peoples to share knowledge and access services opened in May 2024. As a place of connection and belonging, a space for storytelling and truth-telling, healing, health and wellbeing, it was important to weave reuse and respect for resources into the project.



City of Sydney staff member recycles old uniforms. (Photo by Cassandra Hannagan / City of Sydney)

Some examples of how materials were repurposed to minimise waste include:

- Entry lobby area paving came from salvaged stock which was in storage for about 10 years.
- Portico entry and community room sandstone blocks used for bench seating and doorway thresholds were salvaged from footings of the building.
- Community room service counter was salvaged from the architect's office that formerly used the building, and basin and tapware were salvaged from the demolished kitchen.
- Lift shaft external brickwork recycled bricks were sourced from Lohas Australia.

Fridge, oven and wall mounted microwave oven from the demolished kitchen were salvaged and reinstalled at Redfern Community Centre.

- Existing air-conditioning units were reused and supplemented to improve natural airflow, building health and air quality.
- Local clay, excavated for the new lift, was retained and stored. It will be used in future art and pottery projects.

To complete a sensitive restoration of the heritage listed former post office, we collaborated with the local community, Aileen Sage Architects, Djinjama Indigenous Corporation, heritage architect Jean Rice and architectural historian Noni Boyd.



Reused brick façade at 119 Redfern (Photo by Aileen Sage / City of Sydney)

#### Extended life event signs

We've redesigned our major events and festivals signs so they can be reused, where possible, across all events over multiple years.

We've produced generic City of Sydney fence wraps and operational signs for common event messages, such as event locations and directions.

Signs containing a large amount of information can now be simplified with a QR code that links to the City of Sydney website with up-to-date information.

This initiative adds to the reuse of street banners each year for Sydney Christmas, Sydney New Year's Eve, Sydney Lunar Festival and NAIDOC in the City.

#### Encouraging BYO coffee cups

In November 2023 our waste education team presented BYO cup pop-up information stalls at Town Hall House to encourage employees and visitors to choose a reusable coffee cup.

Our education team spoke with 195 people about reusable cups and encouraged many of them to use the 'Ugly Mug Library' in the level 1 cafe when they forget their own reusable cup.

Feedback was positive with one employee saying they've noticed more and more employees using keep cups for their takeaway coffee.

#### Circular economy statement

Our community strategic plan includes the commitment that, 'A circular economy approach is embedded in product, services and systems'.

This year we published our <u>circular economy</u> <u>statement</u>. It provides an explanation of what the circular economy is, why it's needed and its basic principles, what we've done so far and the role of other government stakeholders.

The statement outlines our existing circular economy projects and programs and provides guidance on future strategy documents for circular economy outcomes. Green report 2023/24

## Action for our city

Our long-term waste objectives for our local area are to reduce waste, recycle as much as possible while retaining a material's highest value and treat what is left over in the most sustainable way.

We cannot achieve this alone. We require the support and partnership of industry, government and our communities.

#### Our results

Our landfill diversion rate has declined since 2018. This is caused by continued high use of red lid bins by residents, and NSW EPA legislative changes in 2019, as our waste service provider was no longer able to convert organic material from red lid bins into a land remediation product.

To address this shortfall, since 2019 we've increased the number of services and materials we can accept for recycling to make it easier for our residents to avoid putting waste in the red lid bin. We've also stepped up our advocacy at a state and federal level.

In 2023/24 our Recycle It Saturday events were attended by 3,307 people who dropped off 71.5 tonnes of materials for reuse and recycling. The Ultimo recycling pop-up at Bay Street Depot saw 2,530 visits by residents and 17.7 tonnes of items collected. For residents who can't make it to our



Figure 8: Residential waste generation

drop-off events or pop-up, we offer a doorstep recycling collection service. This year we collected 26 tonnes from 2,407 pickups directly from residents' homes.

Despite these efforts, we'll struggle to meet our 2030 landfill diversion targets due to external market challenges and the availability of recycling technology and infrastructure. This is a systemic issue, requiring a change in how governments, industry and communities view the value of materials we use.

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Landfill diversion rate	67%	48%	46%	47%	49%	51%	50%
Residential recycling rate	26%	28%	27%	28%	27%	31%	33%

Table 3: Residential recycling and landfill diversion rates

#### How we do it

#### Measure

We measure residential material streams through managed contracts and we work with agencies to estimate commercial and construction waste generated in our area.

#### **Tailored services**

Our resident services focus on maximising resource recovery in the most efficient and convenient way.

Our residents have access to more than 12 separate collection or drop-off services for recycling. We always seek to provide services that will maintain the value of the materials we collect.

We design our services to consider materials people generate as waste and seek the most appropriate processing solutions available.

#### Waste avoidance events and activities

Our waste avoidance events and activities encourage our communities to avoid, reuse and reduce waste. Events include clothing and toy swaps, sewing repair workshops, school waste avoidance education programs, online recycling masterclasses and community pop-up stalls.

