



# AGENDA

A meeting of the **Environment Reference Group** will be held on Cammeraygal Land at the Ros Crichton Pavilion Council Chambers, 200 Miller Street, North Sydney at 5:30 PM on Tuesday 14 May 2024.

The agenda is as follows.

Therese Cole  
**CHIEF EXECUTIVE OFFICER**



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## **1. Confirmation of Minutes**

The Minutes of the previous meeting held on 5 March 2024, copies of which had been previously circulated, were taken as read and confirmed.

## **2. Disclosures of Interest**

### 3. Reports

#### 3.1. The state of the Urban Forest in North Sydney LGA

<b>AUTHOR</b>	Jessica Karam, Urban Forest Officer
<b>ENDORSED BY</b>	Gary Parsons, Director Open Space and Infrastructure
<b>ATTACHMENTS</b>	Nil

#### **PURPOSE:**

The purpose of this report is to showcase the work conducted by Council's Urban Forest team and provide a summary on our outcomes and achievements.

#### **EXECUTIVE SUMMARY:**

- The Urban Forest team at North Sydney Council is constantly seeking new opportunities to enhance the canopy cover within the region.
- The Urban Forest team plants and ensures the establishment of at least 350 trees per annum, and maintains all existing trees around the Local Government Area (LGA) (irrigation, pruning, removal when necessary, treatment for diseases, etc.)
- Continuous monitoring of the Urban Forest (whether by visually assessing trees or by remote sensing-based mapping) highlights the changes throughout the years on different land categories, allowing us to set out plans to mitigate or lower the impact of any loss and to identify locations where trees are most needed, including replacing dead or senescent trees.
- Infrastructure projects undertaken in North Sydney LGA, as well as urban developments, are causing a dramatical loss of canopy.
- Trees for Newborns program has been in place since July 2023. 100 trees have been requested by the community for planting on their own property.
- Education programs are being prepared and implemented to raise awareness among the stakeholders about the value and benefits of trees in an urban environment.
- Plans and policies are continuously reviewed and updated for the protection of the trees in the LGA.

#### **FINANCIAL IMPLICATIONS:**

The Urban Forest team operation is funded through the recurrent operating budget provided by the Council. Other initiatives such as Trees for Newborns, LGA canopy cover mapping, street tree audits, and converting low voltage conventional powerlines to aerial bundled cables are fully financed through the annual budget allocated from the Environmental Levy.

#### **RECOMMENDATION:**

- 1. THAT** the report on the state of the Urban Forest in North Sydney be noted.

## **LINK TO COMMUNITY STRATEGIC PLAN**

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment
  - 1.1 Protected, enhanced and biodiverse natural environment
  - 1.2 Environmentally sustainable community
  - 1.3 Clean and green places
  
3. Our Innovative City
  - 3.2 North Sydney is smart and innovative
  
5. Our Civic Leadership
  - 5.3 Community is engaged in what Council does
  - 5.4 Council services are efficient and easy to access

## **BACKGROUND**

As per the North Sydney Council Urban Forest Strategy, the aim of the Urban Forest team is to “Value, Protect, Maintain, Plant and Monitor” the Urban Forest in the North Sydney LGA.

To educate and raise awareness among stakeholders, innovative programs and projects are being created to highlight the value and importance of preserving the Urban Forest.

Protection of trees is manifested by implementing and executing legislative controls and by continuously reviewing and updating existing policies.

Daily maintenance of the current canopy involves activities such as nurturing juvenile trees through establishment, removal, pruning and deadwooding public trees, and treating any diseased specimens. Additionally, residents can take advantage of complimentary consultations provided by the Council's Tree Management Officers for trees situated on both public and private property by submitting a request through the Council's website.

The Urban Forest team also aims at planting at least 350 trees per annum in parks and on roadsides and enforces replanting conditions.

Monitoring of the urban forest is done by keeping accurate records and statistics through continuous audits: a high-resolution remote sensing-based canopy cover mapping and assessment undertaken every two years, and a detailed physical audit and valuation of street trees conducted every five years.

## **CONSULTATION REQUIREMENTS**

Community engagement is not required.

## REPORT

Council’s Urban Forest Team is committed to maintain and protect existing trees and to plant at least 350 trees annually to preserve our canopy cover.

Every five years, Council engages consultant arborists to conduct a Tree audit, visually evaluating the health and condition of our street trees, as well as determining their valuation. The next audit is due in 2025.

