## NET ZERO MOMENTUM TRACKER

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MONASH SUSTAINABLE DEVELOPMENT INSTITUTE



### **Acknowledgements**

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This report is part of a series of Net Zero Momentum Tracker[1] assessments focusing on sectors within the Australian economy. Net Zero Momentum Tracker is an initiative that demonstrates progress towards net zero greenhouse gas emissions in Australia. It brings together and evaluates climate action commitments made by Australian businesses, governments and other organisations.

Achieving net zero emissions prior to 2050 is a key element of the Paris Climate Agreement[3] to limit global temperature rise to well below 2 degrees Celsius above pre-industrial levels and to strive for 1.5 degrees.

### Local governments are helping Australia's citizens and businesses cut their emissions to zero

As the level of government closest to the community, Australia's 530 councils can influence individuals, households and businesses to reduce their emissions and adapt to climate change[4, 5].

This report assesses emissions reduction commitments and activities of 57 Australian councils, evaluating the extent to which they are on target to achieve net zero greenhouse gas emissions by 2050. The councils chosen are responsible for the largest local government areas<sup>1</sup> by population, collectively covering 52 per cent of Australia's population[6, 7].

Australian councils are responsible for urban planning, land use and building approvals, waste management and the provision of community infrastructure and services[5]. That makes them among Australia's most significant infrastructure owners and managers, with collective responsibility for over \$380 billion in infrastructure and land[8]. Councils can collectively deliver a substantial reduction in Australia's greenhouse gas emissions. By providing facilities and infrastructure; incorporating sustainability criteria into planning approvals; and implementing programs to change behaviour, councils can encourage uptake of renewable energy, minimise the use of fossil fuelled transportation, limit emissions from landfill and encourage greater energy efficiency in homes and businesses[9, 10].

Local governments can reduce emissions in two ways: directly through their operations and indirectly through their influence on communities. Activities or sources owned or controlled by local governments – such as waste management and government owned buildings, facilities, infrastructure and vehicles – create 'operational emissions'. All other emissions produced within a local government area from sources such as buildings, transport, waste, land use and industry result in 'community emissions'.

Typically, community emissions represent almost all (99 per cent) of the emissions from a local government area[9].

To be aligned to net zero by 2050, a local government should have a stated target to be net zero or carbon neutral by or before 2050 for both their operational and community emissions. This target needs be supported by interim emissions reduction targets and plans.

Our analysis found all of the local governments assessed are taking steps to reduce their operational or community emissions and many have net zero by 2050 targets or aspirations.

We found that 58 per cent of the local governments assessed have a target to reach net zero operational emissions by 2050, or have made emissions reduction commitments compatible with this goal. These 33 councils – four of which are already carbon neutral – represent 31 per cent of the Australian population.

<sup>&</sup>lt;sup>1</sup> A Local Government Area is a geographical administrative division that a local government is responsible for.

Thirty-seven per cent of the local governments assessed – representing 21 per cent of the Australian population – have a target, aspiration or have made emissions reduction commitments aligned with net zero emissions by or before 2050 for all or the majority of their community emissions.

Of the capital city councils, Sydney, Melbourne and Brisbane are already carbon neutral for their operational emissions. Adelaide and Darwin city councils, and the Australian Capital Territory Legislative Assembly (which has local government authority for Canberra) each have a goal of becoming carbon neutral for their operations by 2020, 2030 and 2040 respectively. The City of Adelaide, City of Sydney and City of Melbourne also have a net zero by 2050 target or aspiration for their community emissions. Canberra's community emissions are included in the ACT's legislated target to be net zero by 2045.

Of the 57 governments assessed, Moreland City Council, Northern Beaches Council and the ACT have targets to reach net zero by or before 2050, with supporting interim emissions reduction targets that address both operational and community emissions.

Local government action to address climate change can benefit both councils and the communities they serve. For example, it can reduce energy costs while providing a healthy, resilient and liveable environment. In addition, by setting ambitious net zero emissions targets for operational and community emissions compatible with the Paris Climate Agreement, Australian local governments can build momentum for a nationwide transition to net zero emissions.

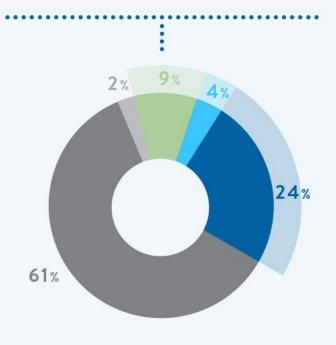
## Local government momentum towards net zero emissions

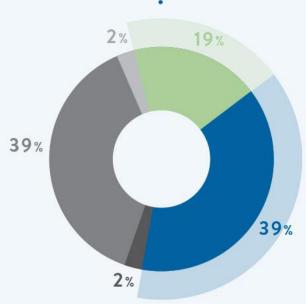
WE ASSESSED THE COMMITMENTS AND ACTIVITIES OF AUSTRALIA'S 57 LARGEST LOCAL GOVERNMENTS BY POPULATION TO EVALUATE ALIGNMENT WITH NET ZERO BY 2050 AND FOUND THAT:

+37%

have target or aspiration to reach net zero emissions by or before 2050 for all, or the majority, of their community emissions. +58%

have a target or aspiration to reach net zero by 2050 for their operational emissions.





#### COMMUNITY EMISSIONS

These are all of the emissions produced within a local government area, other than those controlled by council.

#### **OPERATIONS EMISSIONS**

These are activities or emissions sources owned or controlled by local governments.

FULLY ALIGNED

Net zero by or before 2050 target for all emissions

CLOSELY ALIGNED

Net zero by or before 2050 aspiration or target which covers most but not all emissions

 ALIGNED ASPIRATION/PATHWAY Net zero by 2050 aspiration, or an aligned interim target

- PARTIALLY ALIGNED
   Net zero emissions for a small proportion of emissions
- NOT ALIGNED

Undertaking emissions reduction activities, but these are not sufficient to reach net zero before 2050

NO TARGETS

No emissions targets or activities have been disclosed

#### **INFLUENCE**

## Local governments have significant influence on Australia's emissions

There are over 530 local governing bodies in Australia[11]. Local governments are often referred to as 'councils', but have a variety of other designations, which include 'city', 'borough', 'shire' and 'municipality'[12]. Local government forms one tier in Australia's three levels of government, alongside Australia's federal government and the eight state and territory governments[4].

The scope of local government authority is defined by state and territory acts of parliament. Typically, it includes responsibility for urban planning, land use and building approvals<sup>2</sup>, infrastructure (including local roads, footpaths, cycle routes, signage and lighting), waste management, community buildings and facilities (such as libraries, recreational facilities and parks) and community services (such as childcare and aged care)[5]. Councils are among Australia's most significant infrastructure owners and managers, with collective responsibility for more than \$380 billion in infrastructure assets and land[8].

As the level of government closest to the community, local governments can directly influence people, households and businesses. They are also closely connected to community issues and needs[12]. Councils are often on the front line of responding to climate change consequences, such as more frequent and extreme weather events, sea level rise and bushfires [10].

Australian local governments therefore perform an important role in helping their communities to mitigate and adapt to climate change. Given their authority and influence, local governments can implement a variety of measures that could collectively result in a significant reduction in Australia's greenhouse gas emissions. Specific examples include[5, 9, 10]:

- Reducing the emissions from local government owned and managed infrastructure, facilities and services by:
  - procuring energy from renewable sources or installing on-site renewable energy generation
  - phasing out gas- and diesel-powered facilities and appliances through electrification
  - installing energy efficient lighting, heating and air conditioning in buildings
  - installing energy efficient street lighting and transport infrastructure
  - encouraging active and public transport use through events and initiatives, construction of cycle routes, pedestrianisation and congestion charging
  - implementing electric vehicle charging infrastructure and encouraging electric vehicle use
  - supporting vehicle sharing schemes
  - transitioning local government owned and managed vehicles to low-carbon options
  - encouraging appropriate practices among local government staff through education, procedural changes, sustainability-linked performance criteria and behaviour change initiatives.
- Diverting organic waste and recycling from landfill
- Incorporating strict sustainability criteria into strategic and statutory planning processes and ensuring that urban

activities or developments that can occur within different areas of a municipality, which require planning or building permits issued by the council.

<sup>&</sup>lt;sup>2</sup> Australian councils are responsible for town planning and building approvals. Within state planning laws, councils typically develop local planning schemes. These schemes define specific

- development minimises car dependency[13]
- Providing funding and support for construction of large-scale renewable energy facilities
- Encouraging and facilitating renewable energy use within the community through information, subsidies, bulk-buy schemes (to secure discounts for domestic solar photovoltaic systems, solar hot water and energy storage equipment) and support for community-owned renewable energy generation initiatives
- Encouraging behaviours and action to address climate change through behaviour change programs, education and support for both citizens and businesses.

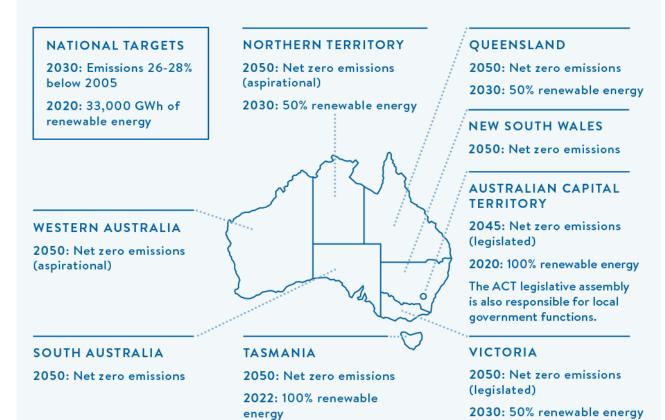
In addition to influencing emissions within their local government area, councils can have a much broader impact, through both their

own actions and in collaboration with other councils and organisations. For instance, the City of Melbourne, City of Port Phillip, City of Yarra and Moreland City Council have partnered with corporate, government, cultural and academic organisations through the Melbourne Renewable Energy Project to support construction of the Crowlands Wind Farm, which will provide renewable energy for the initiative's fourteen participants[14].

The influence of local government action can also extend to other levels of government. Councils can act as incubators: trialling and refining emissions reduction policies, initiatives and innovations prior to their deployment at a state or national level[15]. In addition, some councils have lobbied state governments for more ambitious climate action. All states and territories have now made a net zero by 2050 commitment. [16, 17].

## AUSTRALIAN NATIONAL, STATE AND TERRITORY COMMITMENTS

All eight Australian state and territory governments have committed to, or have stated aspirations to have net zero emissions by 2050 or sooner. These commitments and aspirations are summarised below.



#### GLOBAL AND NATIONAL CONTEXT

## Local governments worldwide are active in supporting climate goals

Estimates indicate that worldwide action to reduce emissions from urban areas could deliver 70 per cent of the abatement required to achieve the Paris Climate Agreement goals[18]. Globally, state, regional and local governments have taken strong action to address climate change and have led efforts to mitigate emissions[9, 10]. At the Paris climate talks in 2015 more than a thousand representatives from cities, regions and local governments came together at the Climate Summit for Local Leaders. This culminated in the Paris City Hall Declaration, a commitment to support the goals of the Paris Climate Agreement and transition to 100 per cent renewable energy[19].

