

### **3.6. Towards Net Zero Emissions**

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**ATTACHMENTS:** Nil

**PURPOSE:**

The purpose of this report is to provide an overview on how North Sydney Council and the community are tracking on the carbon footprint targets and how we propose to assist as we work towards net zero emissions.

**EXECUTIVE SUMMARY:**

In July 2021, North Sydney Council endorsed the North Sydney Environmental Sustainability Strategy 2030 (ESS 2030) that sets out community and council targets and action plans across seven areas including carbon footprint.

**FINANCIAL IMPLICATIONS:**

The program will be funded through the Environment Levy.

**RECOMMENDATION:**

**1. THAT** this report on Net Zero Emissions be received.

## **LINK TO COMMUNITY STRATEGIC PLAN**

The relationship with the Community Strategic Plan is as follows:

1. Our Living Environment
- 1.2 North Sydney is sustainable and resilient

## **BACKGROUND**

North Sydney Council has long been a leader in environmental sustainability, setting ambitious Council and community targets for the reduction of energy, waste and water consumption since 2004.

However, over the last decade it has become increasingly evident that in order to tackle climate change and contain warming to 1.5deg C, previous targets and efficiency efforts have not been strong enough to yield the dramatic drop in greenhouse gas emissions that are required.

## **CONSULTATION REQUIREMENTS**

Community engagement is not required.

## **DETAIL**

In July 2019, North Sydney Council declared a climate emergency with Councillors unanimously voting to acknowledge that climate change poses a threat to the future of our cities, including the North Sydney LGA. This was followed in July 2021 with the endorsement of the North Sydney Environmental Sustainability Strategy 2030 (ESS 2030). The strategy sets out twenty-two community and council targets and an action plan across seven areas including carbon footprint, water conservation, water quality, engagement in sustainability, urban ecology, resource recovery and sustainable transport.

Together, the declaration and strategy embody Council's commitment to sustainability and shows the North Sydney community that we are serious about addressing climate change. To reinforce this commitment, Council has also become a member of a national and international program - the Climate Councils Cities Power Partnership program and the Cities Race to Zero program. Pledge commitments we have made in these programs align with the ambitious targets set out in the ESS 2030 and will hold us accountable at a national and global level.

### Net Zero targets and achievements for Council

Council has set ambitious targets in the ESS 2030 to reduce greenhouse gas emissions through a mix of renewables and electrification.

Targets include:

- 100% of Councils electricity needs will be met by renewable energy sources by 2030;
- Council operations will be 100% carbon neutral by 2030;
- 100% of Council's passenger and commercial fleet will be electric before 2030.

Whilst we are at the beginning of our decarbonization journey, significant achievements have been accomplished to date that have put us firmly on the path to net zero emissions. These include:

- By 2023, 100% of all Council electricity needs (including Council sites and streetlighting) will come from NSW solar farms;
- Ongoing energy efficiency upgrades at all Council facilities including lighting and HVAC systems;
- Increased rooftop solar electricity on Council facilities to 500kW, approximately 1500 panels;
- Installing heat pumps for hot water and air conditioning as upgrades are required;
- Electric vehicle chargers in five council car parks, with the ability to charge 10 vehicles;
- Removing gas and replacing with electric equipment powered by solar;
- Installation of three batteries for electricity storage.

Future projects to reduce emissions include investigating the feasibility of divesting Councils investments from fossil fuels and developing a fleet transition strategy to electrify Council fleet, operations and equipment.

#### Net Zero targets and achievements for the community

The ESS 2030 sets out a community carbon footprint target of 65% greenhouse gas reduction of the 1996 community emissions levels before 2030. This target is currently tracking at 18% which highlights the need for significant measures to assist the North Sydney community in rapidly reducing their emissions.

Indicators measured for North Sydney residents do show a downward trend of greenhouse gas emissions, albeit slowly, however there are several community achievements to date that are particularly promising. These include:

- the purchase of electric vehicles in North Sydney has increased five fold in four years;
- over 3703kW of solar PV has been installed on residential dwellings in North Sydney;
- over 1500 households diverting food waste from landfill through the Council subsidized compost revolution program.

#### Towards Net Zero Emissions

The research in the scientific community indicates that the strongest action we can take in tackling climate change is to switch to clean and renewable energy sources such as solar, wind and heat pump technology, and stop the use of fossil fuels including coal and gas. This is necessary in meeting our energy demands as well as our transportation needs and it is thought that by simply electrifying everything (with the source of the power being green power), Australia could cut its emissions by 80 % by 2035.

Supporting our residents to reduce their greenhouse gas emissions through electrification will be the main focus of our sustainability programs going forward, as we work towards building a net zero community in North Sydney.

Going electric is possibly the easiest and fastest way to cut greenhouse gas emissions with relatively little impact on quality of life. For North Sydney residents it means an increase in the number of households with rooftop solar panels; electric vehicles instead of petrol/diesel; electric water heaters instead of gas; reverse cycle air conditioners; induction cooktops and household batteries to store solar power. It is anticipated that the average Australian would need to make about seven changes of new electric acquisitions.

However, electrification is not without its challenges, with possibly the biggest obstacle being the upfront expense. Currently there are government rebates for certain items including solar PV, heat pump hot water systems and reverse cycle air conditioners, however more could be done at a local level to incentivize the community to make the switch. Ku-ring-gai City Council is leading the way by offering additional rebates.

Key to engaging North Sydney residents on our road to net zero will be a comprehensive public messaging and communications campaign beginning in 22/23. Council website will be updated to outline our current targets and performance and we will refresh existing and create new content for a net zero community webpage. The net zero community pages will include information on how to take action; provide local and relevant case studies; promote local legends and advise on rebates and subsidies. Our key message of 'Electrifying Everything' will be the at the core of this messaging campaign.

Our existing residential and business programs will prioritize decarbonization through electrification and will aim to undertake the following:

- Green Events program will hold workshop and events to support residents to electrify their homes;
- Futureproofing Apartments program will focus on energy saving opportunities in strata common areas; the potential for solar PV sharing and centralised hot water system upgrades; electric vehicle charging infrastructure and installation of batteries for electricity storage.
- Sustainable Business Programs will focus on purchase of renewable energy and reductions in consumption; transitioning from gas to electric; waste reduction and diversion.