Every two years, Council hires an environmental consultancy firm with expertise in diagnosing, monitoring, and sustainably managing vegetation using innovative remote sensing techniques to monitor the canopy cover in the LGA. The canopy cover capture is conducted biennially using an airplane. The consultancy's experts then analyse the collected data to generate indicative results of the overall canopy cover percentage across the LGA, as well as percentages for different land categories, as presented in the table below. These results also highlight areas emitting the most heat through thermal imaging and can assess the current health condition of the vegetation, among other features.

Table 1. Canopy cover in North Sydney LGA 1997-2022

Whole LGA		% of NSC LGA land area	Target cover Based on Industry best practice	1997	2001	2008	2014	2017	2020	2022	Canopy Loss since 2008
				%	%	%	%	%	%	%	
Land Use	Overall Canopy Cover	100	34.4	19	24	33.9	30.7	28.2	27	24.9	9
	Central Business Districts	10	15	-	-	16.5	13.5	14.2	11.9	10.5	6
	Urban Areas	48.3	25	-	-	32.4	28.8	26.9	25.8	23.5	8.9
	Suburban Areas	41.7	50	-	-	39.8	37	33	32	30	9.8
Land Tenure	Public land	25.7	-	-	-	50.5	52.8	50	50	48.8	1.7
	Private Land	58	-	-	-	31.6	26.4	24	22.4	19.9	11.7
	Roads	16.3	30	-	-	28.1	26.1	23.4	23	21	7.1

Based on the information provided, the Council can identify suburbs requiring additional tree and vegetation planting to reduce the urban heat island effect and alleviate associated impacts on the community and the environment.

The most recent flyover was completed in February 2024 and Council is currently awaiting results. Due to major infrastructure projects undertaken in the LGA in the last couple of years, it is predicted that the loss of green cover is going to be staggering compared to the previous years in all land categories, including public land. Therefore, it has been decided to reassess the overall canopy cover target to make it more feasible and achievable in the future.

Two major ongoing infrastructure projects overseen by Transport for NSW (TfNSW) include the Sydney Metro Victoria Cross station in North Sydney and Crows Nest station, as well as the Western Harbour Tunnel and Warringah Freeway Upgrade (WHT/WFU).

For the construction of Sydney Metro stations, a total of 35 trees will be removed. However, Sydney Metro contractors will plant 62 trees on-site, and an additional 59 trees have been planted on roadsides around Crows Nest, maintained by the Council. This initiative promises a net increase in canopy cover in the future.

Regarding WHT/WFU, trees are being removed during road works, with an estimated 3,000 trees (defined as over 3 meters high) set for removal. As part of the projects planning approval, it's a requirement that a Tree Replacement program be implemented. The program proposes replacing removed trees at a 2:1 ratio, resulting in the planting of 6,000 juvenile trees across the LGA. Priority will be given to areas within 500 meters of the project boundaries. While this replacement ratio aims to ensure a net increase in canopy cover in the future, limited vacant planting sites in North Sydney LGA, coupled with some residents' reluctance to have trees planted outside their properties, may pose challenges to planting all 6,000 trees.

The Urban Forest team is continually exploring alternative methods to introduce trees onto public land whenever feasible, such as planting trees on rooftop carparks. In fact, although limited, several sites have been identified as suitable for accommodating a few trees and some vegetation, providing protection for cars from the elements.

Other than adding trees to our current amenity, the Urban Forest team aims at preserving the current healthy trees to reach their maturity and full potential. For instance, Council has submitted their application to take part of a co-funding program with Ausgrid to upgrade low voltage overhead conventional bare powerlines in high priority areas into aerial bundled cables (ABCs). With ABCs, trees don't have to be pruned so aggressively or hacked to maintain a safe clearance zone around the powerlines, which ultimately allows the growth of a dense and healthy canopy.

Other ventures that the Urban Forest team adopted to increase the canopy cover on private land, is launching the Trees for Newborns program that consists of providing a tree of the residents choice to plant on their local private property to commemorate the birth of their child or grandchild. The program initiated in July 2023, and since then 100 trees (native and exotic) were requested from Council and were delivered to the residents' doorstep free of charge.

The Urban Forest team is also looking into running competitions for primary schools to celebrate National Tree Day, as well as a program of educational posts on Council's social media platforms on the benefits of trees among other interesting subjects that could shed light on the importance and value of trees within the urban environment.