Global organisations and programs that support local government action to address climate change include:

- The Global Covenant of Mayors (GCoM), a coalition of over 10,000 cities from 139 counties, which currently has an Australian membership of 26 local authorities[20]. This initiative provides knowledge, data, tools and technical support to its members and helps them secure investment to accelerate the transition to a net zero economy. GCoM members are required to measure, set targets and develop action plans to reduce community emissions. GCoM claims that the commitments of its members could collectively reduce global carbon dioxide emissions by '1.3 billion tons [1.18 billion tonnes]' per year. Fourteen of the 57 councils assessed by our analysis are members of GCoM.
- ICLEI Local Governments for Sustainability (ICLEI), a global network of over 1,750 local governments that facilitates knowledge exchange and collaboration between its members and advocates for policy change at a subnational level to support sustainable

- development[21]. Between 1997 and 2008, 233 Australian councils, representing over 80 per cent of the Australian population, took part in ICLEI's Cities for Climate Protection program[22]. It is estimated that this program helped councils and community members in Australia to avoid 18 million tonnes of carbon dioxide emissions and save \$95 million in energy costs. Twelve of the 57 councils assessed by our analysis are ICLEI members.
- C40 Cities, a global network of 94 cities with a focus on reducing greenhouse gas emissions to achieve the Paris Agreement goals, improving air quality and addressing climate change risks[23]. C40 Cities facilitates collaborative action between its members, conducts research to help cities prioritise climate initiatives and supports programmes addressing areas including finance, diplomacy, business and innovation, energy and inclusive climate action. The City of Melbourne and the City of Sydney are both C40 members.
- The Carbon Neutral Cities Alliance
   (CNCA), a global coalition of cities
   committed to reducing greenhouse gas
   emissions by 80 to 100 per cent by 2050 or
   sooner. To be eligible for membership,
   cities must have a community-wide carbon
   neutrality goal with a supporting
   implementation plan and dedicated budget
   and staff for its delivery. The City of
   Adelaide, City of Melbourne and City of
   Sydney are CNCA members.
- The Climate Emergency Declaration movement, an initiative that has gained recent prominence advocating for national, state and local governments to increase the momentum of climate action [24]. It campaigns for governments to declare a 'climate emergency' and thereby commit to mobilising resources 'at sufficient scale and speed to protect civilisation, the economy, people, species, and ecosystems'. This campaign began in Australia, and in 2016 Darebin City Council was the first local council to declare a climate emergency. Subsequently over 1,100 jurisdictions and local governments in 23 countries have declared a climate emergency, including 60

in Australia[25]. Seventeen of the 57 councils assessed in our analysis have declared a climate emergency.

In addition to these global initiatives, there are several Australian climate action programs and organisations working with local governments and communities to support the transition to net zero emissions, including:

- The Cities Power Partnership (CPP), a local government climate network run by the Climate Council of Australia[26]. CPP has a membership of over 115 councils, that make five climate action pledges related to either renewable energy, energy efficiency, transport or collaboration and influence. The CPP facilitates collaboration between local governments and provides members with information and tools to track emissions, energy and cost savings. Thirty-one of the councils assessed are members of the CPP.
- Take2, a pledge initiative led by the Victorian Government[27]. It provides a platform for individuals and organisations commit to actions to address climate change. Over 60 Australian councils, government and community organisations have taken a Take2 pledge, of which 15 were assessed in our analysis.
- The Coalition for Community Energy (C4CE), founded to support and promote the emerging community energy sector in Australia[28]. Community energy initiatives are renewable energy generation projects managed and fully or partially funded by citizen investors. C4CE provides tools and advice for community energy groups and advocates for greater support for community energy from state and local governments. In addition to community energy groups, C4CE's 86 members include non-profit organisations. educational institutions and government bodies. The City of Melbourne is a C4CE member.
- The New South Wales Government's Sustainability Advantage Program. This initiative acknowledges businesses and local government organisations that have acted to operate more sustainably. Its

- highest accolade recognises organisations that can demonstrate practices that achieve 'net zero impact on the environment'[29]. Twenty-eight local governments in New South Wales are members of, or have been acknowledged by, the initiative, six of which were included in our analysis.
- Beyond Zero Emissions (BZE), an independent research organisation that provides guidance and tools for community groups and councils through its Zero Carbon Communities program [30]. This includes an online tool that profiles community emissions for every council in Australia. BZE also conducts research to assess Australian council emissions reduction actions and the associated barriers and opportunities.

#### **ANALYSIS**

The Net Zero Momentum Tracker assessed the pledges, commitments and activities of the local governments responsible for Australia's 57 largest local government areas by population[6]. The collective population of these local government areas constitutes 52 per cent of the Australian population. Tables 4 and 5 in the Appendix list these local governments and details the sources and information used for each to conduct this analysis.

Local government emissions reduction commitments and targets either have an operational or community focus, depending on the emissions sources they address[9]:

Local government operational emissions
 (also known as 'council', 'internal' or 'corporate emissions') are emissions resulting from sources owned or controlled by the local government, or that are a consequence of local government activities. Sources include local government owned buildings and facilities, traffic infrastructure and street lighting, local government vehicles, and waste disposal activities.

 Community emissions (also known as 'municipal', 'community-wide' or 'city-wide emissions') are emissions produced within the geographical boundaries of a local government area from sources other than local government operations. Examples include emissions from residential and commercial property, transport, waste, industry, agriculture and land use.

Australian local government community emissions are far more significant than their operational emissions, usually representing almost all (99 per cent) of the emissions from a local government area[9].

## Australian local government net zero ambition

Table 1 provides an indication of net zero ambition for each of the 57 councils assessed. The assessment of net zero ambition is based on consideration of each local government's stated targets and aspirations, the alignment of these targets and aspirations with achieving net zero emissions by or before 2050, and any supporting emissions reduction activities or initiatives.

The table provides an indication of net zero ambition for operational emissions, community emissions and an overall assessment that combines the two. Table 6 in the Appendix provides supporting detail for this assessment.

The criteria used to assess net zero ambition are:

- ★ Fully aligned: The local government has a target to achieve net zero emissions or become carbon neutral by or before 2050. Alternatively, the local government is already carbon neutral and has committed to remain so. In both cases the local government also has interim emissions reduction targets aligned with mitigating avoidable emissions by or before 2050.
- ★ Closely aligned: The local government is fully aligned to net zero emissions or carbon neutrality (as defined above) for

- a significant proportion,<sup>3</sup> but not all, of its emissions. Alternatively, it has a comprehensive fully-aligned net zero target, but its supporting emissions reduction target is aspirational.
- Aligned aspiration/pathway: The local government does not have a target to achieve net zero emissions or become carbon neutral by or before 2050 but has an interim emissions reduction target aligned with this goal. Alternatively, the local government has an aspirational commitment to achieve net zero emissions or become carbon neutral by or before 2050. A local government would also be rated with this ambition if it is already net zero or carbon neutral but has not committed to remain so and does not have a supporting emissions reduction target aligned with eliminating avoidable emissions by or before 2050.
- Partially aligned: The local government is aligned to net zero emissions or carbon neutrality for a small proportion<sup>4</sup> of its emissions.
- Not aligned: The local government has made a commitment, pledge or is undertaking activities that will reduce its emissions but not in alignment with net zero before 2050, or the alignment is unclear due to insufficient information.
- No emissions reduction targets or activities: The local government has not disclosed any information regarding emissions reduction targets, commitments or activities.

Our assessment found that all of the 57 local governments considered are taking steps to reduce their operational and/or community emissions. Of the local governments assessed, Moreland City Council in Victoria, Northern Beaches Council in NSW and the ACT Legislative Assembly (which has state and local government accountability over Canberra), have a fully aligned net zero by 2050 target that addresses both operational and community emissions.

<sup>&</sup>lt;sup>3</sup> For the assessment of overall ambition, the targets assessed considered to encapsulate a "significant proportion" of emissions address both operational and community emissions with some minor exclusions.

<sup>&</sup>lt;sup>4</sup> For the assessment of overall ambition, the targets assessed considered to encapsulate a "small proportion" of emissions predominantly focus on operational emissions only.

Over half (58 per cent) of the local governments assessed (representing 31 per cent of the Australian population) have a netzero-by-2050 target or aspiration for their operational emissions, or have made emissions reduction commitments that align with this goal. Several of these local governments aim to achieve net zero operational emissions well before 2050. Of the state capital city councils, City of Sydney, City of Melbourne and Brisbane City Council are already operating carbon neutral. City of Adelaide has a goal of becoming carbon neutral by 2020, and Darwin City Council is aiming for carbon neutrality by 2030. The ACT Legislative Assembly, which has local government authority over the City of Canberra, has a goal of becoming carbon neutral for its operations by 2040.

Just over one-third (37 per cent) of the 57 local governments assessed (representing 21 per cent of the Australian population) have a target, aspiration or have made emissions reduction commitments aligned with net zero emissions by or before 2050 for all or most of their community emissions. Since community emissions represent almost all of the emissions produced within a local government area, this indicates that approximately two-thirds (63 per cent) of the local governments assessed have yet to make a net-zero-by-2050 commitment that addresses most of the emissions produced within their area of responsibility. Of the state capital city councils, the City of Adelaide, City of Sydney and City of Melbourne have a netzero-before-2050 target or aspiration for their community emissions. Canberra is included in the ACT's legislated target to be net zero by 2045.

### In terms of local government *operational emissions*:

- Eleven (19 per cent) of the local governments assessed have a fully aligned net-zero-by-2050 target supported by an interim emissions reduction target. Two of these (City of Melbourne and Moreland City Council) state that they are already carbon neutral.
- Twenty-two (39 per cent) have expressed an aspiration to achieve net zero emissions by 2050 or have made aligned emissions reduction commitments, but do

- not yet have a fully aligned net-zero-by 2050 target for their operational emissions. Alternatively, they are already net zero or carbon neutral but have not committed to remain so into the future, which is the case for the City of Sydney.
- One (two per cent) is partially aligned, since it has made a net-zero-by-2050 commitment for a small proportion of its operational emissions (Blacktown City Council).
- Twenty-two (39 per cent) are **not aligned**, since they have made no net-zero-before-2050 commitments for their operational emissions but are taking steps that will reduce these emissions.
- One (two per cent) has no disclosed emissions reduction targets or activities for its operational emissions (Townsville City Council).

#### In terms of *community emissions*:

- Five (nine per cent) of the 57 governments considered have a fully aligned net-zeroby-2050 target supported by an interim emissions reduction target (Northern Beaches Council, Moreland City Council, City of Adelaide, City of Sydney and the ACT Legislative Assembly).
- Two (four per cent) have a target that is closely aligned to net-zero-by-2050 (Cities of Melbourne and Newcastle), since they have fully aligned net-zero-by-2050 targets, but their supporting emissions reduction targets are aspirational.
- Fourteen (24 per cent) do not have a fully aligned net-zero-by-2050 target for their community emissions but have expressed an aspiration to achieve this goal or have made aligned emissions reduction commitments.
- Thirty-five (61 per cent) are not aligned, since they have made no net-zero-before 2050 commitments for their community emissions but are taking steps that will reduce these emissions.
- One (two per cent) has no disclosed emissions reduction targets or activities for its community emissions (Cumberland Council).