We provide 'Ask a Waste Expert', an online service to answer questions from residents about recycling.

#### Promote sustainable events

We've developed guidelines to support our employees and communities to reduce waste at

our own events and those using City of Sydney venues and outdoor spaces.

We maintain <u>guidelines and a toolkit for single-use items</u> to reduce waste from events and services.

#### **Planning requirements**

Our development controls and associated waste guidelines enable good design of waste management and source separation in new buildings.

#### **Grant funding**

We provide funding to support new and innovative resource recovery and circular economy solutions for positive change across our local area.

#### Advocacy

We're consistently an advocate of system and legislative changes in industries beyond our control that will reduce waste or manage the material streams we collect. Our partnership with the South Sydney Regional Organisation of Councils and Resilient Sydney member councils is a core element in our advocacy efforts.

Our employees are also active in stakeholder engagement and working groups that focus on the circular economy such as the Green Building Council of Australia, Circular Australia, and the Australian Packaging Covenant Organisation.

#### **External factors**

We recognise the importance of the relationships we have with policy developers, regulators and operators of waste and resource recovery facilities. Circular economy, resource

#### Innovating for a circular economy

#### **Recycled yarn**

The rising global trend of fast fashion has changed the way people shop and is creating a huge excess of unwanted, poor-quality clothes that mostly end up in landfill.

To investigate a solution, we provided an innovation and ideas grant to Dempstah, a Sydney-based design practice.

The grant funded a trial to process 100% postconsumer textile waste through new textile mill technology in Hong Kong. This mill has an innovative approach to fibre recovery. It doesn't use any water or liquid chemicals to clean fabric, instead it sanitises textile waste with ozone gas. Cameras sort old garments into colour groupings, eliminating the need for bleaching and re-dyeing later in the process. recovery and waste are sectors heavily impacted by global industries and supply chains. Our responses to managing materials in this evolving space need to be flexible and responsive.

Dempstah partnered with the Salvation Army to see if donated clothing unsuitable for resale that would be sent to landfill could instead be processed by this mill.

The trial was a success, producing clean fibres that can be spun into a yarn then knitted or woven into new fabrics or knitwear.

Dempstah has begun distributing to an enthusiastic community of makers who want to integrate recycled materials into their process.

This project has created a hyperlocal solution to textile waste. Empowering small local players reduces the need for waste to be shipped around the world. It also makes Australia a little bit more circular in how it manages textile waste.



Dempstah's recycled yarn (Photo by Dempstah)

Since completing the City of Sydney grant, Dempstah was awarded a national prize to help further scale its business.

#### Second life electronics

WorkVentures, a local social enterprise, refurbishes electronics such as laptops and tablets from corporations. This enterprise supports the circular economy by giving devices a second life and helps meet the digital needs of Australian families who can't afford newer and more expensive devices.

So far, WorkVentures has distributed around 90,000 technology packs to those in need.

In early 2024 we gave WorkVentures a grant to explore the feasibility of a national device bank. This would help the program to be selfsufficient, with every device donated being funded through the commercial remarketing of a second device.

Programs like this keep e-waste out of landfill, ensuring we can reuse these valuable finite resources.

#### Recycling odd items

To make it easier for our communities to recycle more, we're continually adding new household items that can be reused or recycled through our recycling programs.

This year we added blister packs, bicycles and scooters to the list of items accepted at our Recycle It Saturday events.

More than 20 different items are now accepted at our recycling stations, Ultimo recycling popup, Recycle It Saturday events and through the doorstep recycling service. These include vapes, electronics, household batteries, mobile phones, polystyrene, coffee pods, clothes, linen, hard toys, x-rays, printer cartridges, blister packs, gas bottles, small metals, paint, food scraps, car batteries, large cardboard, light tubes, bicycles and scooters.

#### Connecting on circularity

This year we produced 483 activities for 4,830 residents and visitors across the local area to help people embrace circularity, avoid waste and make things last.

Our custom waste avoidance events included 4 waste reduction and recycling workshops to 440 primary school students, a bilingual English and Mandarin electronics recycling session at Ron Williams Community Centre, a market stall to promote repair at the Bower Repair Festival, an information booth at the Australian Climate Tech Festival and a circular economy workshop for startups in the city centre.

We engaged with international students on waste avoidance at 6 stalls across 3 separate events including the University of Sydney's Welcome Week, the University of Technology's 'Got Your Back' event and at the Lord Mayor's Welcome to International Students at Sydney Town Hall.

We also presented 23 waste reduction webinars to 356 people on the topics 'Plastics Decoded', 'Electronics Unplugged' and 'Resourceful Recycling', 4 clothes swaps where 537 people attended and swapped 670kg of clothing, and 4 sewing workshops where 80 people learnt simple mending skills to extend the wearable life of their clothing.

