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

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ATTACHMENTS	Nil
CSP LINK	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.

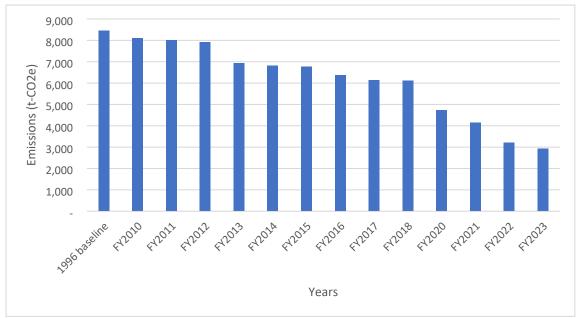


Figure 2. Council operational emissions (Trellis, 2024).



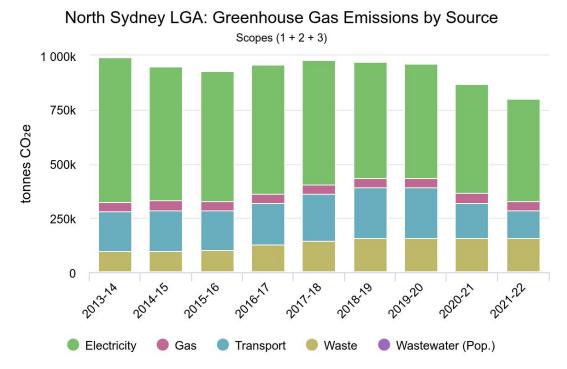


Figure 3. North Sydney Community Emissions by Source (Resilient Sydney, 2024)

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.

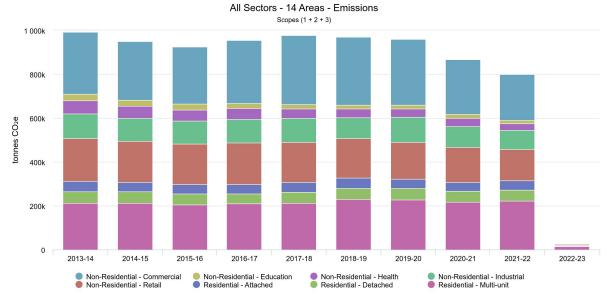


Figure 4. North Sydney Community Emissions by sector. (Resilient Sydney, 2024)

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.