## Given the above, in terms of **overall net zero ambition**:

- Three (five per cent) of the 57 governments considered have fully aligned net-zero-by-2050 targets that address both operational and community emissions (Moreland City Council, Northern Beaches Council and the and the ACT Legislative Assembly, which has both state and local government accountability).
- Four (seven per cent) have targets closely aligned to net zero by 2050 (cities of Adelaide, Melbourne, Newcastle and Sydney), since they have a fully aligned net zero target supported by an interim emissions reduction target that addresses all their community emissions but not their operational emissions or encapsulates most, but not all of their community emissions. Alternatively, as is the case for the cities of Melbourne and Newcastle, they have a comprehensive, fully aligned net zero target but their supporting emissions reduction targets are aspirational.
- Fourteen (25 per cent) do not have a fully aligned net-zero-by-2050 target that addresses both their operational and community emissions, but have expressed an aspiration to achieve this goal or have made aligned interim emissions reduction commitments without a net zero commitment.
- Thirteen (23 per cent) are partially aligned, since they have made net-zero-by2050 commitments for a small proportion of their overall emissions. One of these (City of Casey) has a net-zero-before-2050 target for its operational emissions (typically a small proportion of emissions from a local government area) but not for its community emissions.
- Twenty-three (40 per cent) are not aligned, since they have made no netzero-before-2050 commitments for either their operational or community emissions but are taking steps that will reduce their emissions.

#### **TABLE 1: ASSESSMENT OF NET ZERO AMBITION**

The governments listed are those responsible for Australia's 57 largest local government areas by population, as reported by the Australian Bureau of Statistics[6]. The table groups the local governments by overall net zero ambition and then orders them by population within each group. This assessment of ambition is informed by Table 6 (included in the Appendix).

Overall net zero ambition	Operational emissions net zero ambition	Community emissions net zero ambition	Already operating carbon neutral?	Population 2018	Government
*	*	*	No	420,960	ACT Legislative Assembly
*	*	*	No	271,278	Northern Beaches Council
*	*	*	Yes	181,725	Moreland City Council
☆	•	*	Yes	240,229	City of Sydney
☆	*	☆	Yes	169,961	City of Melbourne
☆	•	☆	No	164,104	City of Newcastle
☆	•	*	No	24,794	Adelaide City Council
•		•	Yes	1,231,605	Brisbane City Council
•	<b>A</b>	•	No	366,534	Blacktown City Council
•	*	•	No	255,322	Wyndham City Council
•	*	•	No	252,217	City of Greater Geelong
•	*	•	No	251,311	City of Parramatta Council
•	•	•	No	216,071	Wollongong City Council
•	•	•	No	204,914	Lake Macquarie City Council
•	•	•	No	198,024	Inner West Council
•	•	•	No	181,289	City of Boroondara
•	*	•	No	176,196	Whitehorse City Council
•	•	•	No	165,822	Mornington Peninsula Shire
•	*	•	No	163,431	Kingston City Council (VIC)
•	*	•	No	161,609	Darebin City Council
•	•	•	No	27,762	City of Perth
<b>A</b>	•	•	No	342,047	Central Coast Council
<b>A</b>	*	•	No	340,419	City of Casey
<b>A</b>		•	No	326,615	Logan City Council
<b>A</b>		•	No	319,922	Sunshine Coast Council
<b>A</b>		•	No	213,638	Ipswich City Council
<b>A</b>		•	No	209,210	Penrith City Council
<b>A</b>	•	•	No	208,714	Brimbank City Council
<b>A</b>	•	•	No	166,094	City of Greater Dandenong
<b>A</b>	•	•	No	165,525	Cairns Regional Council
<b>A</b>	•	•	No	158,411	Georges River Council
<b>A</b>	•	•	No	158,173	Yarra Ranges Council
<b>A</b>	•	•	No	84,613	City of Darwin
<b>A</b>	•	•	No	53,684	City of Hobart
•	•	•	No	606,774	Gold Coast Council

Overall net zero ambition	Operational emissions net zero ambition	Community emissions net zero ambition	Already operating carbon neutral?	Population 2018	Government
•	•	•	No	459,585	Moreton Bay Regional Council
•	•	•	No	373,931	Canterbury Bankstown City Council
•	•	0	No	236,893	Cumberland Council
•	•	•	No	229,213	Sutherland Shire
•	•	•	No	224,394	Hume City Council
•	•	•	No	223,322	City of Whittlesea
•	•	•	No	223,304	Liverpool City Council
•	•	•	No	220,249	City of Stirling
•	•	•	No	210,612	Fairfield City Council
•	•	•	No	203,679	City of Wanneroo
•	•	•	No	200,077	Monash Council
•	0	•	No	194,072	Townsville City Council
•	•	•	No	174,378	Bayside Council
•	•	•	No	172,473	The Hills Shire Council
•	•	•	No	171,489	City of Onkaparinga
•	•	•	No	168,139	Campbelltown City Council
•	•	•	No	167,657	Toowoomba Regional Council
•	•	•	No	163,203	Knox City Council
•	•	•	No	160,031	City of Joondalup
•	•	•	No	156,863	Redland City Council
•	•	•	No	64,820	Wagga Wagga City Council
•	•	•	No	29,998	City of Kalgoorlie-Boulder

#### ★ Fully aligned

The local government has a target to achieve net zero emissions or become carbon neutral by or before 2050. Alternatively, the local government is already carbon neutral and has committed to remain so. In both cases the local government also has interim emissions reduction targets aligned with mitigating avoidable emissions by or before 2050.

#### Closely aligned

The local government is fully aligned to net zero emissions or carbon neutrality (as defined above) for a significant proportion, but not all, of its emissions. Alternatively, it has a comprehensive, fully aligned net zero target but its supporting emissions reduction target is aspirational.

#### Aligned aspiration/ pathway

The local government does not have a target to achieve net zero emissions or become carbon neutral by or before 2050 but has an interim emissions reduction target aligned with this goal. Alternatively, the local government has an aspirational commitment to achieve net zero emissions or become carbon neutral by or before 2050. A local government would also be rated with this ambition if it is already net zero or carbon neutral but has not committed to remain so and/or does not have an emissions reduction target aligned with mitigating avoidable emissions by or before 2050.

#### ▲ Partially aligned

The local government is aligned to net zero emissions or carbon neutrality for a small proportion of their emissions.

Not aligned

The local government has made a commitment, pledge or is undertaking activities that will reduce its emissions but not in alignment with net zero before 2050, or the alignment is unclear due to insufficient information.

 No emissions reduction targets or activities The local government has not disclosed any information regarding emissions reduction targets, commitments or activities.

# Australian local government climate commitments and activities

Tables 2 and 3 present an assessment of local government emissions reduction commitments and activities. This assessment specifically focuses on energy conservation<sup>5</sup>, renewable energy use, fuel switching<sup>6</sup> and emissions mitigation through non-energy measures (such as offsetting).

Table 2 is an assessment of commitments and activities to reduce local government operational emissions. Table 3 focuses on commitments and activities to reduce community emissions.

The criteria used for this assessment are:

- ★ Specific target that aligns with net zero emissions before 2050. For example:
  - Energy conservation: commitment equivalent to one of the EP100 pathways or similar[31].
  - Renewable energy: commitment to use 100% renewable energy.
  - Electrification/fuel switching: 100% shift to electrification and/or nonemitting fuels.
  - Non-energy: Offsetting of unavoidable emissions only.

- Activities to reduce emissions supported by a detailed strategy or target.
- Activities without a detailed strategy or target that will reduce emissions.
- Generic expression of intent or no information.

<sup>&</sup>lt;sup>5</sup> Energy conservation in the context of local governments include steps to encourage active transport (transport involving physical activity such as cycling and walking) to avoid use of motorised transport options.

<sup>&</sup>lt;sup>6</sup> Fuel switching in the context of local governments includes electrification of buildings and facilities, and initiatives to encourage use of non-fossil fuelled motorised transportation.

## TABLE 2: ASSESSMENT OF OPERATIONAL EMISSIONS REDUCTION COMMITMENTS AND ACTIVITIES

This assessment of local government operational emissions reduction activities and initiatives is informed by the pledges and commitments summarised in Table 5. This assessment specifically focuses on energy conservation, renewable energy use, fuel switching and emissions mitigation through non-energy measures (such as offsetting).

Government	Total reported emissions (tCO2e) <sup>7</sup>	Energy conservation	Renewable Electricity	Electrification/ fuel switching	Non-energy targets
ACT Legislative Assembly	-	☆	*	*	*
Adelaide City Council	-	☆	*	☆	*
Bayside Council	-	•	-	0	0
Blacktown City Council	39,492	☆	*	☆	0
Brimbank City Council	19,850	☆	☆		•
Brisbane City Council	635,352	☆	☆	•	*
Cairns Regional Council	33,960	☆	☆	•	☆
Campbelltown City Council	-	•	•	0	•
Canterbury Bankstown City Council	-	•	☆	•	•
Central Coast Council	-	•	•	•	•
City of Boroondara	23,397	☆		•	☆
City of Casey	53,576	•	☆	•	*
City of Darwin	10,881	•	•	•	0
City of Greater Dandenong	11,635	•	•	•	•
City of Greater Geelong	23,135	☆	☆	☆	*
City of Hobart	19,723	•	•	•	☆
City of Joondalup	15,982		-	•	-
City of Kalgoorlie-Boulder	59,394	0	-	0	0
City of Melbourne	35,914	•	*	☆	*
City of Newcastle	61,563	•	*	•	-
City of Onkaparinga	9,369	•	-	0	-
City of Parramatta Council	9,600	•	☆	☆	•
City of Perth	10,479	•	-	•	-
City of Stirling	24,806	•	-	•	0
City of Sydney	39,566	•	*	☆	*
City of Wanneroo	-	-	-	•	0
City of Whittlesea	29,026	•	•	•	•
Cumberland Council	-	•	•	0	0
Darebin City Council	8,540	☆	☆	•	0
Fairfield City Council	-	•		0	0
Georges River Council	-	•	*	0	0
Gold Coast Council	-	•	•	•	•
Hume City Council	66,500	☆	☆	☆	☆
Inner West Council	21,826	☆	*	☆	*
Ipswich City Council	-	•	0	•	•

<sup>&</sup>lt;sup>7</sup>The emissions data sources for each council are provided in Table 4.

Government	Total reported emissions (tCO2e) <sup>7</sup>	Energy conservation	Renewable Electricity	Electrification/ fuel switching	Non-energy targets
Kingston City Council (VIC)	18,600	☆	*	•	•
Knox City Council	5,257	•	•	•	☆
Lake Macquarie City Council	14,330	•	•	•	☆
Liverpool City Council	8,999	•	-	0	0
Logan City Council	141,538	•	-	•	*
Monash Council	25,786	•	•	•	•
Moreland City Council	20,485	☆	☆	☆	*
Moreton Bay Regional Council	-	•	•	0	•
Mornington Peninsula Shire	9,524	☆	☆	•	*
Northern Beaches Council	-	•	☆	•	•
Penrith City Council	25,379	•	•	•	О
Redland City Council	13,578	•	•	•	•
Sunshine Coast Council	206,303	•	*	•	•
Sutherland Shire	-	•	-	•	-
The Hills Shire Council	13,061	•	•	•	•
Toowoomba Regional Council	-	•	0	0	0
Townsville City Council	120,000	0	0	0	0
Wagga Wagga City Council	-	•	•	•	0
Whitehorse City Council	29,026				
Wollongong City Council	-	•	•	0	
Wyndham City Council	24,752	☆	☆	☆	*
Yarra Ranges Council	-	☆	☆	•	-

- ★ Specific target that aligns with net zero emissions before 2050. For example:
  - Energy conservation: commitment equivalent to one of the EP100 pathways or similar.
  - Renewable energy: commitment to use 100% renewable energy.
  - Electrification/fuel switching: 100% shift to electrification and/or non-emitting fuels.
  - Non-energy: Offsetting of unavoidable emissions only.
- ☆ Activities to reduce emissions supported by a detailed strategy or target.
- Activities without a detailed strategy or target that will reduce emissions.
- O Generic expression of intent or no information.

