

Councillor Sam Ngai was elected to Council in 2017 and in September 2023 was elected to serve as Mayor.

He grew up in Roseville and attended Roseville Public School.

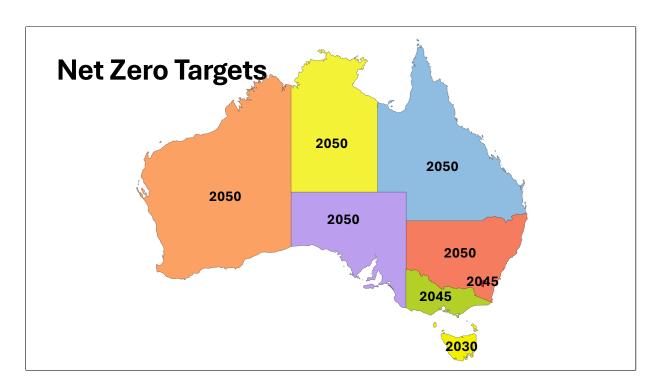
Cr Ngai holds degrees in Software Engineering and Accounting, and next month will complete a Master of Laws (Environmental Law and Sustainable Development) and Master of Business Administration. He is a Fellow of CPA Australia and a graduate of the Australian Institute of Company Directors (Order of Merit).

Prior to becoming Mayor, he worked for 14 years at an energy company where he supported the acquisition, development and operation of thermal (coal and gas) as well as renewable (geothermal, wind, hydro, solar, and energy storage) projects.



We all know about the Paris Agreement and our efforts to limit the increase in global temperatures to 1.5°C above pre-industrial levels. We are aiming for a 43 percent reduction by 2030 to stay on track to Net Zero by 2050.

Australia now has a Net Zero 2050 target. But what about each individual state and territory?



We can see that most states have a Net Zero target of 2050 but why is it that Tasmania, the ACT, and Victoria have more ambitious targets?

Tasmania has the benefit of being a net exporter of hydro energy along with a small population.

Victoria benefits from Tasmania's exports.

The ACT has the benefit of a small population supported by early adoption of a Large Scale Generation Certificate scheme. However its ecological footprint was estimated at 9x their land size, in other words, there's much further to go before they are considered self sustainable on all fronts.

The other states have the disadvantage of supporting larger populations and industry with a mix of renewable and thermal sources. There are also diminishing returns with renewables, that is, wind and solar have been developed at the highest yield sites located closest to existing transmission networks, whereas powering the rest of the country with renewables requires much more investment in our transmission networks and energy storage.



In 2020, Ku-ring-gai Council's staff proposed an ambitious Net Zero target of 2040 for the entire Local Government Area. The proposed Climate Change Policy and Action Plan 2020 was adopted by Councillors, and aims to achieve:

- 50% emissions reduction by 2030 or earlier [across the LGA]
- 100% emissions reduction (net zero emissions) by 2040 or earlier [across the LGA]
- 100% renewable energy by 2030 (but aiming for 2025 if possible) [council's operations]
- 100% reduction in fleet emissions by 2040 or earlier [council's operations]

Like the smaller states and territories, Ku-ring-gai has the benefit of achieving a target with a smaller population and without the need to support a large industry base.



It is easier for Council to improve its own operations before encouraging all of our residents to reach best practice.

Three areas of focus include:

- Rooftop Solar We have 579kW of generation at 14 council sites, plus solar hot water.
- Energy Efficiency Initiatives Upgrades to LED lights for community sites and streetlights, intelligent lighting controls, smart meters, upgrades to HVAC air conditioning, heat pump upgrades, insulation and other energy efficiency upgrades.
- Fleet We have ten electric vehicles and 1 electric truck so far, as well as a dozen hybrid vehicles. Aiming to electrify the entire fleet by 2040.

In addition, we have collectively worked with other Northern and Southern Sydney Councils to source our energy from Zen Energy, which provides us with what they say is 100% renewable energy.



Ku-ring-gai also promotes domestic energy efficiency and electrification initiatives through Energy Smart Rebates that are funded by our Environmental Levy. Under this initiative we offer rebates of \$500 if residents install solar or batteries, \$500 if they install solar or electric hot water, \$500 if they install insulation, and \$500 if they install more energy efficient windows. \$250 is also available if residents install an appropriate pool pump.

I want to update the rebates to include induction cooktops. Since switching to induction, I couldn't go back to gas. Induction is faster, safer, and cheaper.

