

ITEM 2. DRAFT ENVIRONMENTAL ACTION 2016 – 2021 STRATEGY AND ACTION PLAN – PUBLIC EXHIBITION**FILE NO: S125908.008****SUMMARY**

In 2008, the City of Sydney launched *Sustainable Sydney 2030* and committed Sydney to becoming a green, global and connected city. Since that time, there have been significant improvements in environmental performance in both our own operations and in the City of Sydney Local Government Area (LGA). On 12 May 2014, Council set interim environmental performance targets for emissions, energy, water, waste and transport for the City's own operations to be achieved by December 2016. Key achievements include:

- certified carbon neutral since 2011, with a 27 per cent reduction in operational greenhouse gas emissions;
- solar power installed on 38 City properties, trigeneration being installed at Town Hall House, and all city-owned street lighting converted to efficient LED lamps;
- increase in open space irrigation while maintaining the same average annual water use;
- 11,000 new street trees planted since 2005, and 154 raingardens installed since 2009; and
- waste and recycling in our properties and parks meeting targets.

Since the 2006 baseline year, major achievements within the City LGA include:

- 19 per cent emissions reduction across the LGA and a 36 per cent reduction in carbon intensity (Tonnes of Carbon/Gross Domestic Product);
- a 45 per cent emissions reduction by Better Buildings Partnership members;
- precinct water recycling at Central Park, Barangaroo, Sydney Park, and soon Green Square Town Centre;
- the City's 620 Smart Green Business members saved over 1GL of water annually;
- City Waste Service diverted 419 tonnes of e-waste from landfill;
- the City installed 12.5km of new traffic-separated cycleways; and
- 130 green roofs and walls were installed in or on properties.

The draft Environmental Action 2016 – 2021 Strategy and Action Plan (the Strategy and Action Plan) provides an update on progress towards the December 2016 targets for the City's own operations and for longer-term LGA targets. The Strategy and Action Plan combines the insights, data and actions from the City's existing environmental strategies and master plans, experiences in program delivery, and feedback from stakeholder engagement, to set interim targets for 2021.

The Strategy and Action Plan outlines the actions the City will take to work towards those outcomes.

The document has been developed with significant internal consultation and the input of an external reference group of government and industry stakeholders including the Property Council of Australia, NSW Office of Environment and Heritage, Green Building Council Australia, Energy Efficiency Council, Jemena and Facilities Management Australia (see paragraph 52 for the full list).

KEY TARGETS FOR THE CITY'S OWN OPERATIONS

Emissions and energy

- 44 per cent reduction in greenhouse gas emissions by end June 2021 based on 2006 levels.
- 50 per cent of electricity from renewable sources by end June 2021.
- 70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 levels.

Water

- zero increase in potable water use by end June 2021 from 2006 baseline achieved through water efficiency and recycled water.
- annual potable water use of 180L/m² of irrigated open space.
- zero increase in potable water use by 2030 from 2006 baseline achieved through water efficiency and recycled water.

Waste

- 70 per cent resource recovery of waste from City-managed assets by end June 2021.
- 95 per cent resource recovery of maintenance, construction and demolition waste by end June 2021.
- 95 per cent resource recovery of organic waste from parks by end June 2021.

A full list of targets is at paragraph 19 of this report.

KEY TARGETS FOR LOCAL GOVERNMENT AREA

Emissions and energy

- 70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 levels.
- 50 per cent of electricity demand met by renewable sources by 2030.
- net zero emissions by 2050.

Water

- zero increase in potable water use by 2030 from 2006 baseline achieved through water efficiency and recycled water.

- 50 per cent reduction in the annual solid pollution load discharged to waterways via storm water by 2030.
- 15 per cent reduction in annual nutrient load discharged to waterways via storm water by 2030.

Waste

- 70 per cent recycling and recovery of residential waste from the City LGA by end June 2021.
- 70 per cent recycling and recovery of commercial and industrial waste from the City LGA by end June 2021.

A full list of targets is at paragraph 20 of this report.

SUMMARY OF PRIORITY ACTIONS

Actions to improve environmental performance in the City's own operations

- additional solar power on City buildings and purchase of renewable energy generated outside the local area.
- installation of trigeneration at Town Hall House and cogeneration at aquatic centres.
- continue energy and water efficiency retrofits in City properties.
- sustainable asset management and capital works process improvements.
- continue to increase canopy cover and biodiversity through plantings of trees and habitat vegetation.
- continue to maintain our parks to best-practice standards and connect more parks to alternative water supplies.