## TABLE 3: ASSESSMENT OF COMMUNITY EMISSIONS REDUCTION COMMITMENTS AND ACTIVITIES

This assessment of community emissions reduction activities and initiatives is informed by the pledges and commitments summarised in Table 5. This assessment specifically focuses on energy conservation, renewable energy use, fuel switching, and emissions mitigation through non-energy measures (such as offsetting).

Government	Reported emissions (tCO2e) <sup>8</sup>	Energy conservation	Renewable Electricity	Electrification/ fuel switching	Non-energy targets
ACT Legislative Assembly	3,916,100	☆	*	☆	☆
Adelaide City Council	976,151	☆	*	*	*
Bayside Council	-	-	•	0	-
Blacktown City Council	-	0	0	0	•
Brimbank City Council	-	☆	☆	•	•
Brisbane City Council	-	-	•		-
Cairns Regional Council	-	-	•	0	•
Campbelltown City Council	-	-	•	0	•
Canterbury Bankstown City Council	-	-	•	•	•
Central Coast Council	-	0	•	0	-
City of Boroondara	-	-		•	-
City of Casey	-	•			•
City of Darwin	-	•		0	•
City of Greater Dandenong	-	■.		•	•
City of Greater Geelong	4,559,000		•	•	*
City of Hobart	-		•	•	☆
City of Joondalup	-			•	-
City of Kalgoorlie-Boulder	-	-	0	0	0
City of Melbourne	5,049,262	☆	*	*	*
City of Newcastle	3,420,000	-	☆	•	-
City of Onkaparinga	-		•	0	•
City of Parramatta Council	2,792,966	-	☆		•
City of Perth	-		•		•
City of Stirling	-	-	•	0	•
City of Sydney	4,633,498	☆	☆	☆	•
City of Wanneroo	-		0	0	•
City of Whittlesea	2,373,000			•	•
Cumberland Council	-	0	0	0	•
Darebin City Council	1,155,000			•	•
Fairfield City Council	-	0	0	•	•
Georges River Council	-	-	•	0	0
Gold Coast Council	Approx. 9 million tonnes	•	-	•	•
Hume City Council	-	-	☆	•	
Inner West Council	1,133,695	☆	☆	☆	☆
Ipswich City Council	-	0		•	
Kingston City Council (VIC)	1,610,000	-	•	0	•

<sup>&</sup>lt;sup>8</sup> The emissions data sources for each council are provided in Table 4.

Government	Reported emissions (tCO2e) <sup>8</sup>	Energy conservation	Renewable Electricity	Electrification/ fuel switching	Non-energy targets
Knox City Council	-	-	-		-
Lake Macquarie City Council	4,549,837	-		•	-
Liverpool City Council	-		•		-
Logan City Council	-	0	•	0	0
Monash Council	-	•	•	0	•
Moreland City Council	-	☆	*	☆	☆
Moreton Bay Regional Council	-	-	-	•	-
Mornington Peninsula Shire	2,092,094		•		☆
Northern Beaches Council	Almost 2 million tonnes	-	-	•	-
Penrith City Council	-	0		0	-
Redland City Council	-			•	-
Sunshine Coast Council	-			•	-
Sutherland Shire	-		0		-
The Hills Shire Council	-		0		•
Toowoomba Regional Council	-	0	0	•	-
Townsville City Council	-	0		0	0
Wagga Wagga City Council	-				•
Whitehorse City Council	-		•	•	•
Wollongong City Council	-	0		0	0
Wyndham City Council	3,605,230	•	☆	•	☆
Yarra Ranges Council	-	•		•	0

- ★ Specific target that aligns with net zero emissions before 2050. For example:
  - Energy conservation: commitment equivalent to one of the EP100 pathways or similar.
  - Renewable energy: commitment to use 100% renewable energy.
  - Electrification/fuel switching: 100% shift to electrification and/or non-emitting fuels.
  - Non-energy: Offsetting of unavoidable emissions only.
- ☆ Activities to reduce emissions supported by a detailed strategy or target.
- Activities without a detailed strategy or target that will reduce emissions.
- O Generic expression of intent or no information.

#### **Case studies**

#### **CITY OF SYDNEY**

The City of Sydney covers only 26 square kilometres of land, but is home to over 240,000 residents. Due to the high proportion of medium and high density dwellings in the area, it is also one of Australia's fastest growing local government areas in terms of population[32]. The city aspires to be recognised as a global environmental leader. Its operations have been certified carbon neutral since 2011, and the council has a net-zero-by-2050 target for its local government area[33]. This community emissions target is supported by an interim target: a 70 per cent reduction on 2006 emission levels by 2030.

The council's vision for the transition is articulated through environmental strategies and detailed plans, which focus on energy, water, waste, transport and urban greening. The council has already started taking action to achieve its community emissions reduction goals. The City of Sydney encourages and facilitates net zero construction and retrofitting of residential apartment buildings. It delivers energy efficiency programs and grants for residents and businesses, factors low carbon criteria into planning controls and is investing \$10 million to accelerate the uptake of renewable energy[34].

In recognition of the strong collaboration required from all levels of government, the private sector and the community to achieve its local area goals, the City of Sydney has convened an external reference group. It consists of representatives from peak bodies, state government departments and utilities, who provide advice to support the development of the council's environmental strategies and action plans. The council has also established a 'citizen jury' consisting of fifty citizens that live, work or visit the area, who were selected at random for ongoing consultation on a range of issues including sustainability, housing and land use[35].

#### CITY OF ADELAIDE

The City of Adelaide aims to be the world's first carbon neutral city[36]. It is partnering with local and global industry, and offering community incentives to realise this transition. The council has undertaken emissions reduction pathway analysis, and determined that the city can reduce emissions by 65 per cent, from 2007 levels, by 2025. It plans to offset remaining emissions to achieve carbon neutrality.

In 2016, the City of Adelaide partnered with the State Government of South Australia to publish its five year 'Carbon Neutral Adelaide' action plan. The plan identified five priority emissions reduction pathways: energy efficient buildings, zero emissions transport, 100 per cent renewable energy, reducing emissions from waste and water and offsetting carbon emissions. These pathways are being facilitated through:

- upgrades to council buildings and infrastructure
- state government building efficiency incentives
- investment in public transport, electric vehicle infrastructure and vehicle sharing schemes
- incentives for installation of residential and commercial rooftop solar
- expanding waste collection and recycling services and infrastructure
- encouraging use of National Carbon Offset Standard recognised programs for businesses and events.

By acting as a leader in the adoption of environmental initiatives and projects, the City of Adelaide hopes to attract investment, generate opportunities for local business and even pave the way for new industries in its area.

#### WYNDHAM CITY COUNCIL

Wyndham City Council falls within one of Melbourne's designated growth corridors, and has a projected population forecast of over 240,000 by 2036. Despite rapid growth, a high commuter population and increasing development, the council aims to significantly reduce community emissions[37].

Emissions from electricity consumption currently constitute over 80 per cent of Wyndham's community emissions. The council is aiming for net zero emissions from electricity use by 2040. To achieve this goal the council plans to help the community reduce energy use and switch to renewables[38]. Proposals include:

- a community bulk buy program to provide discounted solar panels, battery storage and energy efficient appliances,
- grants and support for community energy projects,
- education programs to inform the community and businesses about energy bill reduction and solar power,
- access to solar and energy efficiency experts,
- planning scheme amendments and new guidelines for home builders to facilitate solar power installation and energy efficiency improvements.

To address other sources of community emissions, the council has implemented parking incentives and installed charge points to increase the uptake of electric vehicles. It has also launched a Green Money App, which rewards residents for making healthy, sustainable choices, such as walking, cycling and saving energy, with discounted movie tickets, coffee vouchers and similar incentives.

### **Next steps**

This report shows that Australian local governments are reducing emissions from their council operations and across their communities.

Local government action to address climate change can provide benefits both for councils and the communities they serve, through reduced energy costs, sustainable investment and employment opportunities and the provision of a healthy, resilient and liveable environment[39].

The next step for Australian local governments is to set net-zero-by-2050 targets, supported by interim emissions reduction targets and strategies that address both council operations and community emissions.

By setting ambitious net zero emissions targets that align operational and community emissions with the goals of the Paris Climate Agreement, Australian local governments can, through their example and influence on citizens, businesses, states, territories and the federal government, help to build momentum to achieve the transition to net zero emissions nationwide.

### **Appendix**

#### **COMPANIES AND DATA**

The local governments considered by this analysis include all Australian state and territory capital city councils, councils that meet the reporting threshold under the National Greenhouse and Energy Reporting Act 2007[40] (City of Wagga Wagga and City of Kalgoorlie -Boulder) and the largest councils in Australia in terms of population[6, 7]. Collectively, the councils analysed represent around 52 per cent of Australia's total population.

Table 4 lists these councils, the states or territories in which they are located and data sources consulted. Table 5 summarises the information used to inform the analysis. In addition to published pledges and targets that support a pathway to net zero emissions, the analysis considered other commitments and initiatives that could reduce emissions.