#### **Encouraging reuse at Christmas**

To encourage waste-wise shopping over the holidays, we presented 5 pop-up information stalls on simple ways to reduce waste at Christmas time.

This included sharing creative gift ideas, options for recycled and reusable wrapping, DIY Christmas crackers and tips for leftovers to reduce food waste to 370 people at 5 different locations in the city centre, Glebe, Alexandria and Green Square.

#### Green report 2023/24



City of Sydney employees presenting an electronics recycling workshop in Redfern (Photo by / City of Sydney)

#### Influencing for change

To achieve statewide waste and sustainable materials strategy targets, the NSW Government recently engaged with the community on the proposed food and garden organics mandate and prepared an issues paper on the review of the waste levy.

These topics are directly relevant to the services we provide to residents and we prepared responses to both.

#### Food waste collection mandate

Our submission strongly supported the need for separate collection of food and garden materials to achieve the NSW Government's target of net zero emissions from organics in landfill by 2030.

Our main recommendations to the NSW Government included the need for funding to implement services related to this legislation and allowing councils to review and comment on draft legislation before it is introduced to parliament, to assist with an easier transition.

#### **NSW** waste levy review

The waste levy is one of the NSW Government's most powerful policy levers to encourage resource recovery and divert waste from landfill.

Revenue from the waste levy is collected by the NSW EPA and then added to the NSW Government's general revenue pool, known as the Consolidated Fund.

Our main recommendations included more reinvestment of the levy to the industry to achieve long term recovery or disposal capacity for waste types that have little potential for reuse, repair or recycling and that increases to the levy should be linked to new treatment facilities.

#### Supporting our region

#### South Sydney Regional Organisation of Councils

We work closely with the South Sydney Regional Organisation of Councils to implement a regional waste strategy and actions. Our CEO Monica Barone is the chair of the waste working group.

These projects were completed by the SSROC working group in 2023/24:

- a 12-month uniform recycling trial for 9 Sydney councils, including City of Sydney
- kerbside and council facility audits across the region to support improved data collection and understanding councils' waste streams
- a regional waste risk and resilience project
- explored opportunities for joint procurement of recycling contracts for councils
- coordinated responses to state consultations on proposed introductions of new organics collection mandates and waste levy review.

## Greening our city



Our communities value a green city with trees and nature, and access to **quality** outdoor spaces for rest and play.

Restoring our natural **environment** and increasing our green **infrastructure** supports the health and wellbeing of all of us and helps our climate resilience.

## **Our operations**

Green streets, parks and open spaces are vital for the liveability of our city. They soften the effects of a dense urban environment and substantially reduce the urban heat island effect, which will get worse with increasing climate change.

Trees naturally cool, enhance resilience, clean our air and reduce the effects of climate change. Green spaces provide places for our communities to rest and play, along with the health and wellbeing benefits from connecting with the natural world.

#### Our results

Since 2008/09, our parks and open spaces have increased from 188 hectares to 218 hectares. This includes 15.2 hectares of land for bush restoration, up from 4.2 hectares on the 2012 baseline.

Each year we aim to plant 700 street and 50 park trees. In 2023/24 we planted 721 street trees and 391 trees in parks. We also planted 78,579 new plants in our parks and street gardens.





#### Green report 2023/24



Figure 10: New plants in parks and street gardens

#### How we do it

#### **Tree planting**

We plant trees in our streets, parks and properties across the local area.

Our qualified arborists select trees with the objective of planting the right tree, in the right place, at the right time. This includes selecting appropriate planting sites and species, ensuring quality tree supply, and establishing the trees with frequent maintenance in the first 2 years.

#### New plants in parks and street gardens

We plant shrubs, grasses and understorey plantings in parks and streetscapes across the local area.

We increase our green areas by converting previously paved areas to new garden beds and infill planting in existing garden beds.

#### Parks and open space

We manage accessible parks and open spaces for play, nature conservation and outdoor enjoyment. Park assets are vital for community health and wellbeing and for improving the quality of the urban environment. They include parks and reserves, playgrounds, streetscapes, verges, community food gardens, and bush restoration and habitat spaces.

With our increasing population we aim to increase the area of parks and open space in line with the <u>open space</u>, <u>sports and</u> <u>recreational needs study</u>.

#### Native bush restoration

We protect, expand and improve the condition of bush restoration areas across the local area. These areas aim to improve the biodiversity of plants and animals.

Our qualified bush regenerators work to establish structurally complex bush areas, improve plant growth, supress weeds and create habitat.

#### Tiny forest as public art

The <u>Barlow Street Forest</u> is both a public art installation and a tiny forest, situated in the dense urban environment of Haymarket. Created by the Dirt Witches, a collaborative environmental group, this microforest is made up of a wide variety of local species, including plants belonging to the critically endangered eastern suburbs banksia scrub and coastal swamp forests that once existed in inner and eastern Sydney.