Actions to support and influence for improved environmental performance across the LGA

- net zero challenge to facilitate Sydney's first net zero buildings.
- energy retrofit program for residential apartment buildings.
- invest up to \$10M to accelerate the uptake of renewable energy across the City LGA.
- encourage improved environmental outcomes through City planning controls.
- facilitate a private water utility to deliver recycled water at greater Green Square.
- work with the NSW Government to provide recycled water pipes along the George Street light rail corridor.
- develop Waste Strategy in consultation with stakeholders.
- support the transformation of George Street.

- complete the ten high-priority regional cycling routes.

Advocacy for action by other levels of government

In addition to the above priority actions that the City will implement, achievement of the LGA targets requires action by other levels of government, the private sector and the community. The Strategy and Action Plan outline the important role that the City has in supporting and influencing progress across the LGA by advocating for change to take place within state and federal government policy.

Key priorities that the City will be advocating for include increased BASIX targets, mandatory disclosure of environmental performance for non-commercial buildings, establishing an environmental rating tool for residential apartments, energy market reform to support local energy generation and include climate change in the National Electricity Objective, Ausgrid to upgrade all its streetlights to LED, NSW pricing regime to support the viability of recycled water schemes and to encourage water efficiency, land allocation for waste management infrastructure in Sydney metropolitan region, and commitment to high environmental standards for urban renewal precincts. For more detail on these advocacy priorities please refer to paragraph 31.

RECOMMENDATION

It is resolved that:

- (A) Council approve the draft Environmental Action 2016 – 2021 Strategy and Action Plan (the Strategy and Action Plan) as shown at Attachment A to the subject report for public exhibition;
- (B) the Environmental Management Plan 2007 be rescinded as it is now superseded by the Strategy and Action Plan; and
- (C) existing environmental master plans and strategies outlined in paragraph 34 of the subject report are now considered supporting documents (containing actions consistent with this Strategy and Action Plan) or reference documents (containing useful background information, with actions superseded by this Strategy and Action Plan).

ATTACHMENTS

Attachment A: Draft Environmental Action 2016 – 2021 Strategy and Action Plan

BACKGROUND

1. In 2008, the City of Sydney launched *Sustainable Sydney 2030* and committed Sydney to becoming a green, global and connected city.
2. *Sustainable Sydney 2030* set targets or thresholds for greenhouse gas emissions, potable water consumption, stormwater pollution, resource recovery and greening within the City's own operations and also across the entire City of Sydney Local Government Area (LGA).
3. The City has many programs and policies underway to facilitate the meeting of the targets and aspirations of *Sustainable Sydney 2030*. These are designed and delivered through a control, influence and concern framework as outlined in the City's Community Strategic Plan 2014.
4. The City has also developed a suite of plans and strategies to inform stakeholders and guide action on a range of environmental issues, including:
 - (a) Decentralised Energy Master Plan – Renewable Energy: 2012-2030;
 - (b) Decentralised Energy Master Plan – Trigenation: 2010-2030;
 - (c) Decentralised Water Master Plan: 2012-2030;
 - (d) Energy Efficiency Master Plan – improving energy productivity: 2015-2030;
 - (e) Adapting for climate change – a long term strategy for the City of Sydney: 2015-2070;
 - (f) Advanced Waste Treatment Master Plan: 2013-2030;
 - (g) Residential Apartment Sustainability Plan: 2015;
 - (h) Connecting our city: 2012;
 - (i) Cycle Strategy and Action Plan: 2007-2017;
 - (j) Walking Strategy and Action Plan: 2014;
 - (k) Greening Sydney Plan: 2012;
 - (l) Urban Ecology Strategic Action Plan: 2014; and
 - (m) Urban Forest Strategy: 2013.
5. On 14 December 2015, in her report on participation in the 21st Conference of the Parties (COP21), the Lord Mayor requested that the Chief Executive Officer review the City's current environmental policies in light of the new COP21 agreement and recent achievements, research and targets of other relevant cities to ensure the City continues to demonstrate environmental leadership.
6. The draft Environmental Action 2016 – 2021 Strategy and Action Plan (the Strategy and Action Plan" represents the culmination of this review. It brings together the insights and data from the existing strategy work listed above and identifies a focussed plan of action for the five year period from July 2016 – June 2021.

7. The Strategy and Action Plan has been developed with input by an internal project control group and an external reference group (refer paragraphs 51 and 52) with representatives from the Better Buildings Partnership, government departments and industry bodies.