TABLE 4: GOVERNMENTS AND DATA CONSIDERED BY THE ANALYSIS

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
ACT Legislative Assembly	ACT	420,960	GCoM Climate Emergency CPP	ACT Climate Change Strategy 2019-25 Zero Emissions Government Framework ACT website - Leading the transition to a zero emissions future	ACT Climate Change Strategy 2019-25 CDP 2018-19
Adelaide City Council	SA	24,794	GCoM Climate Emergency CPP CNCA	City of Adelaide 16-20 Strategic Plan Carbon Neutral Adelaide Foundation Report Carbon Neutral Adelaide Action Plan 2016-2021 Shared Vision Statement 2019 Adelaide City Council website	Carbon Neutral Action Plan CDP 2018-19
Bayside Council	NSW	174,378	CPP TAKE2	Bayside Council Website	
Blacktown City Council	NSW	366,534	СРР	Annual Report 2018-19 Responding to Climate Change- Council Policy Responding to Climate Change Strategy Environment Sustainability Framework Our Blacktown 2036-Community Strategic Plan	Annual Report 2018- 19
Brimbank City Council	VIC	208,714	Climate Emergency	Greenhouse Reduction Strategy 2013-2023 Brimbank City Council website Climate Change Adaptation Framework 2017-2022	Greenhouse Reduction Strategy 2013-2024 (Revised)
Brisbane City Council	QLD	1,231,605	CPP	Brisbane. Clean, Green and Sustainable 2017-2031	Carbon Neutral Council website

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
				Brisbane Vision 2031 Carbon Neutral Council Website	
Cairns Regional Council	QLD	165,525	СРР	State of the Environment Report 2018 Cairns Regional Council Website Energy and Emissions Management Policy [2018] Cairns Regional Council Climate Change Strategy 2010-2015	State of the Environment Report 2018
Campbelltown City Council	NSW	168,139		Sustainability Strategy  Campbelltown City Council website  State of the environment report 2015-16 Annual Report 2018/2019	
Canterbury Bankstown City Council	NSW	373,931	Climate Emergency CPP	Environment Website Community Strategic Plan - CBCity 2028 Delivery Program 2018-2021 Operational Plan 2019-2020 Meeting minutes 2019	
Central Coast Council	NSW	342,047	Climate Emergency CPP	Central Coast Council. CCP 2018 Council Meeting 2019 Community Strategic Plan 2018- 2028 Operational Plan 2019-20 Central Coast Council Website	
City of Boroondara	VIC	181,289	CPP TAKE2	Our Low Carbon Future Strategy - Action Plan Update 2017-2020 City of Boroondara website	Our Low Carbon Future Strategy
City of Casey	VIC	340,419	CPP TAKE2	Emissions Management Plan 2018-2022 StreetsAhead. Integrated Transport Strategy Sustainability Plan Rethink Your Waste! City of Casey Waste Management Strategy 2016 – 2022	Emissions Management Plan 2018-2022
City of Darwin	NT	84,613	Climate Emergency CPP	Darwin 2030 - City for People. City of Colour. Strategic Plan.  Climate Change Action Plan 2011-2020  Have your say [2018]- City of Darwin City of Darwin website	Climate Change Action Plan 2011- 2020
City of Greater Dandenong	VIC	166,094	CPP TAKE2	Annual Report 2018-19 Annual Sustainability Report 2017-18 State of the Environment Report 2014-15 Greater Dandenong Sustainability Strategy 2016–2030	Annual Sustainability Report 2017-18

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
				City of Greater Dandenong Website	
City of Greater Geelong	VIC	252,217		Zero Carbon Emissions Strategy 2017-2020 Low Carbon Growth Plan for Greater Geelong 2015 Update Greater Geelong website	Zero Carbon Emissions Strategy 2017-2020
City of Hobart	TAS	53,684	GCoM Climate Emergency	City of Hobart Climate Summary 1999–2019 Energy Savings Action Plan 2018- 20 Greenhouse Gas Emissions and Energy Use 2017/18 City of Hobart Managing Hobart's Carbon Footprint -Background paper 2017 City of Hobart. Capital City Strategic Plan 2019–29 Waste Management Strategy 2015-2030 Environment Website	City of Hobart Managing Hobart's Carbon Footprint - Background paper 2017
City of Joondalup	WA	160,031	GCoM	City of Joondalup website Joondalup 2022-Strategic Community Plan 2012-2022 Climate Change Strategy 2014- 2019 Annual Report 2018-2019	Annual Report 2018- 2019
City of Kalgoorlie - Boulder	WA	29,998	CPP	City of Kalgoorlie –Boulder website	NGER 2017-2018
City of Melbourne	VIC	169,961	GCoM Climate Emergency TAKE2 C4CE C40 CNCA	Climate Change Mitigation Strategy 2050 Emissions Reduction Plan 2016- 2021 Council Plan, Goal 1 – A city cares for its environment Transport Strategy 2030 Melbourne City Council website	Climate Change Mitigation Strategy 2050 CDP 2018-19
City of Newcastle	NSW	164,104	GCoM Climate Emergency CPP	Community Strategic Plan: Newcastle 2030 Newcastle 2020. Carbon and Water Management Action Plan Annual Report 2018-19 City of Newcastle website Newcastle Transport Strategy 2016	Newcastle 2020. Carbon and Water Management Action Plan
City of Onkaparinga	SA	171,489	CPP	City of Onkaparinga website Greenhouse Gas Accounting Summary 2017/18 Climate Ready Onkaparinga 2019 Climate Change Snapshot 2019 Waste and recycling 2017-2021	Greenhouse Gas Accounting Summary 2017/18
City of Parramatta Council	NSW	251,311	СРР	Environmental Sustainability Strategy 2017-18 Progress Report Environmental Sustainability Strategy 2017 Environmental Sustainability Strategy website	Environmental Sustainability Strategy 2017-18 Progress Report
City of Perth	WA	27,762	GCoM	Environment Strategy Perth City Council Sustainability website Towards an energy resilient city Environmental Snapshot- July 2017	Environment Strategy

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
City of Stirling	WA	220,249		Annual Report 2018-19 Climate Change Adaptation Plan Corporate Business Plan 2018- 2022 Strategic Community Plan 2018 - 2028 City of Stirling website	Annual Report 2018- 19
City of Sydney	NSW	240,229	GCoM Climate Emergency CPP C40 CNCA	Green Environmental Sustainability Progress Report (January to June 2019) Environmental Action Plan 2016- 2021 City of Sydney Website Sustainable Sydney 2030 Community Strategic Plan 2017– 2021	Environmental Action Plan 2016-2021 CDP 2018-19
City of Wanneroo	WA	203,679		Energy Reduction Plan 2017-2020 Local Environmental Strategy 2019 Climate Change Adaptation and Mitigation Strategy 2016-2020 Annual Report 2017-18 Strategic Community Plan 2017/2018 to 2026/2027	
City of Whittlesea	VIC	223,322	TAKE2	Corporate Greenhouse Gas Emissions Report 2014-2015 Environmental Indicators Report 2016 Environmental Sustainability Strategy 2012-2022 and Progress Summary 2012-2016	Corporate Greenhouse Gas Emissions Report 2014-2015 Environmental Sustainability Strategy 2012-2022
Cumberland Council	NSW	236,893	CPP	Environmental Management Framework 2019 Cumberland Council Website	
Darebin City Council	VIC	161,609	GCoM Climate Emergency TAKE2	Annual Report 2018-19 Climate Emergency Plan 2017- 2022 Darebin City Council website	Climate Emergency Plan 2017-2022
Fairfield City Council	NSW	210,612		Fairfield Website Integrated Transport Strategy Action Plan 2011 2017/18-2020/21 Delivery Program Fairfield City Plan 2012-2022 2016-2026 Fairfield City Plan 2019-2020 Operational Plan	
Georges River Council	NSW	158,411	СРР	Annual Report 2017-2018 Georges River website Delivery plan and operational plan 2018-2019 Council Meeting Minutes 25/11/2019	
Gold Coast Council	QLD	606,774		Gold Coast 2022 Gold Coast 2020 Bringing the City Vision to life Our Natural City Strategy Gold Coast Council website Gold Coast City Transport Strategy 2031 Solid waste strategy 2014-2024	Gold Coast Climate Change Website

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
Hume City Council	VIC	224,394	TAKE2	Hume City Council Greenhouse Action Plan 2018-2022 Sustainability Report 2019	Sustainability Report 2019
Inner West Council	NSW	198,024	Climate Emergency CPP	Inner West website - Our Energy Future Climate and Renewables Strategy Pathway to zero emissions (2019) Pathway to a Carbon Neutral Council (2018) Our Inner West 2036	Pathway to a Carbon Neutral Council (2018) Inner West Pathway to Zero Emissions (2019)
Ipswich City Council	QLD	213,638	CPP	City of Ipswich Sustainability Strategy 2019 City of Ipswich Nature Conservation Strategy 2015 Ipswich City Council. Making it Happen	
Kingston City Council (VIC)	VIC	163,431	TAKE2	Climate Change Strategy 2018- 2025 Kingston City Council website Annual Report 2018-2019	Climate Change Strategy 2018-2025
Knox City Council	VIC	163,203		Know Climate Change Response Plan 2012-2022 Know Community and Council Plan 2017-2021 Knox Annual Report 2018-19	
Lake Macquarie City Council	NSW	204,914		Lake Macquarie City: State of the Environment Report 2018-2019 Environmental Sustainability Action Plan 2014-2023  Energy resilience plan. Strategies for an energy resilient future Lake Macquarie City Council website	Lake Macquarie City: State of the Environment Report 2018-2019
Liverpool City Council	NSW	223,304		Annual Report 2018-2019 Liverpool City Council Energy Management Plan 2012 State for the Environment (Annual Report 2015-16) Delivery Program 2017-2021 & Operational Plan 2019-2020 Liverpool City Council Website	Liverpool City Council Energy Management Plan 2012
Logan City Council	QLD	326,615	CPP	Carbon Reduction Strategy and Action Plan Logan City Council website	Carbon Reduction Strategy and Action Plan
Monash Council	VIC	200,077	CPP TAKE2	Environmental Sustainability Strategy 2016-2026 Annual Report 2018-19 Council meetings minutes 2019 Monash Council website	Environmental Sustainability Strategy 2016-2026
Moreland City Council	VIC	181,725	GCoM Climate Emergency CPP TAKE2	Zero Carbon Moreland Action Plan 2020/21-2024/25 Zero Carbon Evolution – Refresh to 2020 Zero Carbon Moreland 2040 Framework Corporate Carbon Reduction Plan: On track to zero carbon 2015-2020 Moreland City Council website	Corporate Carbon Reduction Plan 2015- 2020 Zero Carbon Moreland Action Plan 2020/21-2024/25

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
Moreton Bay Regional Council	QLD	459,585		Annual Report 2018/19 MBRC Planning Scheme Roadmap for a changing climate 2013-2016	
Mornington Peninsula Shire	VIC	165,822	GCoM Climate Emergency CPP TAKE2	Carbon Neutral Policy 2016 Our Peninsula 2021: Council Plan 2017-2021 Climate Change Community Engagement Strategy Mornington Peninsula Shire Website Annual Report 2018-19 Energy and Greenhouse Management Improvement Plan 2013	Energy and Greenhouse Management Improvement Plan Climate Change Community Engagement Strategy
Northern Beaches Council	NSW	271,278	Climate Emergency CPP TAKE2	Protect. Create. Live Northern Beaches Environment and Climate Change Strategy 2040 Community Strategic Plan 2018- 2028 Northern Beaches Council Website Delivery Program 2019-2023	Protect. Create. Live Northern Beaches Environment and Climate Change Strategy 2040
Penrith City Council	NSW	209,210	GCoM CPP	Annual Report 2018-19 Sustainability Strategy 2015-21	Penrith Annual Report 2018/19
Redland City Council	QLD	156,863		Redland City Council Corporate Plan 2018-23 Redland 2030 Community Plan Annual Report 2018-2019 Green Living Policy 2025 Staff passenger vehicle fleet policy Redland City Council website	Annual Report 2018- 19
Sunshine Coast Council	QLD	319,922	СРР	Organisational Environmental Sustainability Benchmarking Annual Report 2018–2019 Environment and Liveability Strategy 2017 - PART A, B and C Sunshine Coast Council website	Organisational Environmental Sustainability Benchmarking Annual Report 2018– 2019
Sutherland Shire	NSW	229,213		Our commitment to the community 2019. Delivery Plan 2017-2021 and Operational Plan 2019-2020. Our Community Plan Environment and Sustainability Report 2011/2012 Annual Report 2018-19	
The Hills Shire Council	NSW	172,473		Annual Report 2017-18  2012-2017 State of the Environment Report The Hills Shire - Awsolar case study 2015	Annual Report 2018- 19
Toowoomba Regional Council	QLD	167,657		Toowoomba Region Corporate Plan 2019-2024 Annual Report 2018-19 Toowoomba Regional Council Website	
Townsville City Council	QLD	194,072		Environmental Policy (Current version reviewed 2018) Townsville City Council Website	Greenhouse Audit & Energy Cost Reduction Plan