On a more strategic level, the Urban Forest team continuously works on reviewing and updating their plans and policies (e.g. Development Control Plan, Urban Forest Strategy, Street Tree Strategy, etc.) based on the daily experience acquired by the team members for a better protection of the trees around the LGA. The team also takes part in the Department of Planning and Environment workshops and actively works on giving them feedback to improve systems.



### 3.2. Coal Loader Schools Education Program

<b>AUTHOR</b>	Leonie Netting, Coordinator Coal Loader Sustainability Centre
<b>ENDORSED BY</b>	Marcelo Occhiuzzi, Director Community, Planning and Environment
<b>ATTACHMENTS</b>	Nil
<b>CSP LINK</b>	1. Our Living Environment 1.1 Protected, enhanced and biodiverse natural environment 1.2 Environmentally sustainable community 1.3 Clean and green places 1.4 Well utilised open space and recreational facilities

#### **PURPOSE:**

The purpose of this report is to provide an update on the Coal Loader Schools Education Program.

#### **EXECUTIVE SUMMARY:**

- A core function of the Coal Loader Centre for Sustainability is environmental education.
- In recent years, the Coal Loader’s education program for schools has not been adequately resourced and an opportunity to refocus efforts in FY23/24 has allowed for a complete program review and overhaul.
- A comprehensive review of the existing school’s education program was undertaken, followed by the design of a new program.
- The new Coal Loader Schools Education Program is set to be launched in July FY24/25.
- Funding for the Coal Loader Schools Education Program comes from the Environmental Levy.

#### **RECOMMENDATION:**

**1. THAT** the report on the Coal Loader Schools Education Program be received.

## Background

The core ethos of the Coal Loader Centre for Sustainability is the facilitation and encouragement of sustainable behaviour in our local community and beyond. At the centre of this is environmental education which comprises of school and tertiary education, as well as broader community education and engagement. This report focusses specifically on the school education program which is undergoing significant review and overhaul this year.

To date, the Coal Loader school education program has been largely *'ad hoc'* in delivery due to inadequate staffing and financial resourcing. The program consisted of piecemeal activities for students rather than a cohesive traditional full day excursion program, and a review of market offerings and teacher feedback indicated the program would benefit from an overhaul.

Background research indicated that primary students are most likely to take up excursion opportunities at the Coal Loader; that teachers would prefer 'set' excursion opportunities that are appropriately organised and resourced onsite; and that all excursion opportunities need to be curriculum linked, with sustainability now being an overarching theme across all curriculums.

Resourcing at the Coal Loader does not allow for in-house delivery of school education, as student/teacher ratio requirements mean we do not have enough staff onsite to do more than one class at a time (when most schools will send a grade cohort), and a full day excursion is obviously a full day teaching for Coal Loader staff which is not feasible.

## Report

The Coal Loader School Education Program review includes:

- A review of the existing 'Coal Loader Sustainability Learning Guide' resource to ensure relevance/current curriculum links, which will be digitised and made available freely on our website.
- The development of 4 x full day excursion programs, including all resources needed for delivery, for Stage 2-3 (primary) curriculum linked to science, geography and sustainability.
- The introduction of a 'school excursion fee' to Council's fees and charges which will allow for the cost recovery of casual teachers if needed.

Observatory Hill Environmental Education Centre (OHEEC), our local Department of Education and Training Centre, has been engaged for the above-mentioned works. OHEEC regularly teach their own programs onsite at the Coal Loader and are well placed to create our own suite of offerings that are curriculum linked and tailored to our site.

These excursion programs will be fully developed by June 30, 2024, and ready to be made available to the school community for Term 3 of 2024 (July). The 'Coal Loader Learning Guide' resource will also be updated and made freely available on our website by this time.

The roll-out model for the excursions, to be launched next financial year, will be one of two options:

- A. Casual teachers can be employed to run the excursions on set days, invoking the school excursion fee and administered by the Coal Loader Coordinator.
- B. NSC will partner with OHEEC for program delivery. Enquiries will be taken by the Coal Loader and referred to OHEEC for booking.

Consistent with current program delivery, North Sydney schools will not be charged for Coal Loader excursions as these are funded through Council's Environmental Levy. Current budget allocations will allow for approximately 10 North Sydney schools to participate in the program with two classes over the course of one year.

