



WAVERLEY COUNCIL

Getting to net zero: the relationship between targets and action



Acknowledgement of Country

Waverley Council would like to acknowledge the Bidjigal and Gadigal people, who traditionally occupied the Sydney Coast. We would also like to acknowledge Aboriginal Elders both past and present.



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An aerial photograph of a coastal city, likely Waverley in Sydney, Australia. The image shows a dense residential area with a mix of houses and apartment buildings, situated on a peninsula or coastal strip. The ocean is visible in the foreground with waves crashing against the shore. In the background, the city skyline of Sydney is visible under a blue sky with scattered white clouds. A semi-transparent teal box is overlaid on the right side of the image, containing the title and dates.

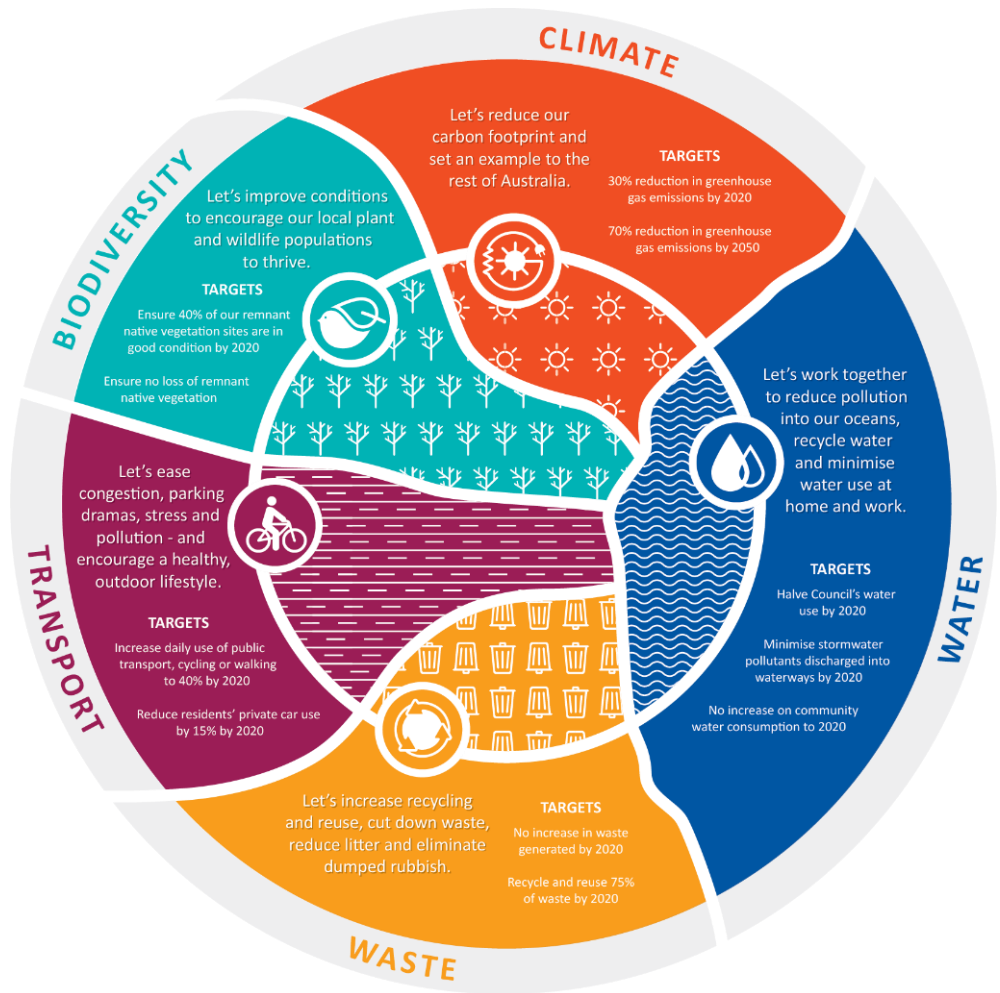
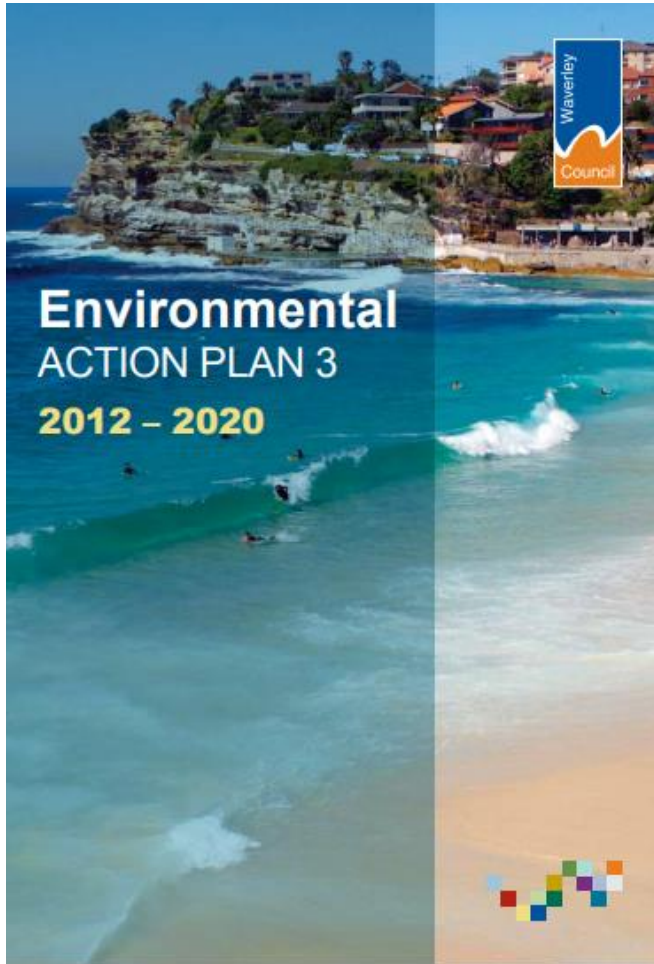
Environmental Action Plan