As an artwork, it serves as a poetic reminder of the 5,300 hectares of scrub that once stretched between Botany Bay (Kamay) and North Head (Car-rang-gel).

The Barlow Street Forest began as a temporary laneway artwork commissioned in 2021 to reactivate the city during the Covid pandemic. The Dirt Witches group volunteered to maintain the garden initially as an activist environmental art project, in response to the catastrophic bushfires of 2020. Following significant community support the artwork was made permanent as part of the George Street south pedestrianisation project.

The permanent Barlow Street Forest was opened in November 2023, during the celebrations for the opening of George Street south following the pedestrianisation works. The official opening included a procession performance by members of the Dirt Witches from Sydney Town Hall along George Street to the microforest.

#### Refreshing green spaces

We continue to renew parks across the city as part of our ongoing yearly asset renewal program to ensure parks are safe, in good condition, are well presented and meet the needs of our communities. Renewal works include new playgrounds, pathways, furniture and landscaping.



Dirt Witches bless the forest during the George Street south pedestrianisation and Barlow Street Forest launch. (Photo by Katherine Griffiths / City of Sydney)

In the past year renewal works were completed at:

- Peace Park, Chippendale
- Michael Kelly Reserve, Newtown
- Prince Alfred Park, Surry Hills
- Butterscotch Park, Rosebery
- Ethel Street Playground, Erskineville
- Blackwattle Bay Playground, Glebe
- Fred Miller Reserve, Surry Hills
- Sydney Park, Alexandria
- Federal Park, Annandale

To ensure our natural sports fields are fit for play we completed yearly renovations including returfing and soil improvements. Drainage was improved at Alan Davidson Oval to increase the resilience and performance of the field in high rainfall events.

We've continued to green our streets, replacing hard surfaces with plants and grass. The greening of streetscapes has increased by more than one hectare during the year.



Ethel Street Playground, Erskineville (Photo by Will Jones / City of Sydney)

Green report 2023/24

## Action for our city

Our vision is for a greener Sydney that will help improve everyone's health and wellbeing, reduce urban heat impacts and bring nature into the city. Our commitment to green living focuses on providing everyone with access to quality green spaces and supports the biodiversity of our city as part of a healthy ecosystem.

Experts forecast that by 2050 Sydney will be hotter and more susceptible to extreme or prolonged drought, as well as high rainfall periods. We're focused on ensuring our tree canopy is resilient – planting the right kinds of trees at the right time and in the right places has never been more important.

#### Our results

Every 2 years we measure how green our city is by using specialised high-resolution aerial imagery to measure tree canopy cover (trees over 3m) and overall green cover (trees, plants and grass). The latest measurement in February 2024 showed our canopy is at 20.9%, an increase on our 2008 baseline of 15.5%, while total green cover is 33.2%.



Figure 11: Local area canopy coverage

The analysis extends to canopy cover in the 3 broad land uses: streets, parks and property. Each has specific targets to ensure comprehensive urban forest benefits.



#### Figure 12: Canopy coverage by location type

	2008 coverage	2024 coverage	2030 target	2050 target
Streets	21.5%	30.1%	31%	34%
Parks	26.1%	35%	39%	46%
Property	10.7%	14.1%	16%	20%

#### Table 3: Tree canopy coverage results by land use type

These results show we're steadily advancing towards our 2030 and 2050 canopy cover targets through a shared commitment to a greener, cooler and calmer city. From residents caring for their trees and gardens, and planners and developers protecting and planting new trees to many professions in our organisation who assist with planning, management and care of our city.

#### **Community volunteering**

In 2023/2024 we continued to support 4 <u>Landcare / Bushcare groups</u> with around 50 volunteers who regularly work in bush restoration areas across the local area. Around 600 garden members participated in activities at 19 community gardens. Volunteers contributed 2,600 hours of work at Sydney City Farm in 2023/24.

Three planting activities were held on National Tree Day in July 2023. At Prince Alfred Park, Surry Hills, 250 community volunteers planted 5,000 native grasses, groundcovers and flowering herbs, to restore a native meadow area and create habitat for insects, small birds and lizards. In Glebe, 150 students from Forest Lodge Public School planted 80 native shrubs. At Wentworth Park, volunteers from the Pyrmont Ultimo Landcare Group planted 100 native trees, shrubs and groundcovers with local children.

#### How we do it

#### **Community engagement programs**

We improve gardening skills and confidence through programs at Sydney City Farm.

We program activities to promote our communities understanding of the biodiversity in our city.

#### **Community gardens**

We have <u>19 approved community gardens</u>, providing spaces for our communities that promote environmental education and sustainable food production. The gardens also provide opportunities for social and community development.

#### **Bushcare volunteers**

We support biodiversity volunteers who restore local bushland by weeding, growing native

plants, and creating habitat for birds, lizards, insects and other species.

#### **Biodiversity counts**

We monitor species diversity through citizen science programs. These programs identify the presence and distribution of local species. We use this data to tailor projects for protecting and enhancing habitats.