Non-North Sydney schools will, however, be required to pay a fee. In the case of model A), the fee will be charged by the Coal Loader to cover the casual teacher cost, in the case of model B) OHEEC will invoice the Coal Loader per teacher per day. The School Excursion Fee has been included for Council review ready to be implemented in FY24/25.

In addition, this model can be expanded to include specific indigenous education and options to work with the Aboriginal Heritage Office are currently being explored.

In the event a non-North Sydney school requests an excursion but is not financially resourced to pay, they have the option to undertake a self-guided experience. The following will be provided:

- The Coal Loader Sustainability Learning Guide resource, with printed worksheets/clipboards available if needed.
- The Coal Loader augmented reality app available both as pre-visit classroom learning and onsite.
- The Genia/Mess Hall space made available to class for activities.
- A 15-minute site orientation/introduction at the start of the day by Coal Loader staff.

The program will be launched in Term 3 this year via the North Sydney Schools Network. A suite of assets will also be developed for Council's website, digital communications, and social platforms, possibly including a short vox pop or similar.

Due to the timing of the mid-year release, it is anticipated there will be minimal uptake of the program this year due to teachers prior scheduling of activities early in 2024, however, it is expected there will be an upswing of bookings in 2025.

Stage two of this project will be to develop the next set of resources for stage 4-5 (Secondary Schools) for curriculum linked geography and science excursions. These programs will be rolled out from Term 3 (July) 2025.

### **Consultation requirements**

Community engagement is not required.

### **Legislation**

Not applicable.

### 3.3. Tracking Towards Net Zero: North Sydney Council and Community Emissions

<b>AUTHOR</b>	Danielle Birkbeck, Acting Manager Environmental Services
<b>ENDORSED BY</b>	Marcelo Occhiuzzi, Director Community, Planning and Environment
<b>ATTACHMENTS</b>	Nil
<b>CSP LINK</b>	1. Our Living Environment 1.2 Environmentally sustainable community

#### **PURPOSE:**

The purpose of this report is to provide an update on North Sydney Council’s operational emissions, and the emissions profile of the North Sydney community. The report outlines how each are tracking toward Council’s 2030 targets.

#### **EXECUTIVE SUMMARY:**

- The North Sydney Environmental Sustainability Strategy 2030 lists both Council and community targets for emissions reduction.
- Council and the North Sydney community are on track to meet these targets through significant investment in renewable technologies, procurement of renewable energy contracts and the delivery of community education and incentivisation programs.

#### **RECOMMENDATION:**

**1. THAT** the report Tracking Towards Net Zero: North Sydney Council and Community Emissions be noted.

## Background

The North Sydney Environmental Sustainability Strategy 2030 was adopted by Council in November 2021. The strategy sets targets across seven themes including carbon footprint, water quality, water conservation, engagement in sustainability, resource recovery, urban ecology, and sustainable transport. This report focusses on the progress toward the carbon footprint targets listed in the strategy.

The carbon footprint and emissions targets are:

1. 100% of Council's electricity needs are met by renewable energy sources before 2030.
2. 100% carbon neutrality for Council operations achieved before 2030.
3. 65% greenhouse gas reduction of 1996 community emission levels before 2030.

