



National Carbon Offset Standard Public Disclosure Summary

Randwick City Council 2017-18

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Declaration

Name of Certified Entity: Randwick City Council

Reporting Period: FY 17/18

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.

Signature		Date	29/01/2019
Name of Signatory: Peter Maganov			
Position of Signatory Manager Sustainability			

1. Carbon Neutral Information

1.1. Introduction

Randwick City is located in the eastern suburbs of Sydney, bounded by Waverley Council to the north, the Pacific Ocean to the east, Botany Bay to the south and the City of Sydney and Bayside Councils to the west.

Randwick City covers 37 square kilometres and includes the suburbs of Chifley, Clovelly, Coogee, Kensington, Kingsford, La Perouse, Little Bay, Malabar, Maroubra, Matraville, Phillip Bay, Randwick and South Coogee. Randwick City is known for its extensive parkland and open space areas including Centennial Park, Heffron Park and Kamay Botany Bay National Park; 29 kilometres of coastline with the magnificent Coastal Walkway linking ten beaches and eight ocean pools; excellent education and medical facilities including the University of NSW (UNSW), the Randwick Hospitals Complex and associated research and related services; a strong artistic and cultural focus; regionally significant recreational facilities; employment facilities such as Port Botany; and its proximity to the Sydney Central Business District and Sydney Airport.

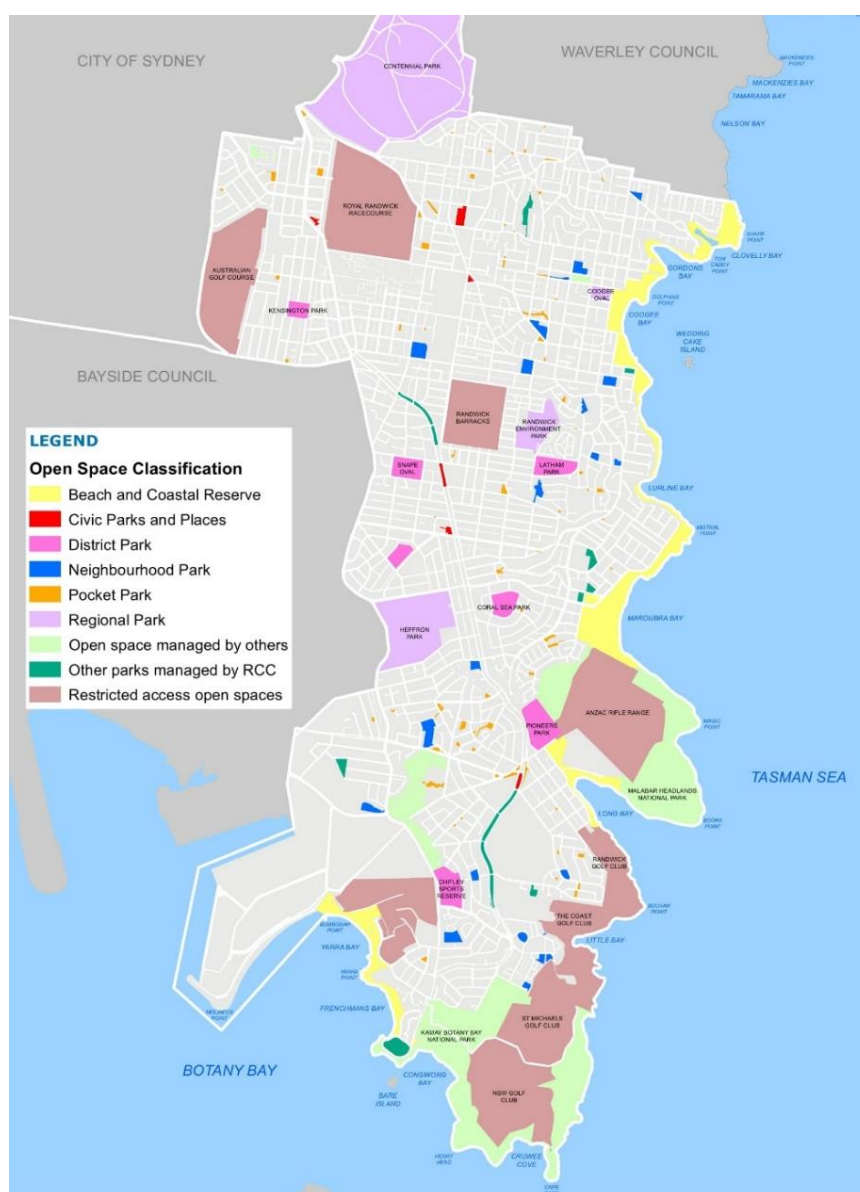


Figure 1 - Map of Randwick City

OUR COMMUNITY



151,993

Residents (2017
estimate; ABS)



