



MOSMAN

STATE OF THE ENVIRONMENT

Scorecard
2021-22

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INTRODUCTION

The Mosman Local Government Area

The Mosman LGA is located 8km north-east of the CBD on Sydney's lower north shore. It is one of Australia's premier suburbs with an unmatched harbourside setting. Occupying some 8.7 sq km, Mosman features stunning bays and beaches punctuated by rugged headlands, sandstone cliffs, bushland areas and foreshore parklands.

Mosman's undulating foreshore is approximately 24km in length and is emphasised by more than a dozen headlands. Mosman is home to many popular swimming and recreation beaches and bays including Chinamans, Balmoral The Spit, Cobblers and Clifton Gardens. The majority of the foreshore include significant rocky areas, bushland, including many protected areas, parks and tourist attractions, such as Sydney Harbour National Park and Taronga Zoo.

The 2022 data showed 28,329 people lived in Mosman, with the median age of residents 42 years old. Children aged 0-14 years account for 17.9% of Mosman's population and people aged 65 years and over equate to 18.8% of the population.

Mosman Council's vision is to preserve and enhance biodiversity, including Mosman's bushland, parks, tree canopy, beaches and marine environment through best practice operational and maintenance programs, infrastructure upgrades, regulatory practice and education campaigns. Council's aim is to also reduce its carbon footprint and minimise its waste to landfill.





State of the Environment Report

This report aims to show that Council is sustainable and is actively managing the use of the local environment whilst conserving and protecting it for the enjoyment of future generations.

The State of the Environment (SOE) Report provides an annual snapshot of the condition of the environment, current impacts on the environment and the Council's response to these impacts.

The 2021-2022 SOE Scorecard summarises key areas of operation and projects undertaken by Council to improve the local environment for residents and visitors alike.

Key Areas

This SOE focuses on seven key areas chosen by the State Government, these include:

- Climate Change and Air Quality
- Total Water Cycle
- Biodiversity
- Waste
- Transport
- Planning, Built Environment and Heritage
- Engagement and Education for Sustainability

Within these areas are a number of standard indicators used to measure change. These indicators align with the goals and objectives of Council's MOSPLAN and allow for change in environmental management to be measured over time.

CLIMATE CHANGE AND AIR QUALITY

Air Quality	2018-19	2019-20	2020-21	2021-22	Change from previous year
Number of air pollution complaints received by Council	12	5	2	15 [†]	Up ↑

Energy	2018-19	2019-20	2020-21	2021-22	Change from previous year
Electricity use Council operations (kWh)	1,523,945	1,388,213	1,223,908	994,696	Down ↓
Council energy and consumption (GJ)	7,254	6,240	5,594	5,293	Down ↓
GHG emissions from Council energy and gas use (tonnes CO ₂ -e)	1,414	1,206	1,082	894	Down ↓
Total residential and non residential electricity use for Mosman (MWh)	131, 834	130,397	130,130	128,574	Down ↓
Solar generation exported to the grid (MWh)	997	1,289	2,072	2,620	Up ↑

[†]Attributable to increase in companion animal ownership and suspected increase in residents working from home.

100% Renewable Electricity Purchase

Mosman Council has joined forces with 24 other participating councils in securing one of the largest renewable energy deals for local government. The councils will be supplied with energy by three NSW solar farms which was brokered by the Southern Sydney Regional Organisation of Councils (SSROC) with electricity retailer ZEN Energy. Worth approximately \$180 million, the landmark retail electricity agreement will deliver more than 214 gigawatt hours of electricity per year to 25 councils which collectively represent more than 3 million people or almost 38% of the NSW population, with 83% of their total electricity supply to be covered by renewable energy.

Council has opted for 100% renewable energy under the agreement which will help power council facilities and streetlights throughout the area. Electricity is Council's most significant source of emissions and reducing consumption has been a major priority. This deal will be a key plank in reaching Council's net zero emissions by 2030 target. Council has been steadily reducing emissions and has already cut its operational electricity emissions by 29% over the past decade and Council can now expect to see further significant cuts to emissions in coming years.