## Report

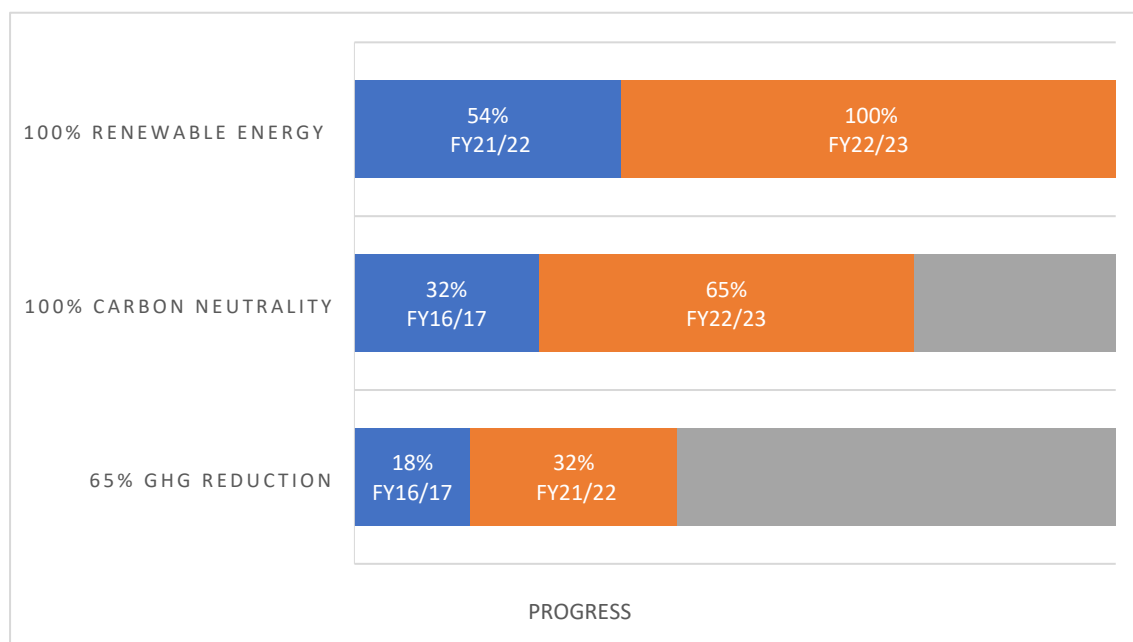


Figure 1. Progress towards 2030 Carbon Footprint Targets.

### Council operational targets

In January 2023, Council completed the transfer of all its streetlighting, and electricity use in its facilities to the 100% renewable energy contract with retailer ZEN Energy. 100% of Council's electricity needs are now met by renewable energy sources and in doing so, we have achieved this target 7 years ahead of the planned timeframe. Fig. 1. above shows how Council has increased its renewable energy content from 54% in FY21/22 to 100% in FY22/23.

Figures from FY21/22 show Council is now tracking at 65% towards achieving the target of 100% carbon neutrality by 2030 (Fig.1). This is a 50% increase on FY16/17 data and has been achieved through various measures including electricity conservation actions; increase in installation of, and investment in, renewable energy technologies (solar PV and battery); savings in fuel through the transition of Council fleet to electric vehicles; and energy audits of Council buildings. Implementation of these clearly shows a decreasing trend in emissions as evident in Fig. 2.

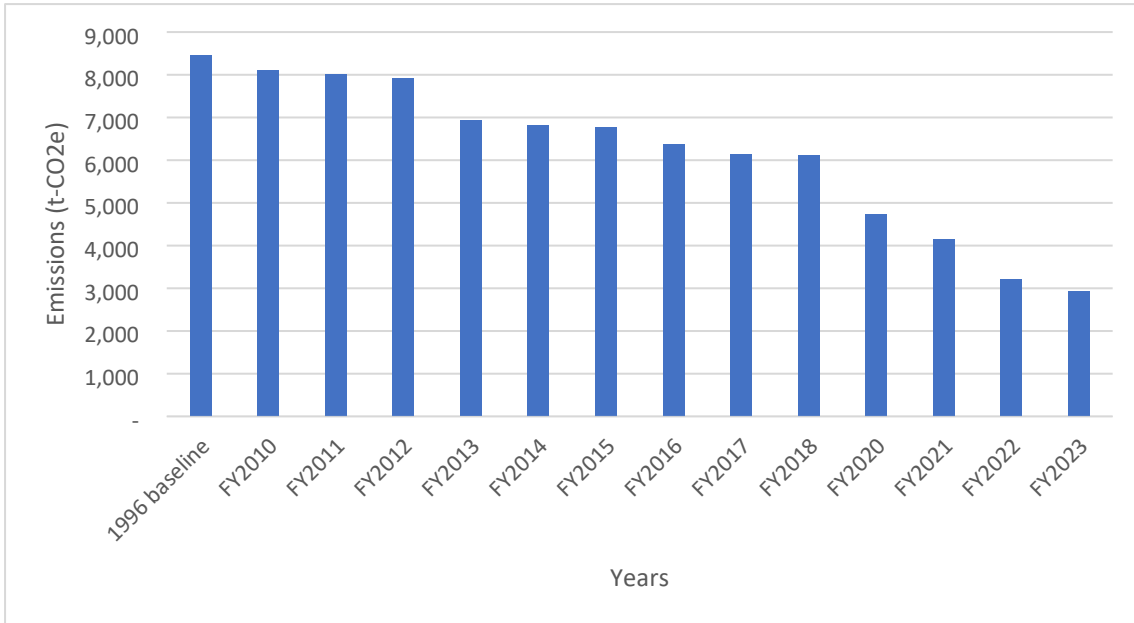


Figure 2. Council operational emissions (Trellis, 2024).