58,702

In homes
(ABS census)



2.2%

Predicted rate
of growth



34

Median age

OUR GEOGRAPHY

37.4km²

Area

29km

Coastline

30%

Open space

58

Playgrounds

14%

Tree canopy cover
(UTS 2014)

58

Playgrounds

87

Parks

19

Sportfields

15

Community Centres

13

Suburbs

10

Beaches

8

Ocean pools

4

Golf courses

3

Libraries

2

National Parks

1

Leisure Centre

OUR ORGANISATION



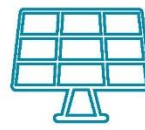
528

Permanent
employees



23

Council
buildings



12

Solar power
systems



18

Water recycling and
harvesting systems

Figure 2 - Our Numbers

1.2. Carbon Neutral

This inventory has been prepared for the financial year from 1 July 2017 to 30 June 2018.

The operational boundary has been defined based on an operational control test, in accordance with the principles of the National Greenhouse and Energy Reporting Act 2007. This includes all operations which are controlled by Randwick City Council.

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- National Carbon Offset Standard (NCOS) for organisations
- The GHG Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with "Method 1" from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and synthetic gases - hydrofluorocarbons (HFCs). No perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) or nitrogen trifluoride (NF₃) were detected within the operational boundary. All emission sources have been expressed as carbon dioxide equivalents (CO₂-e) using relative global warming potentials (GWPs).

1.3. Emission Sources within Certification Boundary

Quantified sources

- Transport Fuel
- Natural Gas
- Refrigerants
- Electricity - including street lighting
- Water
- IT Equipment
- Telecommunications
- Office Paper
- Stationery
- Merchandising
- Office Furniture
- Bitumen
- Chlorine
- Employee Commute

- Business flights
- Cleaning
- Food and Catering
- Postage and Couriers
- Printing
- Hotel Accommodation
- Advertising
- Taxis
- Waste – landfill Commercial
- Waste Landfill Garden and green
- Waste – Recycling

Excluded sources

- NA

2. Emissions Reduction Measures

2.1. Emissions Reduction Strategy

In 2018, Randwick Council committed to an in-principle objective of achieving net-zero greenhouse gas emissions by 2030. This target is in line with the Paris Agreement of 'keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius'.

A carbon neutral roadmap is currently being drafted to reduce Council's emissions in line with this target (to be completed in 2019).

The Renewable Energy Master Plan, adopted by Council in 2015, outlines how Randwick City Council can increase the uptake of renewable energy both for its own operations and across its municipality.

As greenhouse gas emissions from Council's electricity and gas consumption make up over 65% of Randwick Council's annual emissions, the transition to renewables has been a key focus of the Council's emission reduction journey.

The 2015 Renewable Energy Master Plan suggested that Council aim to have 15% of its total stationary energy demand supplied by renewable energy by 2025. This target was largely based on the installation of rooftop solar on Council assets.

In 2017/18, 4.5% of Council's stationary energy was supplied by renewable sources, namely rooftop solar and Green Power. With the implementation of a street lighting upgrade and a renewable energy power purchase agreement (PPA), this percentage will increase to 20% in July 2019.