2018–2030

second
nature



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ON TRACK



ON TRACK WITH WORK NEEDED

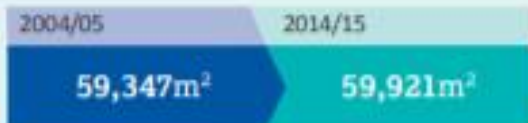


WORK NEEDED

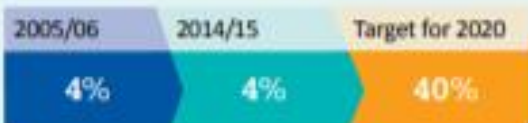
Biodiversity



Ensure **no loss of remnant vegetation** based on 2009/10 numbers



40% of remnant vegetation in **good condition** by 2020



Council Greenhouse Gas Emissions



30% reduction of 2003/04 **Council generated greenhouse gas emissions** levels by 2020



Community Greenhouse Gas Emissions

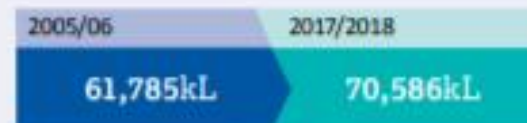
30% reduction of 2003/04 **greenhouse gas emissions** levels by 2020



Council Water Use



50% reduction of 2005/06 levels of **mains water consumption** by 2020



Community Water Use

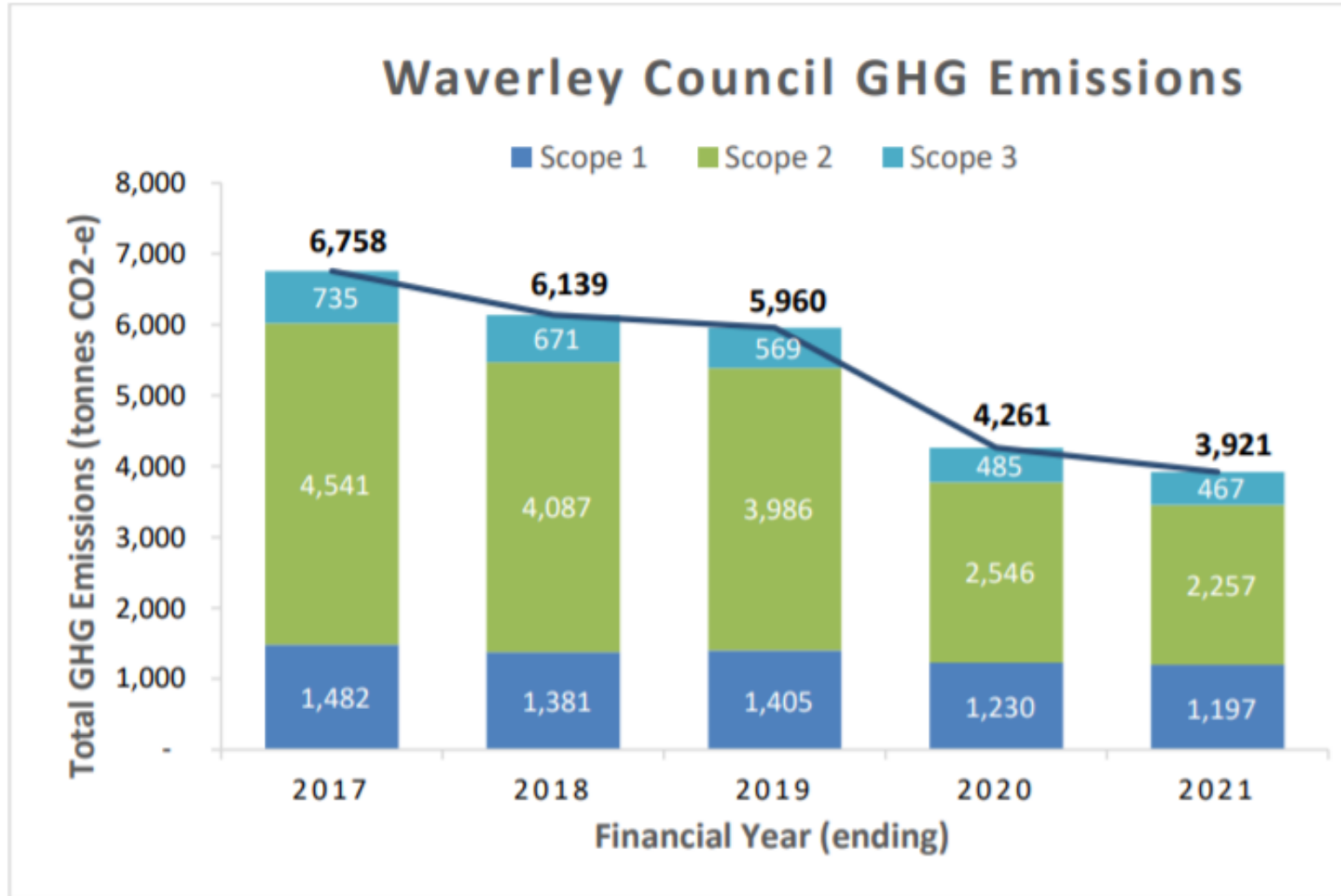
Zero increase of 2005/06 levels of **mains water consumption** by 2020



Climate and Biodiversity Emergency

- Waverley declared Climate & Biodiversity Emergency in December 2019
- Council has a 100% renewable energy target by 2030
- This week Council resolved- and budgeted - to go net zero by 2030

Council GHG



Transition fleet to electric

- Costed and budgeted transition of full fleet - including garbage compactors - to electric by 2030.



Renewable Energy

- Have purchased approximately 30% renewable energy for the last 3 years.
- Working to expand this to 100% RE in collaboration with SSROC and other Sydney Councils



Energy Efficiency

- Ongoing lighting upgrades (streetlighting and Council facilities).
- HVAC upgrades



Building specifications

- Council projects built to a very high standard. Eg Bondi Pavilion restoration 5 star green star, 70KW PV, recycled water, and reuse (embodied carbon)



Community GHG

Waverley LGA - Community Greenhouse Gas Emissions by Source 2013/14 - 2018/19

Scopes (1 + 2 + 3)



How will we achieve our environment targets?