Community Emissions Target

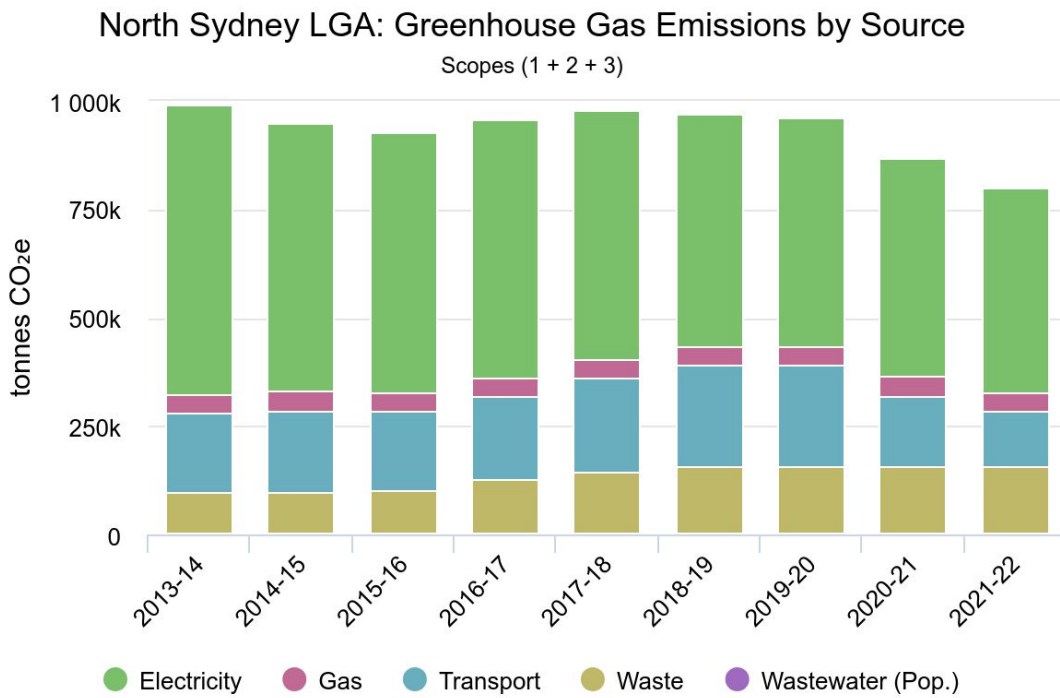


Figure 3. North Sydney Community Emissions by Source (Resilient Sydney, 2024)

The target for community emissions reduction was set at 65% from the 1996 baseline, 1,165,052.44 (tonnes CO2e). Fig 1. conveys an 18% reduction in emissions in FY16/17 (total emissions 955,343 tonnes CO2e) and a 31.33% reduction in FY21/22. Community emissions totaled 799,973 tonnes CO2e in FY21/22.

Fig.3. above shows the sources of community emissions with electricity being the most significant contributor followed by transport and waste. Whilst emission reduction has been slow to date, it is thought that with the rapid decarbonisation of the electricity grid, coupled with the 2030 NSW Government mandate for food and organics recycling (FOGO), the North Sydney community will be well placed to achieve the 2030 target.

Fig. 4. below shows community emissions by sector. It can be seen from the chart that significant emissions are attributed by the commercial, retail, and multi-unit residential sectors.