The agreement commences in July 2022 and runs to 2026, with an option to extend to 2030.

Household solar catches on

Mosman residents are increasingly introducing solar onto residential rooftops to help lower power costs and their carbon footprint while adding value and future-proofing the home.

Mosman's low 7% rate of installed solar is quickly catching up to the Sydney average of 20% following the installation of 214 new domestic systems over the past 18 months. This has resulted in the saving of 45,000 tonnes in CO₂ emissions over the solar installations' lifetimes.

When combined with a battery, solar power can take a home almost entirely off grid.

Council, which is moving to solar has already put an array on the Marie Bashir Sports Centre and will soon add a system at the Depot and the Civic Centre, is encouraging residents to make the change.

A range of resources is available on Council's website mosman.nsw.gov.au/solar or visit Zero Emissions Sydney North zerosydneynorth.org

TOTAL WATER CYCLE

Stormwater	2018-19	2019-20	2020-21	2021-22	Change from previous year
Number of gross pollutant traps (GPTs)	35	35	35	35	Stable ↔
Total gross pollutants removed from GPTs (tonnes)	305	260	350	380	Up ↑
Water Consumption	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total LGA potable water use (kilolitres)	3,262,836	3,059,919	3,506,105	2,815,493	Down ↓
Total residential potable water use (kilolitres per capita)	105	99	113	85	Down ↓
Total Council potable water use (kilolitres)	60,739	63,273	48,664	44,991	Down ↓

Restoring Riparian Habitat

Recent improvement works have been undertaken by council at Clifton Gardens to restore riparian vegetation. The creek functions as headwaters for the catchment and in recent times has reached capacity due to heavy sedimentation. This would regularly cause flooding to adjacent park and whilst the works will not eliminate this it will reduce the frequency. Significant earthworks were required to deepen the channel and provide ponds for future sediment capture. Site works also included the revegetation of disturbed creek banks with native sedges and other planting work using local native species directly adjacent to the creeks.

Drill Hall stormwater reharvest system

The underground tank was cleared of sediment and flanges were cleared of dirt. The UV disinfection system was upgraded, and a new water meter was installed. The system was also enhanced through the upgrade of a new 20,000 litre receiving tank at Rawson Oval. This allows increased run time for oval irrigation meaning less water from town water is required to complete the oval irrigation cycle.



BIODIVERSITY

Biodiversity Condition	2018-19	2019-20	2020-21	2021-22	Change from previous year
Weed assessments undertaken	22	15	16	19	Up ↑
Number of registered active bushcare volunteers	95	48	63	65	Up ↑
Bushcare Program volunteer hours	2,200	840	1,180	1,500	Up ↑
Number of active bushcare groups	20	18	22	20	Down ↓
Total number of native plants supplied to volunteers, contractors and residents	9,000	7,000	12,000	10,500	Down ↓
Number of native plant species recorded in LGA	490	490	490	499	Up ↑
Number of threatened flora species	3	3	3	2 [†]	Down ↓
Number of threatened fauna species	5	5	5	4 [†]	Down ↓
Number of endangered ecological communities	2	2	2	2	Stable ↔
Number of endangered fauna populations	0	0	0	0	Stable ↔
Number of feral fauna species targeted through programs (eg. rabbits, foxes, cats)	1	2	2	2	Stable ↔

[†]Based on survey for Mosman Council managed bushland sites only.

Flora and fauna survey

Mosman's flora and fauna and the ecological health of the area's bushland sites are stable and continuing to improve according to a comprehensive survey conducted over 2021/2022 summer.

The study provides a snapshot of the current biodiversity value and a condition assessment of selected Council-managed natural assets, with Council's consistent work program aided by dedicated Bushcare volunteers helping to ensure a positive outcome. The report also reported that native vegetation cover >90%+ in bushland sites has increased from 74% in 2019 to 80.5% in 2022.