Government	State	Population 2018	Pledge Platforms and Initiatives	Other sources	Emissions data sources
				Greenhouse Audit & Energy Cost Reduction Plan	
Wagga Wagga City Council	NSW	64,820	СРР	Annual Report 2018/2019 Annual Report 2016/2017  Community Strategic Plan 2040 Wagga Wagga Local Environmental Plan 2010 City of Wagga Wagga - Environment Website Annual Report to the Community 2010/11	NGER 2017-2018
Whitehorse City Council	VIC	176,196	TAKE2	Climate Change Adaptation Plan 2011 Whitehorse City Council Sustainability Strategy 2016 – 2022 Corporate Greenhouse Gas Emissions Report Whitehorse City Council website	Corporate Greenhouse Gas Emissions Report
Wollongong City Council	NSW	216,071	GCoM Climate Emergency	Annual Report 2017-18 Environmental Sustainability Strategy 2014 - 2022 Emissions reduction target - Global Covenant of Mayors 2019 Our Wollongong 2028 Community Strategic Plan Wollongong City Council website	
Wyndham City Council	VIC	255,322	GCoM CPP TAKE2	Environment and Sustainability Strategy 2016-2040 Smart City Implementation Plan 2019 Greenhouse Action Plan 2018- 2021	Greenhouse Action Plan 2018-2021 CDP 2018-19
Yarra Ranges Council	VIC	158,173	Climate Emergency CPP	Adapting to a changing climate and energy future strategy Environment Strategy 2015-2025 Yarra Ranges website	