#### Nest box program

We've installed 105 nesting boxes across our parks. Many Australian species use natural tree hollows for breeding, but these are generally limited in urban areas. These nesting boxes provide more habitat for local urban wildlife.

#### Growing the city farm

<u>Sydney City Farm</u> provides a place for our communities to learn about urban agriculture and sustainable food production. This year we added options to allow more people to benefit from the farm.

Our crop diversity increased with more than 200 different types of fruit, vegetable, herbs and flowers grown this year. These crops are maintained by volunteers.

This year their efforts produced more than 745kg of fresh food for local charities, including culturally significant and interesting foods such as hops, sugar cane, babaco, plantain, taro and pandan.

During NAIDOC Week 2023 Aboriginal educators from Koori Kinnections hosted a community bush food planting day and provided insights into cultural landscape connections and local native plants. Seventy-five visitors got hands-on, planting a new bush food and habitat display in the farm's orchard.

We formalised our city farm <u>team activities</u>. Corporate groups can now get outdoors, work together and learn new skills while giving back to the local community. More than 115 people from 9 businesses have worked at the farm in team building and wellbeing programs. We created a self-guided <u>digital map</u> of the cropping area to enhance visitor's experiences and allow online exploration of the farm.

National Science Week 2023 was celebrated with a Science of Nature themed event attracting 260 people. The event showcased urban ecology, Aboriginal culture, and how organic farms work with nature to grow food.

## **Resilient Sydney**

Now in its ninth year, the Resilient Sydney program continues to bring the 33 Greater Sydney councils together to strengthen the ability of local government to support community resilience and manage environmental risks.

The Resilience Ambassadors program successfully hosted 4 quarterly meetings with all 33 Sydney councils in 2023/24 sharing key programs, tools and experience to support resilience building with Sydney communities.

#### **Resilient Sydney platform**

The Resilient Sydney data platform continues to grow, providing Greater Sydney councils with the datasets they need to measure, analyse and develop strategies to reduce environmental impact and greenhouse emissions in their local area. This year the platform was significantly upgraded to align data methodologies, inclusions and assumptions with the latest census reporting.

The platform provides more than 10 years of data on greenhouse gas emissions, energy, water, waste, transport and solar energy generation. It is now used by 357 council and state government employees.

Resilient Sydney hosted 5 masterclasses for platform users on:

- sustainability for apartments
- using the Net Zero App to develop emissions reduction strategies
- new user training.

The workshops were attended by 401 people, representing 859 training hours with an average 4.5/5 satisfaction rating from participants.

#### **Greater Sydney Heat Taskforce**

Heat is Australia's deadliest weather-related hazard and heatwaves are major shock events for Greater Sydney. From 2022 to 2024, Resilient Sydney supported the Western Sydney Regional Organisation of Councils to facilitate the Greater Sydney Heat Taskforce. This collaboration of 30 organisations and businesses across health, planning and design, infrastructure, emergency management and community sectors, was set up to develop a region-wide heat smart city plan.

This innovative taskforce, representing many organisations and disciplines, worked together to identify the crucial adaptations and plans needed to reduce health risks in extreme heat.

The Resilient Sydney program provided strategic direction and advice, assisted with recruitment and one-to-one briefings of taskforce members, presented to taskforce workshops, reviewed draft reports and project materials, and promoted the taskforce to a broader stakeholder network.

The project was funded by the joint Australian Government – NSW Government National Partnership Agreement on Disaster Risk Reduction.

#### Partnering to develop the new Resilient Sydney strategy

Extensive engagement with Greater Sydney communities and technical resilience experts was carried out during the year to inform development of a new Resilient Sydney strategy (2025–2030).

More than 1,500 community members responded to targeted surveys. Deep-dive sessions were carried out with 220 community members to identify the core challenges, vulnerabilities and strengths that determine resilience for people in Greater Sydney.

Apartment residents and young people were invited to specific sessions to discuss their particular risk and resilience challenges.

Close to 100 experts shared their knowledge on technical resilience risks during focused workshops. Other workshops focused on expertise from the arts and cultural sector, emergency services sector and leaders from the multicultural sector.

This work is funded under the joint Australian Government – NSW Government National Partnership Agreement on Disaster Risk Reduction.

#### Greater Sydney Waste Leadership Forum

In May 2023 the City of Sydney hosted the mayoral summit that focused on the urgent need for waste infrastructure planning. CEO Monica Barone, in conjunction with Resilient Sydney, advocated to NSW EPA and other relevant state departments for more collaboration, transparency and leadership to provide necessary waste treatment capacity for the communities of Greater Sydney.

In response to these requests and to facilitate a partnership approach the Greater Sydney Waste Leadership Forum was set up in December 2023. It is chaired by the NSW EPA, with representatives from each of the Sydney regional organisations of councils, the <u>Parks alliance of councils</u> and Resilient Sydney.