Key findings and changes from the last survey in 2016 included 499 indigenous native plant species recorded, up from 490 in 2016, and 48 additional flora species since 2016 as well as 64 native fauna species recorded during the latest survey, with two threatened plant species and four threatened fauna species identified. Six bushland sites contained threatened ecological communities.

Posidonia australis restoration project development

Council started a seagrass (*Posidonia australis*) restoration project in Sydney Harbour. The motivation behind this project includes:

- Seagrass restoration is a proposed future action in the Mosman Council Climate Action Plan - Mitigation Strategy.
- Seagrasses are foundation species that underpin estuarine biodiversity and are important for climate change mitigation and resilience through carbon sequestration and shoreline stabilisation.
- *Posidonia australis* is the largest seagrass species in NSW and provides habitat for hundreds of species including important commercial and recreational species.
- *Posidonia australis* is highly effective at carbon capture (blue carbon) and shoreline stabilisation.
- *Posidonia australis* has declined dramatically in six NSW estuaries near Sydney (including Sydney Harbour) and is at risk of local extinction. It is officially listed as an Endangered Ecological Community by the EPBC Act.
- Community engagement to increase knowledge about seagrass habitats and build environmental stewardship: gathering to call local community to action, citizen science opportunity, school visits/excursions, 'Walk and Talk' with a marine scientist, Webinars, collaborating with local artists using art as a science communication tool.

Tree planting expands

Advanced tree planting programs are continuing to be completed across Mosman's streets and parks, complementing existing tree avenues and increasing canopy and habitat trees.

In addition to recent street and park planting programs, Council is also expanding planting to expansive hard surface areas to reduce the heat island effect.

Following the recent completion of several successful sites, such as Harbour Street and Brady Street, Council will be expanding the program in coming years to Military and Spit Roads.

Along with reducing heat island effects, the initiatives will rejuvenate tree canopy and increase habitat links throughout Mosman's streets and roads.

WASTE

Waste	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total waste to landfill, including general cleanup (tonnes)	6,695	7,372	6,921	6,996	Up ↑
Total waste to recycling including paper, co-mingled, metal and green waste (tonnes)	3,856	4,613	4,360	4,572	Up ↑
Total waste to landfill, including general cleanup per capita (kg)	217	238	223	247*	Up ↑
Total waste to recycling, including metal and green waste per capita (kg)	125	149	141	161*	Up ↑
Green waste diverted from landfill per capita (kg)	46	68	52	62	Up ↑
Total e-waste collected (kg)	34,189	24,958	23,744	12,888**	Down ↓

* Based on 2021 Estimated Resident Population of 28,329 as apposed to all others based on Estimated Resident Population of 30,981

** Only one e-waste event was held due to COVID

Reducing food waste

Residents were encouraged to reduce the amount of food waste going to landfill. More than \$10 billion worth of edible food in Australia goes to waste each year despite some simple steps which can help reduce the tally.

Easy steps to reduce food waste include planning weekly meals before shopping, preparing a shopping list after checking what's at home, measuring serving sizes and storing food in air-tight containers, using leftovers and reusing organic waste by worm farming or purchasing a discounted compost bin from Council. All Mosman residents received a flyer with these key tips. Other tips on reducing food waste are available at mosman.nsw.gov.au/waste, ozharvest.org and lovefoodhatewaste.com.au

Recycling election signage

Waste from the recent local government election was reduced following an innovative plan to donate material for recycling.

Dozens of corflutes, commissioned by prospective candidates, which would normally be destined for landfill were instead diverted to a recycling facility along with any other corflutes which were no longer needed by Council.

Large recyclers will normally only accept the signage if there is sufficient quantity because printing on the corrugated plastic makes it harder to recycle.

Cleaning up masks

Mosman residents were encouraged to participate in a nationwide "Citizen Science project" to measure the extent of Australia's face mask litter on Clean Up Australia Day on Sunday 6 March 2022.

In 2020, more than three billion single-use masks were thrown out across the globe every day, contributing to a significant portion of pandemic-related litter entering the environment. Thankfully in Mosman mask litter, whilst present, was minor.