#### PLEDGES AND COMMITMENTS

TABLE 5: GENERAL EMISSIONS-REDUCTION COMMITMENTS AND ACTIVITIES

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
ACT Legislative Assembly	Zero emissions from Government operations by 2040. Reduce emissions from Government operations by more than 33% by 2025 (from 2020 levels).	Shift to high efficiency, all-electric and climate-wise Government buildings and facilities. By 2020–21 the Government will source all its electricity from renewable sources Transition to a zero emissions Government passenger vehicle fleet and a zero emissions bus fleet (where fit for purpose). The Government will invest a "social cost of carbon" equivalent to emissions from its operations into new emission reduction initiatives.	The ACT has committed to reducing emissions (from 1990 levels) by: - 40% by 2020 - 50-60% by 2025 - 65-75% by 2030 - 90-95% by 2040 -100% (net zero emissions) by 2045.	Expand the Energy Efficiency Improvement Scheme. Encourage the use of smart financing by medium and large businesses and organisations to support energy efficiency improvements and zero emissions vehicle fleets. Be powered by 100% renewable electricity by 2020. Explore approaches to promoting active travel and public transport use. The ACT landfill at Mugga Lane is fitted with a facility that captures the methane and uses it to generate electricity. Goals: reduce waste generation and emissions from waste treatment
Adelaide City Council	Zero net carbon emissions by 2020 (aim to be certified by NCOS).	Improve building standards to perform better. Change streetlights to LED lights. Installation of solar panels on the council's buildings with aim to switch to 100% renewable energy by 2020. Invest in electric fleet vehicles, charged on renewable energy by 2020. Eliminate plastic straws from public events and divert waste from landfill through increased recycling.	Accredited carbon neutral by 2025 or earlier. Reduce emissions by 35% by 2020 (from 2007 baseline). Offset remaining emissions.	Drive investment that improves energy efficiency in the city.  Aim to switch to 100% renewable electricity for the city through large-scale generation and storage throughout the state as well as encourage the uptake of household solar.  Work towards zero-emissions transport.  Improve waste management for the community.
Bayside Council		Introduction of energy efficiency programs and promotion of renewable energy.		Partner in the development of the <i>Our Energy Future</i> program to promote tips to save energy, install solar power or obtain home energy assessments.  Aspiration to divert at least 85% of waste to landfill by 2030.
Blacktown City Council	Achieve net-zero emissions from electricity, fuel and gas use by 2030.	Energy efficiency upgrades for council assets and street lights. Installation of on-site solar PV. Investigate strategies to bring transport fuel emissions to net zero. Improve fuel efficiency of the fleet and support the transition to electric vehicles running on renewable energy.	Will work with the community to achieve the NSW aspirational targets of net zero emissions by 2050.	Improve household waste diversion from landfill. Estimate potential for residential solar in the community.
Brimbank City Council	Reduce emissions by 50% below 2011 levels by 2022/2023.	Upgrade buildings and street lights energy efficiency. Implementation of renewable energy generation on council sites.		Delivery of residential energy efficiency and solar PV programs. Prioritisation of active transport and low-carbon solutions – support the uptake of electric vehicles.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
		Increase waste diversion from landfill to reduce waste emissions.		Investigate community renewable energy solutions.
Brisbane City Council	Carbon neutral since 2016 (NCOS certified).	Energy efficiency and renewable energy investments. Purchase renewable electricity for operations and explore low-carbon solutions for vehicle fleet. Purchases carbon offsets for remaining emissions.	Average household emissions from energy, transport and waste will reach 6 tCO2-e per year by 2031.	Energy efficiency education programs tailored to specific age groups.  Investigate resource recovery and renewable energy precinct project.  Facilitate electric vehicle infrastructure.  Reduce emissions from landfill through better waste management.
Cairns Regional Council	Reduce Council's 2007/08 greenhouse gas emission levels by 50% by 2020.	Reduce emissions through energy and fuel efficiency, renewable energy installations and landfill gas management.		Funding pool for community-led projects that deliver sustainability initiatives. Funded solar PV installations in the community. Active transport initiatives.
Campbelltown City Council		Energy efficiency and HVAC upgrades in council facilities. Solar power projects. High rate of waste diversion from landfill.		
Canterbury- Bankstown City Council		Minimise energy consumption through energy efficiency upgrades and LED replacements in buildings.  Deal signed to guarantee 20% of electricity purchased is from renewable sources and aiming to achieve at least 30% by 2021  Introduction of electric vehicles to the fleet.  Increased recycling.		Support households and community to save energy and reduce emissions: discounted energy efficient lighting, solar PV rebates and accredited green power purchases.  Advance the development of a large scale solar microgrid in the City by 2021.  Promotion of active and public transport.  Aim to reduce amount of waste to landfill.
Central Coast Council		Enable energy efficient development and incorporate energy standards in planning. Replace street lighting with LED lighting. Installation of solar power systems on council assets. Include electric vehicles into the council's fleet. Electricity generation through the combustion of landfill gas.		Support investments in renewable energy projects. Provide waste education programs.
City of Boroondara	Reduce emissions by 30-40% below 2007/2008 levels by 2020.	Investment in low emissions technologies, energy efficiency upgrades for buildings and streetlights. Investment in on-site generation by installing solar PV on council buildings.  Increase vehicle efficiency in fleet and offset emissions.	Support community emissions abatement of at least 50,000 tCO2-e by 2020.	Support households for energy efficiency upgrades and solar PV installations.  Advocate for low-emissions transport in the community.
City of Casey	Aim to be carbon neutral in 2040, certified by NCOS. Reduce emissions by 15% from 2015 levels by 2021.	Improvement in energy efficiency through building retrofits. Aim to purchase 20% renewable electricity by 2021. Improve fleet fuel efficiency and increase ratio of electric vehicles.		Promote sustainable transport and provide better infrastructure. Investigate partnerships for large-scale renewable energy projects. Provide educational programs for waste minimisation.
City of Darwin	Council aims to have net zero emissions by 2030.	Encourage energy efficiency features in buildings and public lighting designs.		Advocate for increased use and development of public transport.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
		Explore feasibility of renewable power for council's use.  Develop a GreenFleet policy to minimise emissions from fuel and increase uptake of electric vehicles.		Support energy efficiency increases throughout community buildings. Implementation of the Darwin Renewable Energy Facility to generate power from landfill gas to feed on city grid.
City of Greater Dandenong	Reduce Council's emissions from street lighting, buildings and facilities by at least 20% by 2020 (2007/08 baseline).	Reduce 20% energy consumption of council assets, including buildings and street lightning, through energy efficiency. Installation of low-carbon and renewable energy technologies. Reduce emissions from fleet. Reduce waste to landfill.	Aspiration for a 10% emission reduction in community emissions by 2020 (24.5 kgCO2 per household per day baseline).	Support the community in reducing energy consumption through energy efficiency initiatives. Increase solar capacity. Encourage low-carbon transportation modes such as public transport and electric vehicles. Work with community to reduce waste to landfill and increase recycling.
City of Greater Geelong	Target to be a Zero Carbon Council. Reduce emissions from buildings and fleet by 50% by 2020, 75% by 2035 and 100% by 2050 from 2014 levels.	Energy efficiency upgrades in buildings and street lights. Installation of rooftop solar on energy consuming facilities. Improve fuel efficiency for fleet vehicles. Offset remaining emissions	Aim to become carbon neutral city-region by 2047.	Support energy efficiency measures and renewable energy installations to reduce emissions. Install electric vehicle charging stations. Purchase offsets for remaining emissions.
City of Hobart	Reduce emissions by 17% from 2010 levels by 2020 and reduce energy use by 35% by 2020 on 2010 levels.	Reduce energy use through energy efficiency measures on buildings and streetlights. Increase renewable energy use. Support uptake of electric vehicles in the council fleet. Zero waste to landfill by 2030.		Coordination of Regional Climate Change Group's Southern Tasmanian home energy bulk. Capture of landfill gas to power the community. Installation of electric vehicle charging stations. Implement waste reduction programs.
City of Joondalup		Energy efficiency upgrades in buildings, use alternative fuels and solar photovoltaic installations to reduce emissions.  Offsetting 100% of fleet emissions by purchasing carbon offsets.  Increase waste diversion from landfill.		Delivery of energy efficiency and recycling education programs.  Public and active transport improvements in the city.  Provide waste reduction educational programs.
City of Kalgoorlie - Boulder		Solar PV systems installed on council's buildings.		Sustainability education provided to the community including energy efficiency measures.
City of Melbourne	Carbon neutral since 2012 (NCOS certified). Reduce emissions by 17,524 tCO2-e by 2020-21 (SBT) or 4.5% per annum.	Energy efficiency upgrades of buildings and streetlights. Powered by 100% renewable electricity. Carbon neutral vehicle fleet through initiatives including fuel efficiency and zero emissions vehicles. Offset remaining emissions.	Municipal target of zero net emissions by 2050. Preferred approach is to reduce emissions according to the assessed Significant Action Scenario.	Develop zero emissions buildings and precincts. Accelerate energy efficiency programs. Zero emissions transport. Reduce impact of waste. Businesses and organisations in Melbourne to reduce and offset emissions.
City of Newcastle	Aim for a 30% reduction in carbon footprint by 2020 from 2008 levels.	Energy efficiency upgrades in buildings and streetlights. 100% renewable electricity (from January 2020). Decrease usage of fossil-based fuels. Reduce waste to landfill.	Aim for a 30% reduction in per capita carbon emissions below 2008 levels by 2020. Net zero emissions by at least 2050	Encourage energy efficiency and renewable energy programs. Increase solar PV coverage on buildings. 100% of public schools to have onsite renewable energy generation. Upgrade and extend walking and cycling paths. Encourage low-carbon transport.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
City of Onkaparinga		Reduce operational emissions through the installation of solar panels and energy efficient initiatives in buildings and street lighting. Offsetting emissions from waste with carbon credits purchased by Solo Resource Recovery.		Improve waste minimisation and recycling practices.  Provide educational programs on energy efficiency and waste management. Installing solar panels on community buildings.
City of Parramatta Council	Carbon neutrality by 2022. Reduce emissions by 60% from 2015 levels by 2038.	Implementation of energy efficient street lighting. Source energy from renewables where possible. Include hybrid vehicles in the council fleet with goal to reduce fleet emissions by 20% by 2038. 90% diversion rate for council waste.	Reduce emissions by 60% from 2015 levels by 2038.	Advocate and support for energy efficiency and renewable energy in households. 50% of electricity demand to be met by renewables by 2038 through regional renewable energy programs. Aim for 10% of trips made with active transport by 2030. Review planning and development to promote low-carbon transport. Increase diversion from landfill.
City of Perth	Aspiration to become carbon neutral. Reduce emissions by 30% from 2011 levels by 2030 and by 20% by 2020.	Energy efficiency projects on buildings and streetlights. Aim to source 25% of the City's energy from renewable sources by 2030. Offsets carpark emissions.	Achieve 30% reduction in citywide emissions by 2030.	Support commercial office tenants to improve energy efficiency and mange waste. Source 20% of city-wide energy use from renewables by 2030. Include electric car charging stations and solar panels in car parks. Increase waste diversion from landfill.
City of Stirling	Reduce fleet emissions by 25 per cent by 2020 (2013/14 baseline).	Implement energy efficiency upgrades. Increase solar generation. Invest in fuel efficient vehicles and use alternative fuels.		Living Green Program educating on energy efficient and renewable energy uptake. Reduce impact of waste. Advocate for public transport.
City of Sydney	Certified carbon neutral since 2007. Reduce emissions by 44% by 2021 and 70% by 2030 (based on 2006 levels).	Energy efficiency initiatives. Power all City-owned properties with renewable energy from July 2020. Zero increase in fleet emissions by end June 2021 (2014 baseline). Address resource recovery of waste. Offset of unavoidable emissions.	Reduce emissions by 70% from 2006 levels by 2030 and reach net zero emissions by 2050.	Local area emissions reduced as a result of energy efficiency initiatives. 50% of electricity demand met by renewable sources by 2030. Promoting active and public transport solutions. Increase recycling and recovery rates of waste across the community.
City of Wanneroo		Energy efficiency initiatives to be implemented across the City's facilities. Solar PV installation projects. Review the City's light fleet vehicles for optimisation.		Seek alternatives to improve energy efficiency. Improve waste education.
City of Whittlesea		Implement energy efficiency and renewable energy initiatives.  Develop a plan to reduce emissions from buildings, street lighting, fuel emissions and waste. Increase fuel efficient vehicles in fleet.  Purchase offsets.  Increase recycling.		Facilitate sustainable built environment in the City. Encourage the use of renewable energy. Implement initiatives to improve public transport. Provide waste management services that minimise emissions.
Cumberland Council		Lighting upgrade to LED lights. Undertaking programs to reduce energy use across the council facilities.		Improve household waste and recycling.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
		Installation of solar power on many facilities.	-	
Darebin City Council	Goal to become carbon neutral by 2020. A 45% emissions reduction by 2022 from a 2006/07 baseline.	Increase energy efficiency and implement solar PV in the council's buildings. Incorporate environmentally sustainable design (ESD) in Building Policy. Increase fleet efficiency and incorporate hybrid and electric vehicles.	Aspirational target aiming for net zero emissions by 2020.	Deliver programs to increase access to LED installation and renewable energy for businesses.  Target: 36,000 kW of solar power generation by 2021.  Reduce waste to landfill.
Fairfield City Council		Energy efficiency retrofits, HVAC upgrade, increase of LED lighting and solar power use. Promotion of alternate fuels and hybrid vehicles.		Support recycling practices and waste reduction through educational programs.  Advocate for public transport improvements.
Georges River Council	Net zero carbon emissions by 2025 or as soon as practicable.	100% renewable target by 2023. Energy efficiency upgrades in the council's buildings.		Encourage residents to implement renewable energy through the Energy Future Program. Energy saving programs.
Gold Coast Council		Introduce sustainable building design and renewable electricity generation. Hybrid vehicles in the council's fleet Reduce emissions from waste and increase recycling.		Implement active transport network plans. Investigate solar generation opportunities. Encourage public transport. Expand waste reduction programs.
Hume City Council		New facilities' emissions to be at least 25% below the modelled emissions of the National Construction Code. Reduction in energy use through energy efficiency measures to upgrade lighting and optimisation. Solar installs on buildings and 10% Green Power purchase for all council buildings to reach at least 1.2 MW solar generation by 2021/22. Increase ratio of emissions efficient fleet vehicles to 20% by 2020. Implement gas capture and use for at least 75% of emissions from landfill.		Support energy efficiency and renewable energy for the community.  Programs to reduce waste and support sustainable transport modes.
Inner West Council	Goal to become carbon neutral by 2025.	Goal to become 100% renewable by 2025. Implement an energy efficiency program to reduce emissions. Deliver a low or zero emissions fleet. Offsets purchased to meet council's residual footprint. Reduce waste to landfill.	Aspiration for net zero emissions Inner West. By 2036, community emissions are 75% less than in 2017.	By 2036, 100% of schools have solar power generation and solar PV capacity in the community is 20 times greater than in 2017.  Set high performance standards for buildings. Identify and develop standards for net zero precincts. Encourage low-carbon transport and active transport. Aspiration for a zero waste community.
Ipswich City Council	Goal to become a carbon neutral organisation by 2021.	Energy efficiency upgrades to LED lights for street lighting. Reduce fleet emissions. Increase recycling.		Increase the use of renewable energy in the community. Support active and public transport modes.  Promote the establishment of a bio-diesel plant in the area.  Improve waste diversion from landfill.
Kingston City Council (VIC)	Aim to achieve zero net emissions by 2050. Reduce emissions by 30% by 2020.	Implement energy efficiency upgrades at council's facilities.	Support community to reduce emissions by 20% by 2025.	Development of Environmentally Sustainable local planning policy to ensure energy efficiency requirements. Increase number of residential solar PV.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
		Aim to be 100% powered by renewable energy by 2050. Switch to clean fuels. Purchase offsets for unavoidable emissions.		Reduce emissions from waste management and increased recycling.
Knox City Council		Lighting upgrades in major facilities. Installation of solar panels on council assets. Encourage staff to use low-carbon transport. Methane capture at landfill sites. Offset emissions.		Reduce energy consumption in houses and increase renewable energy use. Installation of charging stations for electric vehicles. Reduce waste.
Lake Macquarie City Council	Reduce emissions by 3% per year (2008 baseline).	Implement energy efficiency and renewable energy projects in council's sites. Offset remaining emissions. Include sustainable vehicles in the council's fleet.	City-wide 45% per capita emissions reduction by 2023.	Promotion of solar PV. Support active transport.  Continued waste diversion from landfill. Increase use of public transport by 10%.
Liverpool City Council		Undertaking energy efficiency and renewable energy capacity measures.		Encourage energy efficiency, sustainable transport and renewable energy use in the community. Assist in waste reduction at home,
Logan City Council	Goal to be carbon neutral (NCOS certified) by 2022.	Upgrade buildings to best-practice energy efficiency measures. Investigate feasibility of solar PV on-site. Upgrade minimum fuel efficiency requirements. Offset unavoidable emissions.		Support tenants to install community-funded solar PV systems. Encourage household solar.
Monash Council		Energy efficiency upgrades in council's facilities and street lighting. Improved fuel efficiency of fleet. Solar panels installations. Aims to reduce waste and build capacity on sustainable waste practices.		Supporting businesses to implement energy efficiency and renewable energy projects through the Environmental Upgrade Finance program. Education programs to reduce waste. Providing solar bulk buy and advising community on the uptake of renewable energy.
Moreland City Council	Carbon neutral since 2012 (NCOS certified). Exceed 22% reduction by 2020 (on 2011 levels).	Improve energy efficiency in buildings and street lights. Solar PV installation. Purchase of 2 electric vehicles per year. Offset residual emissions.	Zero carbon' community by 2040. Guide the community to a 22% emissions reduction on 2011 levels by 2020.	Residential retrofits and solar saver programs. Advocate for active or zero emissions transport. Promote circular economy with zero waste.
Moreton Bay Regional Council		Landfill gas management projects. Implement energy efficiency measures and renewable energy sources to reduce emissions.	Cut the region's carbon footprint by a third by 2021.	Improve energy efficiency in neighbourhoods. Encourage active transport and develop public transport. Increase local provision of renewable energy. Reduce amount of waste to landfill.
Mornington Peninsula Shire	Achieve carbon neutrality of council by 2021	Increase energy efficiency across assets. Include zero emissions vehicles in fleet. Offset all remaining emissions.	Reduce community emissions by 2.9% annually.	Support community to reduce emissions. Improvement of energy efficiency and generation of local renewable energy. Support low-emissions and active transport. Reduce waste. Increase carbon storage through land-use planning.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
Northern Beaches Council	Net zero emissions by 2045. Reduce carbon emissions by 60% by 2040.	Energy efficiency upgrades throughout council facilities and streetlights. Divert 85% of waste from landfill by 2040. Power all suitable sites by renewable electricity by 2030. Increase share of electric vehicles in fleet.	Net zero emissions by 2050. Reduce carbon emissions by more than half by 2040.	Support installation of solar power. Explore and invest in low-carbon technologies. Increase accessibility to public transport, facilitate active transport and use of electric vehicles. Divert 85% of waste from landfill by 2040 Reduce the rate of waste generation per person by 2040.
Penrith City Council	Reduce emissions by 40% from 2010/11 levels by 2030.	Lighting and air conditioning upgrades. Installation of solar panels and LED street lighting. Purchase Greenpower. 10% of the council's electricity supplied from low carbon sources by 2030.		Investigate ways to support the community in the uptake of sustainable technologies.  Community educational programs involving waste.
Redland City Council		Consider energy efficiency measures and renewable energy sources to reduce emissions. Select staff fleet that contributes to emissions reductions.		Aim for energy conservation and efficiency, renewable energy use and alternative energy generation activities are implemented in the community.  Support sustainable building design through education programs.  Increase active and public transport.  Reduce waste and increase recycling.
Sunshine Coast Council	Be a zero-net emissions organisation by 2041.	Renewable electricity generation offsets the council's electricity generation.	Community is low-carbon by 2041.	Increase community understanding of sustainable living practices with a focus on transport and energy consumption.  Strategic network of electric vehicles charging points. Improve waste management to transform it into a resource.
Sutherland Shire		Invest in energy efficiency plans. Installation of solar PV. Use of alternative fuels in fleet. Review waste disposal process.		Incorporate energy efficiency and sustainable building techniques in new developments.  Foster community groups interested in renewable energy generation.  Waste education.
The Hills Shire Council		Increased lighting efficiency across council facilities. Installation of solar generation. New waste collection vehicles.		Key focus on community education for energy management. Increase of footpaths and cycling lanes.
Toowoomba Regional Council Townsville City Council		Investigate and implement more effective systems to improve energy consumption.		Provide a safe walking, cycling and public transport. Improve waste management. Major solar farm project in Townsville's Upper Ross.
Wagga Wagga City Council		Lighting retrofits and energy conservation measures for council operations. Solar PV installations planned to triple in the coming years.		Implement energy efficiency, renewable energy and recycling projects.
Whitehorse City Council	Be carbon neutral by 2022. Reduce emissions by 45% from 2002 levels by 2022.	Upgrade streetlights to LED technology. Increase solar PV building coverage. Improve selection criteria for fleet vehicles. Offset emissions.	Reduce emissions by 30% from 1996 levels by 2020.	Increase take up of renewable energy through rebates and community energy. Engage with community to undertake energy audits. Encourage sustainable modes of transport.