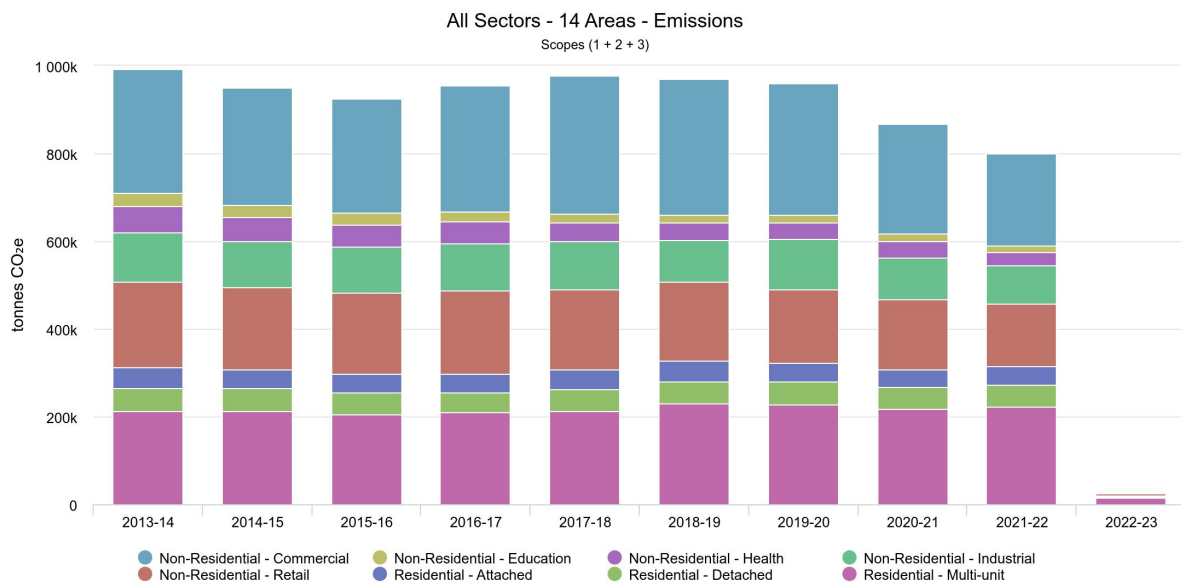


Figure 4. North Sydney Community Emissions by sector. (Resilient Sydney, 2024)

### Achieving the Targets

Emissions reduction is being achieved through several internal operational and community programs and initiatives. These include the investment in renewable technologies on Council buildings, procurement of 100% renewable electricity, fleet transition and community education and incentivisation programs.

To date, Council has installed 519kW of rooftop solar (PV), soon to increase to 555kW with a new installation on Stanton Library, and 175kWh of battery storage in Council buildings.

All heating of Council buildings, except Stanton Library and Council Chambers, is now performed by heat pumps, a renewable heating energy harvested from ambient air.

In January 2023, all of Councils large and small sites came under our 100% renewable electricity contact with ZEN Energy. Our electricity now comes from the solar farms at Hillston, Nevertire, and Moree in NSW.



Currently, Council has 10 electric vehicles (EV's) which are being charged with renewable energy at the Central Depot and Council chambers. This provides a great opportunity for primary emissions reduction by displacing imported fossil fuel such as petrol and diesel, with a further benefit being the creation of jobs in the Australian energy generation sector.

In addition, most of the Councils Parks and Gardens small plant equipment is now electric including electric lawn mowers, brush cutters and small chainsaws. Unfortunately, Councils contracted parks maintenance teams all use fossil fuelled equipment contributing to our Scope 3 emissions.

There is still more that can be done in the pursuit of reducing Council emissions including transitioning the Stanton Library and Council chambers off gas, continuing with the fleet transition program, and including conditions around renewable energies in Council contracts such as the Waste contracts and Parks maintenance contracts.

In the community space, Council programs such as Futureproofing Apartments, the Sustainability Rebates Program and business programs such as City Switch and Better Business Partnership, all focus on reducing emissions in the key sectors. By prioritising efforts in developing and implementing Council programs that target business and multi-unit developments, coupled with the ongoing reforms and funding that are currently happening at the State and Federal level to address climate change, North Sydney's community emissions should continue to reduce at a rate able to meet the 2030 target.

### **Consultation requirements**

Community engagement is not required.

### **Financial/Resource Implications**

Funding for community emissions reduction programs comes from Councils Environmental Levy. Council operational initiatives and upgrades are funded through Councils recurrent budget.

### **Legislation**

Not applicable.

#### **4. General Business**

Jane Theau would like to discuss the following:

I'm the head of an organisation called Textiles Sydney that operates out of the Primrose Park Art & Craft Centre and it has come to our attention that there is a vast quantity of used street banners stored at the Council. They are large and heavy items made from a pretty awful synthetic fabric that stands up to the weather but is unable to be repurposed.

- Are the banners relative to repeat events like Christmas reused? I understand there are a lot stored away for which this isn't the case.
- Given that the banners aren't used over and over, does the fabric have to be so robust?
- Can an alternative natural fabric be used for this purpose?

Given the alarming amount of textile waste, a better way to manage this waste stream is advisable.

#### **5. Closure**