Coffee pod recycling

An innovative pilot program was launched in Mosman to collect aluminium coffee capsules through kerbside recycling. In an Australian first, recyclers iQ Renew and CurbCycle recycled coffee pods with residents placing the pods in purpose made bags and placing them in their yellow bin.

The aluminium in collected coffee capsules, which is infinitely recyclable, is recovered and returned to aluminium producers, saving energy required for aluminium produced from scratch, while coffee grounds are used locally for commercial compost.

Kerbside collection of targeted recyclables, such as aluminium capsules, has been challenging due to the difficulty of separating materials. The use of a specially designed bag will ensure the capsules remain separate from other recycling materials for aggregating and sending on for processing through Nespresso's recycling scheme.

The trial was a success with a long-term rollout pending further assessment and approvals.

TRANSPORT

Transport	2018-19	2019-20	2020-21	2021-22	Change from previous year
Registered vehicles in Council LGA*	19,697	20,007	19,725	17,828*	Down ↓
Number of Council fleet vehicles	21	21	21	21	Stable ↔
GHG emissions from Council fleet vehicles (tonnes CO2-e)	66	32.25	35.7	45.616†	Up ↑
Number of carshare members as at 30 June 2020	996	1,177	1,280	1,596	Up ↑

* Source: RMS NSW, 2022 – Registration Snap Shot Report. Excludes motorbikes and trailers.

† Increase attributable to operational changes made to staff usage of cars and COVID-19 lockdown.

Electrifying Transport

Council's Evie Networks fast electric vehicle charger in Mosman Square Car Park has proven very popular, and will soon make a significant milestone with its 1000th charge! The charger has helped curb Mosman's carbon footprint and at the recent rate of usage saves about 500kg in emissions every week. Mosman Council has also embraced the shift to electric, taking delivery of its first fully electric fleet vehicle and launching a trial of an electric bike as part of its strategy to continue to reduce CO2 emissions. When factoring in greenhouse gas emissions from food production, by some estimates electric bicycles are the least carbon intensive mode of transport, even lower than walking, because of the energy efficiency of being on two wheels.

Collaborating with Community

Volunteers from Zero Emissions Sydney North (ZESN) held a stall at Mosman market on Saturday 5 March 2022. There were conversations with over 100 families about energy reduction in the home, superannuation, investments, solar installations and electric vehicles. The new Council electric vehicle and electric bike, and a Tesla were on display to the public. Uptake of EVs in Mosman is developing fast. The fast EV charger in the Council carpark was busy all day! Many thanks to the ZESN volunteers.



PLANNING, BUILT ENVIRONMENT AND HERITAGE

Population	2018-19	2019-20	2020-21	2021-22	Change from previous year
Estimated population of LGA – at 30 June (ERP)	30,877	30,981*	30,981	28,329	Down ↓
Residential density (persons per hectare)	35.70	35.80	35.80	32.56	Down ↓
Noise	2018-19	2019-20	2020-21	2021-22	Change from previous year
General noise complaints received by Council	33	112	82	103	Up ↑
Barking dog complaints received by Council	66	60	62	35	Down ↓
Development Applications	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total number of development applications received by Council	249	152	229	206	Down ↓
Number of development applications approved	206	118	180	168	Down ↓
Aboriginal Heritage	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total number of Aboriginal heritage sites	105	105	105	105	Stable ↔
Non Aboriginal Heritage	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total number of non-Aboriginal heritage items	481	481	481	481	Stable ↔
Number of built items	445	445	445	445	Stable ↔
Number of landscape items	34	34	34	34	Stable ↔
Number of archeological items	10	10	10	10	Stable ↔
Heritage conservation areas	13	13	13	13	Stable ↔

* Based on 2021 Estimated Resident Population of 28,329

Mosman Local Environmental Plan (MLEP)

The Mosman Local Environmental Plan (MLEP) saw the rezoning of around 2,400 properties in the Mosman Scenic Protection Area from Zone R2 Low Density Residential to C4 Environmental Living.

The rezoning is the outcome of years of campaigning by Council to protect this significant area from uncontrolled development being undertaken without Council approval through the NSW Government's Housing Code.

