3.2. The Case for Carbon Offsets to Achieve Carbon Neutral

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ATTACHMENTS: Nil

PURPOSE:

This report provides a background to carbon offsets and the role they have in achieving Councils 2030 carbon neutral target.

EXECUTIVE SUMMARY:

Council has a target to become carbon neutral by 2030 and predicted modelling shows carbon offsets will need to be purchased to cover our residual emissions profile. Carbon offsets are used as a tool for organisations to achieve carbon neutrality after implementing all other operational measures to reduce greenhouse gas emissions.

This report provides information on Councils emissions profile, carbon offsets, carbon neutral certification and proposes a pathway to achieve carbon neutrality before 2030.

FINANCIAL IMPLICATIONS:

Funding for the purchase of carbon offsets will come from existing funds in the Environmental Levy.

RECOMMENDATION:
1. THAT the report is received and 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

BACKGROUND

Council has been proactively reducing our operational greenhouse gas (GHG) emissions and potable water usage for many years. We set our first targets in 2002 as part of the International Council for Local Environmental Initiatives (ICLEI) Cities for Climate Protection (CCP) program and established the Greenhouse Action Plan and Water Management Plans to achieve them.

These plans have now been superseded by the North Sydney Environmental Sustainability Strategy (ESS) 2030 which was adopted in 2021 and list targets and actions in 7 key areas. The ESS 2030 carbon footprint target has been set for 100% carbon neutrality by 2030.

To date, Council has achieved a 55% reduction in emissions (based on 1996 levels) through the implementation of energy efficiency measures and the purchasing of renewable energy and renewable energy systems.

CONSULTATION REQUIREMENTS

Community engagement is not required.

DETAIL

Whilst much has been done over the past 10 years to reduce operational GHG emissions, including energy efficiency upgrades and renewable energy generation and purchase, predicted modelling has shown Council will not become carbon neutral purely through these measures alone.

Modelling in 2019 showed Council was predicted to achieve a 68% reduction in our Scope 1 (gas) and transport) and Scope 2 (electricity and streetlighting) emissions compared to 1996 levels by 2030. Securing 100% renewable electricity through a power purchase agreement (PPA), set to come into full effect in Jan 2023, has increased this reduction, yet further measures are still needed to continue reducing emissions. These include investing in the electrification of vehicles (EVs) and charging infrastructure and including EV electricity our renewable energy PPA and investing in the electrification of small plant equipment (such as lawn mowers).

However, these carbon abatement measures alone will not achieve 100% carbon neutrality and in order to reach the target Council will need to purchase carbon offsets for any residual emissions. With the 100% electricity PPA in place, residual emissions are estimated as 1,375 t CO_2-e. Over time, it is expected that residual emissions would decrease as Council continues to decarbonise operations.

What are carbon offsets?

Carbon offset units are generated by projects that prevent, reduce or remove GHG emissions from the atmosphere such as renewable energy and energy efficiency projects or reforestation projects. These projects occur both nationally and internationally.

Over the years there has been some concern around the validity and transparency of carbon offset projects and the quantifiable emission reductions that these projects achieve. This was an issue when the offset market first emerged and as a result, certification and purchasing programs were launched that provided the market with requirements, rules and regulations that projects are assessed against.

In Australia there are 3 types of offset purchasing programs. Verified carbon standard (VCS), Gold Standard (GS) and Australian Carbon Credit Units (ACCUS). All have different price per units with indicative pricing of $30 per tonne for ACCUS and $10 per tonne for Gold Standard. ACCU's are issued by the Clean Energy Regulator and when purchased benefits go directly to Australian communities and our environment.

Carbon neutral certification

Whilst not necessary for the purchase of carbon offsets, carbon neutral certification is a tool for the verification of an organisations emissions profile and provides validity to carbon neutral status. In Australia, the most highly regarded standard to achieve carbon neutrality is the voluntary Climate Active Standard, which is administered by the Commonwealth Government.

To be certified, Climate Active members are required to use offsets that result in genuine emissions reduction and certification allows them to show their community that carbon neutrality has been achieved in a credible and transparent way.

Other Councils in greater Sydney who are Climate Active certified carbon neutral include City of Sydney, Woollahra and Bayside City.

Why carbon neutral now?

Modelling has shown that Council will have residual emissions that will decrease over time as further abatement measures are implemented yet may never be completely mitigated.
It is agreed that offsets will play a role in becoming carbon neutral and necessary if Council wants to achieve their 2030 target.

However, Council doesn't have to wait until 2030 to achieve carbon neutrality. By becoming carbon neutral now, Council can show the North Sydney community that we are acting on climate change and reinforcing our commitment to reaching net zero.

Proposed Way Forward

For Council to position itself as a carbon neutral organisation it is recommended that this is recognised through a formal certification process such as Climate Active. Accreditation of which requires the purchase of verified carbon offsets.

To establish a framework for purchasing carbon offsets it is recommended that Council write and adopt a carbon offset policy that will cover the procurement process and list criteria for offset selection.

An excerpt taken from Moreland City Councils Carbon Offset Policy states the objectives as:

- *Guide Council's own decision making in maintaining carbon neutral certification;*
- *Demonstrate leadership in Council's own decision making in responding to climate change on a corporate level and continue to lead the community towards carbon neutrality.*

It is anticipated that if Council follows this proposed way forward it could claim carbon neutrality by 2024, 6 years ahead of our target date.