- Leadership by example
- Advocacy & Policy
- Partnerships & Collaboration
- Capacity-building & Behaviour Change



BUILDING FUTURES

SUCCESS STORY



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Future Proofing Residential Development to Climate Change Project

Modelled BASIX buildings in the Eastern Beaches region to determine the effects of future climate change on the buildings:

- Thermal comfort
 - Energy and water use
 - Greenhouse emissions
- Modelled 3 climate scenarios:
 - 2020 (Baseline year);
 - 2030; and
 - 2070
 - Modelling was based on 5 building types comprising 217 dwellings.



This project has been assisted by the New South Wales Government and supported by Local Government NSW, and our council partners.



Thermal comfort & Energy results

- As the climate warms, houses will use significantly more energy for cooling than heating.
- In 2030, cooling loads increased by 70% on average above the Baseline Year for all dwelling types.
- In 2070, cooling loads increased by 308% on average.
- **Dwellings currently approved under BASIX will be unsuitable for occupation by 2070, without extremely high levels of mechanical cooling.**
- This will result in:
 - peak demand issues,
 - equity & affordability challenges; and
 - health risks during blackouts.



Solar My School

- Regional Environment Program with Randwick and Woollahra Councils
- **16 Councils now involved** (including 2 regional)
- **Over 160 schools** participating
- **> 4MW** will be installed by end of 2021
- **Installed 8% of total solar** in Sydney's eastern suburbs
- Replicable model: **Solar my Club** in 2020 (20 community organizations)



Electric Vehicle charging stations



Collaboration For Impact

COLLECTIVE IMPACT WORKSHOP



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Creating lasting change through aligned efforts