Government	Operational emissions target	Operational activities	Community emissions target	Community activities
				Reduce waste to landfill.
Wollongong City Council	Aspirational emissions reduction target of zero emissions by 2030.	Improve energy efficiency in highest energy using facilities.  Move to renewable and clean fuels and energy generation.  Landfill gas extraction and power generation project.	Net Zero emissions by 2050.	Support development of renewable energy products.
Wyndham City Council	Be carbon neutral by 2040 (NCOS certified). Reduce emissions by 12% from 2014 levels by 2020 and by 95% by 2040.	Increase buildings efficiency and carbon neutrality. Improve fleet efficiency and increase number of low-carbon vehicles. Investigate a power purchase agreement of renewable power for at least 25% of energy needs. Purchase local offsets for remaining emissions.	Zero net emissions from electricity use by 2040. Avoid at least 55,000 tCO2-e by 2020 from residential and business sectors.	Promote energy efficient housing design and grid connected solar panels. Run energy efficient technology bulk buys for the community. Increase residential solar coverage. Capture 75% of landfill gas at Refuse Disposal Facility for energy generation.
Yarra Ranges Council	Reduce emissions by 30% from 2000 levels by 2020.	Increase in solar panels and energy efficiency coverage for buildings. Introduction of electric vehicles to the fleet.		Promote sustainable building design. Partnered with other Councils to deliver affordable household solar systems to residents. Advocate for sustainable transport options.

#### ASSESSMENT OF EMISSIONS REDUCTION AMBITION

Table 6 details the assessment of emissions reduction ambition for each of the local governments considered by the analysis. This assessment considers emissions-reduction commitments and activities for the councils' operational and community emissions. It is informed by the

pledges and commitments summarised in Table 5.

The assessment is based on the following criteria:

Emissions reductions activities?	Indicates whether a council is undertaking activities that will reduce its emissions (Yes/No).
Emissions reduction target	Indicates whether a council has defined an emissions reduction target (Target), has expressed an emissions reduction aspiration (Aspiration), or no information can be found regarding an emissions reduction target or aspiration (No).
Net zero target	A council has defined a net zero by or before 2050 target (Target), has expressed this goal as an aspiration (Aspiration), has a net zero by or before 2050 target or aspiration that does not cover all of its emissions (Partial), or no information can be found regarding an emissions reduction target or aspiration (No).

Based on the above criteria, each council's emissions reduction ambition was assessed as follows:

*	Fully aligned net zero target	The local government has a target to achieve net zero emissions or become carbon neutral by or before 2050. Alternatively, the local government is already carbon neutral and has committed to remain so. In both cases the local government also has interim emissions reduction targets aligned with mitigating avoidable emissions by or before 2050.
*	Closely aligned net zero target	The local government is fully aligned to net zero emissions or carbon neutrality (as defined above) for a significant proportion, but not all, of its emissions. Alternatively, it has a comprehensive, fully aligned net zero target but its supporting emissions reduction target is aspirational.
	Aligned aspiration/pathway	The local government does not have a target to achieve net zero emissions or become carbon neutral by or before 2050 but has an interim emissions reduction target aligned with this goal.  Alternatively, the local government has an aspirational commitment to achieve net zero emissions or become carbon neutral by or before 2050. A local government would also be rated with this ambition if it is already net zero or carbon neutral but has not committed to remain so and/or does not have an emissions reduction target aligned with mitigating avoidable emissions by or before 2050.
<b>A</b>	Partially aligned net zero target	The local government is aligned to net zero emissions or carbon neutrality for a small proportion of their emissions.
•	Not aligned	The local government has made a commitment, pledge or is undertaking activities that will reduce its emissions but not in alignment with net zero before 2050, or the alignment is unclear due to insufficient information.
0	No emissions reduction targets or activities	The local government has not disclosed any information regarding emissions reduction targets, commitments or activities.

TABLE 6: ASSESSMENT OF EMISSIONS-REDUCTION AMBITION

				Ор	erational emi	ssions	Co	mmunity emis	ssions
Government	Overall net zero ambition	Operational net zero ambition	Community net zero ambition	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment
ACT Legislative Assembly	*	*	*	Yes	Target	Target	Yes	Target	Target
Moreland City Council	*	*	*	Yes	Target	Target	Yes	Target	Target
Northern Beaches Council	*	*	*	Yes	Target	Target	Yes	Target	Target
Adelaide City Council	☆	•	*	Yes	No	Target	Yes	Target	Target
City of Melbourne	☆	*	☆	Yes	Target	Target	Yes	Aspiration	Target
City of Newcastle	☆	•	☆	Yes	Aspiration	No	Yes	Aspiration	Target
City of Sydney	☆	•	*	Yes	Target	No	Yes	Target	Target
Blacktown City Council	•	<b>A</b>	•	Yes	No	Partial	Yes	No	Aspiration
Brisbane City Council	•	•	•	Yes	No	Target	Yes	Target	No
City of Boroondara	•	•	•	Yes	Target	No	Yes	Target	No
City of Greater Geelong	•	*	•	Yes	Target	Target	Yes	No	Target
City of Parramatta Council	•	*	•	Yes	Target	Target	Yes	Target	No
City of Perth	•	•	•	Yes	Target	Aspiration	Yes	Target	No
Darebin City Council	•	*	•	Yes	Yes	Yes	Yes	No	Aspiration

				Ор	Operational emissions			Community emissions		
Government	Overall net zero ambition	Operational net zero ambition	Community net zero ambition	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment	
Inner West Council	•	•	•	Yes	No	Target	Yes	Target	Aspiration	
Kingston City Council (VIC)	•	*	•	Yes	Target	Target	Yes	Target	No	
Lake Macquarie City Council	•	•	•	Yes	Target	No	Yes	Target	No	
Mornington Peninsula Shire	•	•	•	Yes	No	Target	Yes	Target	Aspiration	
Whitehorse City Council	•	*	•	Yes	Target	Target	Yes	Target	No	
Wollongong City Council	•	•	•	Yes	No	Aspiration	Yes	No	Target	
Wyndham City Council	•	*	•	Yes	Target	Target	Yes	Partial	Partial	
Brimbank City Council	<b>A</b>	•	•	Yes	Target	No	Yes	No	No	
Cairns Regional Council	<b>A</b>	•	•	Yes	Target	No	Yes	No	No	
Central Coast Council	<b>A</b>	•	•	Yes	No	No	Yes	No	No	
City of Casey	<b>A</b>	*	•	Yes	Target	Target	Yes	No	No	
City of Darwin	<b>A</b>	•	•	Yes	No	Target	Yes	No	No	
City of Greater Dandenong	<b>A</b>	•	•	Yes	Target	No	Yes	Aspiration	No	
City of Hobart	<b>A</b>	•	•	Yes	Target	No	Yes	No	No	
Georges River Council	<b>A</b>	•	•	Yes	No	Target	Yes	No	No	

				Operational emissions			Community emissions		
Government	Overall net zero ambition	Operational net zero ambition	Community net zero ambition	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment
Ipswich City Council	<b>A</b>	•	•	Yes	No	Target	Yes	No	No
Logan City Council	<b>A</b>	•	•	Yes	No	Target	Yes	No	No
Penrith City Council	<b>A</b>	•	•	Yes	Target	No	Yes	No	No
Sunshine Coast Council	<b>A</b>	•	•	Yes	No	Target	Yes	No	No
Yarra Ranges Council	<b>A</b>	•	•	Yes	Target	No	Yes	No	No
Bayside Council	•	•	•	Yes	No	No	Yes	No	No
Campbelltown City Council	•	•	•	Yes	No	No	Yes	No	No
Canterbury Bankstown City Council	•	•	•	Yes	No	No	Yes	No	No
City of Joondalup	•	•	•	Yes	No	No	Yes	No	No
City of Kalgoorlie - Boulder	•	•	•	Yes	No	No	Yes	No	No
City of Onkaparinga	•	•	•	Yes	No	No	Yes	No	No
City of Stirling	•	•	•	Yes	Not aligned	No	Yes	No	No
City of Wanneroo	•	•	•	Yes	No	No	Yes	No	No
City of Whittlesea	•	•	•	Yes	No	No	Yes	No	No
Cumberland Council	•	•	0	Yes	No	No	No	No	No

				Operational emissions			Community emissions		
Government	Overall net zero ambition	Operational net zero ambition	Community net zero ambition	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment	Emissions reduction activities?	Emissions reduction target	Net zero target/ commitment
Fairfield City Council	•	•	•	Yes	No	No	Yes	No	No
Gold Coast Council	•	•	•	Yes	No	No	Yes	No	No
Hume City Council	•	•	•	Yes	No	No	Yes	No	No
Knox City Council	•	•	•	Yes	No	No	Yes	No	No
Liverpool City Council	•	•	•	Yes	No	No	Yes	No	No
Monash Council	•	•	•	Yes	No	No	Yes	No	No
Moreton Bay Regional Council	•	•	•	Yes	No	No	Yes	Aspiration	No
Redland City Council	•	•	•	Yes	No	No	Yes	No	No
Sutherland Shire	•	•	•	Yes	No	No	Yes	No	No
The Hills Shire Council	•	•	•	Yes	No	No	Yes	No	No
Toowoomba Regional Council	•	•	•	Yes	No	No	Yes	No	No
Townsville City Council	•	0	•	No	No	No	Yes	No	No
Wagga Wagga City Council	•	•	•	Yes	No	No	Yes	No	No

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#### WHAT IS THE NET ZERO MOMENTUM TRACKER?

Reaching net zero emissions is a core action of the Paris Agreement goal to limit global warming to well below 2 degrees Celsius and strive for 1.5 degrees. Many major global companies have incorporated this goal into their business strategies. In Australia, businesses and governments are doing the same, but there is no easily accessible place to assess these commitments, making them difficult to track.

The Net Zero Momentum Tracker tells the story of Australia's growing momentum towards net zero across key sectors in the Australian economy through a series of sector reports supported by an online platform.

The Net Zero Momentum Tracker is a ClimateWorks Australia and Monash Sustainable Development Institute initiative.

#### WWW.NETZEROTRACKER.ORG

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ClimateWorks Australia Level 27, 35 Collins Street Melbourne Victoria 3000 ClimateWorks Australia is an expert, independent adviser, committed to helping Australia, South East Asia and the Pacific region transition to net zero emissions by 2050. It was co-founded through a partnership between Monash University and The Myer Foundation and works within the Monash Sustainable Development Institute.

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