Youth workshop for the new Resilient Sydney strategy (Photo by Cassandra Hanagan / City of Sydney)

The focus of the leadership forum will be to:

- identify and drive completion of priority waste and resource recovery related projects
- identify and seek to resolve barriers to progress
- support ongoing partnership activities within the region
- facilitate the sharing of information, evidence and data to contribute towards achieving agreed priorities.

The leadership forum has met 4 times this year. It is now finalising a 2-year draft waste action plan.

#### International partnerships

Resilient Sydney remains an active participant in the global Resilient Cities Network. Sydney met with 15 international cities throughout 2023/24. A core theme of these conversations was experiences in responding to the 'polycrisis' – the reality of managing multiple shock events at once.

The Resilient Sydney team met quarterly with resilience officers in the Asia–Pacific region and Oceania. Programs on plastic in oceans, climate risk planning, water and waste management are common resilience approaches in our region.

## Water stewardship



Water is crucial to the social, economic and environmental **wellbeing** of our city.

Our efforts create a **sustainable**, **liveable** city with healthy waterways, resilient green spaces and the resource valued by our communities.

## **Our operations**

How we manage water plays an important role in adapting to some of the big challenges our city will face in the future. We need to manage water as efficiently as possible and secure access to drought resilient water sources to support greening and cooling across the city.

We're committed to responsible water management. We've set a target of no increase in potable water use compared to our 2006 baseline, even as we increase our parks and open spaces and add new buildings and community facilities. We focus on efficient practices by using rainwater, stormwater, bore water and water recycling methods.

#### Our results

In 2023/24 our operational potable water use reduced, compared to the previous year. This is a result of improved billing accuracy and successfully addressing water leaks.

We met our target of zero increase in potable water use against the 2006 baseline, using 365 megalitres, a 15% decrease from the 2006 baseline.



Figure 13: Annual water consumption against baseline, by use category

Since 2006 we've increased the irrigated area in parks by more than 50% while continuing to reduce potable water use. We're now using less water for every square metre of green space we manage.

Our water recycling systems in parks supplied around 53 megalitres of recycled water for irrigation in 2023/24. This is a capacity increase of 8% on the previous year and enough to meet 81% of irrigation demand for the parks supplied by these systems, and 30% for parks overall.

#### How we do it

#### Measurement and leak detection

We monitor water consumption through 177 smart water meters installed in our parks and buildings. This data enables us to identify leaks and efficiency improvements.

We benchmark energy and water use in our aquatic centres to proactively identify opportunities for maintenance or equipment upgrades.

#### Installation of efficient fixtures

We install water efficient taps and toilets in our facilities when building or upgrading a site.

#### Water efficiency in our parks

We use water efficiently to keep our parks green and healthy. We manage water through operational planning. Employees receive efficiency training and awareness and we set specific service levels for best practice water management. Remote irrigation management helps us schedule and monitor irrigation and quickly respond to weather conditions. We make sure our irrigation systems are efficient with best practice management throughout the asset lifecycle.

#### Water harvesting

We have 20 water recycling systems that supply recycled water to our parks and open spaces. These systems source water from ponds and bores, harvested rainwater and stormwater drainage.

We have more than 40 rainwater reuse systems in our properties, including 4 systems we maintain for the use of community gardens. Water from these systems is used for irrigation, to flush toilets, wash vehicles, top-up our swimming pools and to clean our streets.

#### Medical water gets second life

Royal Prince Alfred Hospital (RPA) and the City of Sydney are leading the way in sustainable water management with a groundbreaking project to capture water from the hospital's dialysis water system.

This system uses reverse osmosis to treat drinking water from a mains water supply into high-quality water that can be used in dialysis treatment.

As the system only delivers the purest water for the RPA's dialysis machines, it also produces leftover water with slightly higher total dissolved solids and sodium levels than drinking water standards. This leftover water was previously discarded. We've worked closely with RPA to find a second life for this water. It is filtered, has low calcium and magnesium, and is no risk to public health, so it's suitable for street cleansing.

RPA installed two 10,000 litre storage tanks to hold the leftover water, and we support the project with technical advice on pumps, control panels and access arrangements.

This water fill point began operation in July 2023. It provides a new, conveniently located fill point for our cleansing vehicles in the Glebe, Camperdown and Newtown areas.



Royal Prince Alfred Hospital dialysis unit reverse osmosis water reuse fill point (Photo by Nicole Webb / City of Sydney)

This project has several benefits.

- It ensures a valuable resource is not wasted. The leftover water, once destined for the drain, now finds a new purpose.
- Significant water savings by using this readily available water source for street cleansing.
- Location of the water fill point results in reduced truck movements and increased fuel savings.

This collaboration is the first time in Australia that left over water from a hospital's dialysis water system has been harvested for street cleansing. Both parties are proud to be pioneers in this innovative approach to water management.