There are also \$4,000 rebates for unit blocks and rebates for schools.

We offer a home assessment service where council officers visit your home and provide advice on how to lower bills and reduce your carbon footprint.

We also have an energy saver kit which you can borrow. It includes a thermal imaging camera which lets you see where heat is leaking out of your home, and a power meter which helps you understand your appliance's standby power consumption.





Vehicle Electrification

Ku-ring-gai is also playing its part in helping residents electrify their transport.

At the Lindfield Village Green we have 15 EV chargers, including one for disabled. I'm not aware of another council with more EV charging at one site than us.

We will soon have chargers at North Turramurra, West Pymble, and Turramurra.

For those living in a standalone home like myself, it's easy to install an EV charger, but it's more difficult for those living in apartments. We have updated our Development Control Plan (DCP) so that all future apartments are required to install electrical conduits, switchboards and meters to support electric vehicle chargers at each parking spot. The DCP stops short of mandating the installation of EV Chargers ... that will be up to residents to arrange when they decide to make the switch.

The Ku-ring-gai Active Transport Committee has also been monitoring an electric bike trial conducted by Lug+Carrie where residents can rent eBikes at half price for an 8 week period. I am currently trialing an electric cargo bike to understand the implications for our active transport networks.



Urban Tree Canopy

Various studies have shown that suburbs with urban tree canopy are cooler than those that are without.

At Ku-ring-gai Council, our urban tree canopy was estimated at 43.81% in 2022, which is the highest in Greater Sydney, and we are doing what we can to protect it and promote future growth.

With urban tree canopy, our suburbs remain cooler and our residents are protected from the adverse effects of climate change. Cooler homes also means lower power bills as we do not need to go hard on our air conditioning. For some homes such as mine, it even means that it doesn't make sense to invest in solar because the shade (plus the solar duck) leads to a much longer payback period.

As you know, our Council continues to be in the headlines with regard to the State Government's housing policy changes and it is the desire for proper urban planning and tree canopy that drives us (along with infrastructure funding, community consultation, and heritage conservation).



Like other Northern Sydney Councils, Ku-ring-gai is also doing everything it can to promote the circular economy.

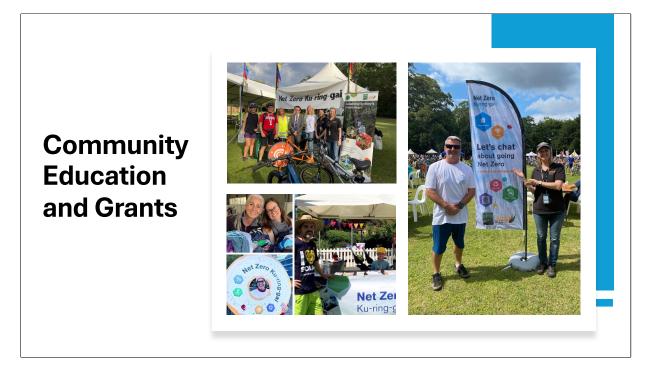
If you think back to the 1980's, we used to throw everything in one bin. Then came the vegetation and recycling bins in the 90's and 00's. But where we want to get to is a situation where goods are used for multiple cycles before going to the bin, or consumption is avoided altogether.

We run events where residents are encouraged to swap toys, clothing, and other equipment.

We promote compositing initiatives, use of glass over plastic, repairing equipment instead of binning.

We also work with other councils to provide a Community Recycling Centre in Artarmon which accepts difficult-to-dispose of goods.

We are conducting a Food Organics and Garden Organics trial to learn how we can encourage residents to adopt sustainable practices.



Community Education plays a vital role in helping our residents collectively reach Net Zero by 2040.

We engage our volunteers and Net Zero Champions to promote sustainability initiatives at community events and run educational workshops.

We also have Environmental Levy Grants and Net Zero Community Grants which promote environmental works, conservation, or waste / energy / water efficiency projects.

This session held by EnergyZE is also supported by a Council Net Zero Grant.

https://www.krg.nsw.gov.au/Council/Grants-and-sponsorship/Environmental-Levy-Grants



The Better Business Partnership is jointly operated by Ku-ring-gai, North Sydney and Willoughby.

The staff at BBP are fantastic – they help connect likeminded local businesses with monthly events, and they assist them with ideas to improve sustainability practices.

BBP also has a partnership with Greener for Business, which provides small businesses with tools to reduce their environmental impact and accelerate carbon emissions reduction.