Activities completed in the *current* reporting year (2017/18)

Status	Emission Source	Emission Reduction Action	Annual Emissions Savings
Completed in 2017/18	Asphalt	Replacement of 4,400 tonnes of hot asphalt with warm asphalt.	NA
Completed in 2017/18	Electricity	Works Depot lighting upgrade	113
Completed in 2017/18	Electricity	Purchase of 349 MWh of GreenPower	321
Completed in 2017/18	Electricity	Installation of monitoring hardware on rooftop solar	NA
Completed in 2017/18	Electricity	Maintenance and cleaning of rooftop solar	NA
Completed in 2017/18	Electricity	Installation of Voltage Optimisation Technology (VOT) at Bowen Library and Des Renford Leisure Centre	86
Completed in 2017/18	Transport	Purchase of 1 x electric bike for council staff	NA
Completed in 2017/18	Transport	Replacement of 109kL of diesel with 5% biodiesel	NA
Emission savings from activities completed in 2017/18:			520

Activities completed in the *previous* reporting years

Status	Emission Source	Emission Reduction Action	Annual Emissions Savings
Completed in 2010-2018	Electricity	Renewable energy from 180kw rooftop solar	260
Completed in 2010-2018	Electricity	Renewable energy from 2.4kw wind turbine	2
Completed in 2010-2018	Transport	Purchase of 1 x electric car and 2 x electric bike for council staff use	NA
Completed in 2010-2018	Gas	Purchase of solar blankets for outdoor pools	NA
Ongoing emission savings from previous activities:			262

Activities completed in the *next* reporting year

Status	Emission Source	Emission Reduction Action	Annual Emissions Savings
To be completed in 2018/19	Electricity	Bowen Library lighting upgrade	170
To be completed in 2018/19	Electricity	Street Lighting Upgrade	1,100
To be completed in 2018/19	Electricity	20% Renewable Energy Power Purchase Agreement (PPA)	1,890
To be completed in 2018/19	Electricity	Purchase of 1 x electric car for council staff use	NA
Emission savings from activities completed in 2018/19:			3,160

3. Emissions Summary

Table 1 – Emissions Summary

Scope	Emission Source	t CO ₂ -e
1	Transport Fuel: Fleet vehicles	1,958.1
1	Transport Fuel Biodiesel	0.5
1	Natural Gas	602.8
1	Refrigerants	16.9
2	Purchased Electricity NSW	3,972.7
3	Transport Fuel: fleet vehicles	109.7
3	Transport Fuel: biodiesel	11.0
3	Purchased Electricity	484.5
3	Natural Gas	149.7
3	Water	98.4
3	Electricity – street lighting	4,915.8
3	IT Equipment	65.6
3	Telecommunications	123.1
3	Office Paper	36.9
3	Stationery	22.8
3	Merchandising	55.6
3	Clothing	5.8
3	Office Furniture	61.8
3	Bitumen	697.6
3	Chlorine	12.7
3	Employee Commute	447.1
3	Business flights	41.1
3	Cleaning Services	75.9
3	Food and Catering	230.4
3	Postage	694.9
3	Couriers	42.4
3	Printing	114.1
3	Domestic Hotel Accommodation	11.0
3	Advertising	65.6
3	Taxi	2.9
3	Waste Landfill – commercial/ industrial	278.0

Scope	Emission Source	t CO ₂ -e
3	Waste Landfill – garden / green	31.8
3	Waste Recycling – co-mingled	25
Total Gross Emissions		15,462.1
GreenPower or retired LGCs		-283.5
Total Net Emissions		15,178.6

4. Carbon Offsets

4.1. Offsets Summary

Table 2 - Offsets Summary

Date of cancellation	Offset project, unit type and registry	Serial numbers	Vintage	Quantity
07 January 2019	Bundled Solar Power Project by Solararise India Projects PVT. LTD	6221-286574656-286589834-VCU-034-APX-IN-1-1762-01012017-31122017-0 https://vcsregistry2.apx.com/myModule/rpt/myrpt.asp?r=206&h=23578	07 January 2019	Bundled Solar Power Project by Solararise India Projects PVT. LTD
Total Offsets Cancelled				15,179
Net Emissions After Offsetting				0.0

4.2. Project Summary

The chosen offset project is the installation of 120 MW of solar photovoltaics (PV) in different states of India through Special-Purpose Vehicles (SPVs). Over the 10 years of first crediting period, the project will replace anthropogenic greenhouse gases (GHG) emissions estimated to be approximately 213,089 tCO₂e per year, thereon displacing 220,752 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian grid, which is mainly dominated by thermal/fossil fuel based power plants.

4.3. Offsets Purchasing and Retirement Strategy

Offsets are purchased and retired in arrears at the end of the reporting period. Any remaining offsets will be used in the following year's accounts in order to maintain certification.