### Smarter irrigation for parks water savings

We're trialling a system that uses real-time soil and weather conditions to determine the best time to irrigate our parks and sports fields.

The Smart Water Asset Network software tool collates data from soil moisture and air temperature sensors, satellite data and Bureau of Meteorology reports to ensure the right volume of water is used at the right time.

We're running the trial in 5 of our major parks, with water use reducing since the trial started.

The 18-month trial will run until 2026 in partnership with Sydney Water.

#### Harvesting more rainwater

Our rainwater reuse systems are back in action, following a comprehensive repair project that began in 2023.

We carried out thorough site inspections and verified water use with meter data to identify and fix issues. This included blocked inlets, failed UV bulbs and filters, misaligned pipes that limited water capture and equipment failure, such as a corroded pump.

The project also focused on effective rainwater use, by installing new tap handles and hoses, connecting rainwater tanks for toilet flushing and introducing an automatic switch that transitions between rainwater and mains water as needed. This innovative solution maximises rainwater use and avoids service disruptions and plumber callouts.

Detailed asset information is now available in our asset management system, ensuring efficient long-term management of our rainwater assets. Our rainwater reuse systems are now producing around 20 million litres of water each year. This is more water than we use for Redfern Park, Wentworth Park and Wynyard Park combined, resulting in significant cost savings and environmental benefits.

Employees at our early education centres, community gardens, depots and recreation centres have been enthusiastic in embracing greater use of rainwater and contributed many suggestions on how to make better use of rainwater. KU Phillip Park Children's Centre uses their rainwater tanks in practical demonstrations for their sustainability lessons.



Rainwater tank in use at Newtown Community Garden (Photo by Optimal Stormwater)

Green report 2023/24

## Action for our city

We want to manage water responsibly and sustainably while meeting local needs and enhancing liveability and resilience. As our local area grows and the climate changes, more water will be needed for drinking and to green the city and combat the effects of increased heat.

Lack of rain and hotter days puts Sydney's water storage dams under pressure. This is predicted to occur with growing frequency and longer duration because of climate change. Supporting the use of less potable water means better water security for all of us.

The City of Sydney is surrounded by Sydney Harbour (Warrane), one of the most iconic waterways in the world. As a steward of our local area, our services impact the health and beauty of this waterway and the Cooks River which flows into Botany Bay (Kamay). Action to improve the quality of these waterways is an ongoing effort, with constant improvement year on year.

#### Our results

Overall potable water use in the local area increased by 21.5% in 2022/23 compared to the year before.

Residential daily water use per person increased by 12% and non-residential water use increased by 3% per square metre from 2021/22.





#### Green report 2023/24



Figure 15: Non-residential water consumption

#### Water quality results

Our target is to reduce solid waste stormwater pollution by 50% and nutrient stormwater pollution by 15% by 2030, compared to 2006. Solid waste pollution is assessed using total gross pollutants and total suspended solids. Total phosphorous and total nitrogen are used to assess levels of nutrient pollution.

Results in 2024 show we've reduced gross pollutants by 16%, total suspended solids by 11%, total phosphorus by 7% and total nitrogen by 4%. In 2023/24 our network of 47 gross pollutant traps prevented 334 tonnes of rubbish and sediment from entering our waterways. This is an increase from last year.

We track our progress towards these targets using industry standard MUSIC (Model for Urban Stormwater Improvement Conceptualisation) modelling software. This software estimates stormwater pollutant loads and the performance of our existing water quality and water sensitive urban design infrastructure.

#### How we do it

#### Measure

We measure water consumption in key sectors through data provided by Sydney Water.

#### **Program delivery**

Our Smart Green Apartments program works with building managers to reduce water use. Entertainment and hospitality venues and commercial buildings measure and report on water use and reduction progress through their involvement with the Sustainable Destination Partnership and Better Buildings Partnership.

#### **Recycled water in Green Square**

We manage a recycled water scheme that supplies water to residents and businesses in Green Square for non-potable uses such as laundry use, irrigation, car washing and toilet flushing.

#### **Planning solutions**

Water quality requirements are included in the Sydney Development Control Plan 2012 to ensure stormwater discharge from large developments meets high water quality standards.

We encourage new developments in the Green Square town centre to install dual pipes and connect to our stormwater harvesting and reuse scheme.

#### Waterway health

We improve the health of our waterways by reducing stormwater pollution entering downstream waterways, including Cooks River and Sydney Harbour. We install and maintain water quality treatment systems such as gross pollutant traps, raingardens, wetlands and swales in our stormwater network.

#### Supporting our region

#### **Coastal management programs**

We support the development of 2 coastal management programs, by providing funding and employee time.

The Greater Sydney Harbour Coastal Management Program project team is managed by the Sydney Coastal Council Group. The group is a collaboration of 33 stakeholders across the catchment. In 2023 the project was rescoped with a greater focus on coastal hazards in the outer harbour catchments.