The provisions of the Housing Code permit private certifiers to approve developments, including new two storey houses, without an assessment of overshadowing, public or private view loss, loss of privacy, visual impact of the development, or any submissions from neighbours.

The C4 zone is used extensively throughout Sydney, particularly in scenic areas adjoining the harbour, and will ensure that Council can continue to maintain the high quality visual amenity that makes Mosman unique.

ENGAGEMENT AND EDUCATION FOR SUSTAINABILITY

Education	2018-19	2019-20	2020-21	2021-22	Change from previous year
Total number of environmental programs (workshops, events, surveys) delivered to the community.	65	40	46	46	Stable ↔
Total number of environmental programs (workshops, events, surveys) delivered to Council staff.	12	6	3	6	Up ↑
Number of HarbourCare volunteers	67	29	3	39	Up ↑

Workshops

Mosman Council hosted several environmental workshops and events for residents throughout the year. These workshops build our residents capacity to make sustainable changes within their household and the wider community. This year Council hosted several in person workshops including A Way to Less Plastic where attendees learnt how to create a less plastic driven lifestyle and Rethink Your Wardrobe with information on how to declutter and organise your wardrobe, complete with a sustainable exit strategy for clothes. In collaboration with Northern Sydney Councils, residents were able to attend online workshops including a screening of Regenerating Australia and The Big Switch with Saul Griffith, Electrify Everything! Information about our current workshops and events is available on the Events Mosman website.

Climate Action Community Consultative Committee

The Climate Action Community Consultative Committee was established in October 2020 to provide advice and recommendations to Council to assist in Climate Action by Council and its Community. The Committee meets four times a year and has helped in the preparation of Council's two strategic documents in response to climate change the 'Climate Action Plan - Mitigation Strategy' and the 'Climate Action Plan - Resilience and Adaptation Strategy'. In providing its advice and/or recommendations, the Committee also consider funding opportunities for Climate Action, facilitating and activating the community broadly and deeply around climate change and facilitating community capacity for action.

Zero Emissions Schools Network

Zero Emissions Sydney launched the Zero Emissions Schools Network in 2020 with the support of Mosman Council for all schools in Mosman LGA. The network helps schools save money, reduce emissions and embrace climate solutions. This year the network held regular meetings, sharing challenges, solutions and opportunities about how sustainability measures are integrated into the curriculum and into everyday life. For example, at one of the meetings staff and students from Sacred Heart Mosman gave an inspiring presentation on their sustainability journey including how the student representative council (SRC) are running Waste-free Wednesdays and reducing waste by 75% -from 8 red bins down to just 2 a day. Please contact Zero Emissions Schools if you'd like to get involved in the current Mosman Network.

Living Mosman Newsletters

Residents can keep up to date on Council's environmental and sustainability news with the Living Mosman Newsletter, distributed quarterly. Those interested can subscribe via the Council website to get the latest Living Mosman Newsletter delivered to your email inbox.

FUTURE DIRECTIONS

Mosman Council is committed to protecting the environment and has set a net zero target by 2030 for Council operations.

Future directions include

- Finalisation of Council's second strategic response to climate – the Climate Action Plan – Resilience and Adaptation Strategy
- Continuation of the Climate Action Community Consultative Committee
- Investigate Food Organic source separation and processing from domestic waste bins
- Increase street tree planting to increase canopy cover in areas susceptible to urban heat island effect
- Expand the HarbourCare and BushCare programs and encourage foreshore community engagement and connectiveness based on environmental protection works
- Continue bushland restoration works including increase in 90%+ native vegetation cover
- Install solar rooftop arrays at Council Depot and Council Civic Centre buildings
- Install further EV fast charging stations. Two at Raglan West carpark
- LED lighting upgrades at Vista Street carpark and Marie Bashir Sports Centre
- Investigate LED lighting upgrades for oval flood lights
- Community education and collaboration
- Continue Recycle Smart waste initiative
- Support and promote State Governments Single Use Plastic Ban



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Mosman
COUNCIL