To achieve certified carbon neutrality, Randwick Council purchases only verified carbon offsets eligible under the National Carbon Offset Standard. These offsets have been assessed as meeting the NCOS offset integrity principles.

Where possible, Randwick Council seeks to firstly reduce its own emissions at the source, and then secondly to procure offsets which deliver positive environmental, social and economic co-benefits.

In accordance with the National Carbon Offset Standard for Organisations, Randwick Council's approach to achieving certified carbon neutrality is:

1. Accurately measure its emissions
2. Continue to reduce its emissions
3. Offset any emissions which cannot be reduced
4. Publically report on the sources of emissions to identify areas for improvement
5. Independently audit the carbon account

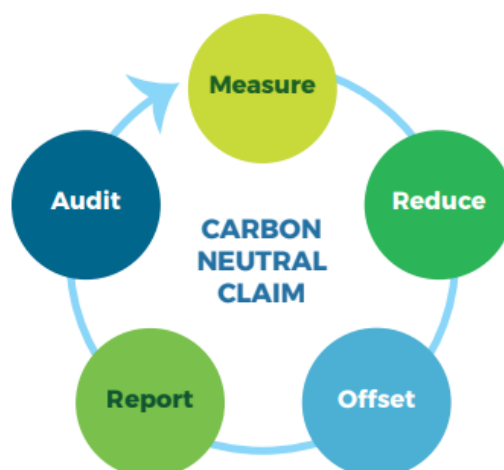


Figure 3 - Activities for Carbon Neutrality (source: NCOS for Organisations, 2017)

5. Use of Trade Mark

Trademark will be used in the following when and if approved for use.

Table 3 - Trade Mark Register

Where used	Logo type
Website	Certified organisation
E-news to residents and staff	Certified organisation
Printed magazines sent out to residents	Certified organisation
Email signatures	Certified organisation

6. Community Emission Reduction Actions

Randwick Council recognizes that its emissions, whilst significant, make up approximately 1.5% of the total annual emissions in its local government area. Community focused Sustaining Our City initiatives ensure that the Council and its residents work together to reduce their emissions. Current examples include:

6.1. Randwick Programs

Pool Efficiency Program

The Pool Efficiency Program is run in partnership with the UNSW Cooperative Research Centre for Low Carbon Living (CRCLCL). The program allows residents to receive a free audit of their pool's energy consumption and a tailored report on how their energy consumption can be decreased. Residents which install the suggested energy-efficient technology also receive a rebate of \$250 provided jointly by UNSW and Randwick City Council.

Sun Tenants

Over 45% of private dwellings in the Randwick LGA are rented. This is 40% higher than the average rate in the greater Sydney region. This can be a significant barrier for tenants looking to install solar due to the 'split incentive problem'. Sun Tenants is a finance tool which helps tenants install rooftop solar on rented properties by splitting the savings between the tenant and owner. The program is currently being trailed on Council buildings leased to local businesses, and will be promoted to the community in early 2019.

6.2. Regional Programs

Solar My Schools

A regional environmental program run across the 3 eastern suburbs councils (Randwick, Waverley, Woollahra) to assist local schools install quality rooftop PV systems. The program is now working with 60 of the 64 schools across the 3-Council region, and has installed 185 kW of solar to date (2018). A total solar potential of 1,375 kW is estimated across all schools in the region.

Our Energy Future

The Our Energy Future program is an initiative of the Southern Sydney Region of Councils (SSROC) to assist residents install rooftop solar and reduce their energy consumption. Through this program, 350 Randwick residents have attended information sessions, with almost 150 residents installing solar.

Compost Revolution

Compost has been running since 2010 as part of a collaborative project with neighbouring Waverley and Woollahra Councils. The program enables residents across the 3 Council areas to obtain discounted compost bins or worm farms as well as technical support and advice to encourage them to avoid placing organic food waste into their red-lidded rubbish bins. Through the program, Randwick residents have composted approximately 2,000 tonnes of organic material composted annually, resulting in an equivalent reduction in greenhouse gas emissions of approximately 500 tonnes.

EV Charging Stations

The first rollout of electric vehicle (EV) charging stations will include a total of 6 stations installed across the 3-council region in early 2019, 3 of which will be located within the Randwick LGA. These will be made available for public use and will be free of charge for the first 6 months to increase their usage.

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