The Cooks River Coastal Management Program is managed by the Cooks River Alliance. The alliance brings together stakeholders from across the catchment to develop a coastal management program to improve the health of the Cooks River. In 2023/24 the project team completed a coastal hazards assessment and developed hazard assessment mapping outputs to inform the next stage of the program. Rubbish and sediment are also removed by street sweeping and routine maintenance of drainage pits and pipes.

We ensure our raingardens are well maintained with guidelines for use by our park maintenance employees.

#### Collaboration

We work with Sydney Water to support our communities to reduce water use, identify potential water reuse and harvesting schemes, and improve our waterways.

#### Advocacy

We're an advocate of recycled water infrastructure installation in new buildings, so they can be connected to the recycled water network and reduce unnecessary potable water use.

## Attachment 1: Strategic actions

#### Environmental Strategy 2021–2025

#### Direction 1 – Smart and resilient City operations

- Deliver energy, water and resilience outcomes through City asset design and management
- 2. Keep City parks green with water efficiency and alternate water sources
- 3. Regenerate the environment through the City's carbon-neutral commitment
- 4. Ensure the City's programs and services use resources efficiently
- 5. Reduce the amount of operational waste sent to landfill through avoidance and resource recovery
- 6. Reduce embodied carbon in our supply chain and support circular economy outcomes
- 7. Manage environmental risks and issues

#### Direction 2 – Efficient, future-proof buildings and transport powered by renewable energy

- Improve energy efficiency, water efficiency and waste management in existing buildings
- 2. Drive all new buildings to be resourceefficient and net zero energy
- 3. Support the transition to zero-emissions transport
- 4. Encourage community uptake of renewable electricity and stimulate the green economy
- 5. Support our residents to reduce utility costs and environmental impact

 Help businesses to reduce utility bills and demonstrate environmental achievement

#### Direction 3 – Regenerative and inclusive city

- 1. Incorporate the perspectives of Aboriginal and Torres Strait Islander people in environmental action
- 2. Address equity issues related to climate change
- 3. Build community resilience and momentum on climate action
- 4. Support the development of circular economy systems
- 5. Drought-proof the city by facilitating water recycling
- 6. Regenerate polluted waterways, air and land
- 7. Reduce the amount of residential waste sent to landfill through avoidance and resource recovery

#### Direction 4 – Strong foundations for delivery

- 1. Build staff capability to deliver environmental outcomes
- 2. Deliver high-quality internal and external environmental reporting and communications
- 3. Employ efficient and effective decisionmaking processes

#### Greening Sydney Strategy

#### Direction 1 – Turn grey to green

- Action 1 Achieve the targets
- Action 2 Greener laneways
- Action 3 Harness innovation, technology and inspiration

#### Direction 2 – Greening for all

- Action 4 Equitable greening distribution
- Action 5 Fair access to quality green spaces
- Action 6 Adapting for climate
- Action 7 Growing food locally

#### Direction 3 – Cool and calm spaces

- Action 8 Cool the hot spots
- Action 9 Calm green spaces
- Action 10 Celebrate water

#### **Direction 4 – Greener buildings**

- Action 11 Green Factor Score
- Action 12 Increase green roofs & walls
- Action 13 Planning ahead

#### Direction 5 – Nature in the City

- Action 14 Recognise and support Indigenous ecological knowledge
- Action 15 Strengthen urban nature protection measures
- Action 16 Urban ecology health check
- Action 17 Reconnecting with nature

#### **Direction 6 – Greening Together**

- Action 18 Support community participation
- Action 19 Greening Sydney Fund
- Action 20 Increase our community engagement

## Attachment 2: Memberships

#### Memberships

Environmental action is about conversations, research, setting policy, taking direct actions, making investments and sharing learnings. We maintain many environmental memberships to enable us to contribute to the conversation, help improve common understanding and to learn, share and support others.

Our <u>memberships</u> that cover environmental, transport and waste related issues are local, regional and international. These include:

- Australian Sustainable Built Environment Council
- Australian Water Association
- C40 Cities
- Carbon Market Institute
- Carbon Neutral Cities Alliance
- Climate Emergency Australia
- Committee for Economic Development Australia
- Council of Capital City Lord Mayors
- Energy Efficiency Council
- Green Building Council of Australia
- Global Covenant of Mayors
- Impact Ecosystems Network
- Infrastructure Sustainability Council

- International Council for Local Environmental Initiatives
- Keep Australia Beautiful NSW
- Local Government NSW
- Materials and Embodied Carbon Leaders' Alliance (MECLA)
- Milan Urban Food Policy Pact
- National Australian Built Environment Ratings (NABERS) Steering Committee
- Property Council of Australia
- Smart Energy Council
- Southern Sydney Regional Organisation of Councils
- Sustainable Business Australia
- The Committee for Sydney
- Waste Management and Resource Recovery Association