DRAFT ENVIRONMENTAL ACTION 2016-2021 STRATEGY AND ACTION PLAN

8. The Strategy and Action Plan spans five years from mid-2016 to mid-2021. It builds on *Sustainable Sydney 2030* commitments to communicate our overarching strategic approach towards six areas of environmental sustainability:
 - (a) Low-carbon city;
 - (b) Water sensitive city;
 - (c) Climate resilient city;
 - (d) Zero waste city;
 - (e) Active and connected city; and
 - (f) Green and cool city.
9. For each of these areas, the Strategy and Action Plan outlines:
 - (a) Background;
 - (b) Issues and opportunities;
 - (c) City of Sydney operations performance to date and future targets;
 - (d) LGA performance to date and future targets; and
 - (e) Outcomes, and the actions the City will take to contribute to achievement of these outcomes.
10. The Strategy and Action Plan reviews the ambitious environmental targets set in *Sustainable Sydney 2030* and combines the insights, data and actions from the City's existing environmental strategies and master plans, experiences in program delivery, and stakeholder engagement, to determine what is most important and feasible to achieve in the next five years.
11. During development of the Strategy and Action Plan, stakeholder feedback suggested that a very clear distinction should be made between the role that the City has in delivering on its operational targets; and the role it has in influencing and supporting achievement of the LGA targets.
12. Given the importance of new buildings to the achievement of LGA environmental targets, the Strategy and Action Plan includes a specific section outlining best practice for new buildings in our city at this time.

Progress towards interim environmental targets

13. On 12 May 2014, Council set interim environmental performance targets for emissions, energy, water, waste and transport for the City's own operations to be achieved by 31 December 2016 (Council meeting 12 May 2014, Item 7.3). The City is on track to meet or exceed the majority of these targets.
14. Progress towards each interim target is listed in the table below:

Interim operational target	Most recent result	Anticipated result as at December 2016
Emissions and energy		
26 per cent reduction in emissions from 2006 baseline	27 per cent reduction as at December 2015	Exceed target
5 per cent of electricity from renewable energy sources	3 per cent electricity from renewable energy sources as at December 2015	Expected to meet target once community buildings in Green Square are constructed – expected 2018/19
Water		
Zero increase in potable water use from 2006 baseline	On average, annual potable water use has remained below the 2006 baseline	Meet target
Annual potable water use of 180L/m ² of irrigated open space	Achieved our annual open space water efficiency target in December 2015	Meet target
Waste		
54 per cent annual resource recovery of waste from City of Sydney managed assets	Achieving 56 per cent waste recovery as at December 2015	Meet target
98 per cent annual resource recovery of maintenance, construction, demolition waste	Achieving annual recovery levels of 99 per cent as at December 2015	Meet target
Transport		
Zero increase in emissions from the City's fleet of vehicles by 2016, from 2014 levels.	Zero increase in emissions from the City's fleet of vehicles from 2014 levels, as at June 2015	Meet target

Progress towards Local Government Area (LGA) targets

15. Between 2007 and 2012, the City LGA saw growth in population, dwellings and employment. Results against key environmental targets over this period include:

Local government area target	Most recent result
70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 levels	19 per cent reduction as at the end of 2014

Local government area target	Most recent result
Zero increase in potable water use by 2030 from 2006 baseline, achieved through water efficiency and recycled water	In 2014/15, potable water use in the LGA had increased 6 per cent above the 2006 baseline
70 per cent recycling and recovery of residential waste from the LGA by end June 2021	In 2014/15, 68.7 per cent of residential waste was diverted from landfill
70 per cent recycling and recovery of commercial and industrial waste from the LGA by end June 2021	In 2014/15, 49 per cent of commercial and industrial waste was recycled

16. Further detail on progress toward targets is provided within the Strategy and Action Plan.

Future environmental targets

17. The Strategy and Action Plan includes a set of environmental targets that cover the areas of environmental sustainability outlined in paragraph 8. These targets were determined by reviewing the targets and objectives in the City's existing master plans and strategies, and then assessing whether these previously adopted targets still reflected the level of ambition consistent with *Sustainable Sydney 2030*, as well as considering their feasibility in the current regulatory and policy environment. Internal and external consultation was undertaken on the proposed set of targets.
18. The targets included in the Strategy and Action Plan are listed in the table below, with targets for the City's own operations and the LGA listed separately. An explanation of any changes to previous targets is also provided.
19. Future City of Sydney operational environmental targets:

City operational targets in Strategy and Action Plan	Comments
Low-carbon city	
44 per cent reduction in greenhouse gas emissions by end June 2021 based on 2006 levels	The previous target of "26 per cent reduction in greenhouse gas emissions by December 2016, based on 2006 levels" (Council meeting 12 May 2014, Item 7.3) has been achieved, so a new interim target has been set, in line with the trajectory to the 2030 target.
50 per cent of electricity from renewable sources by end June 2021 <i>This target includes renewable electricity available both within the grid and classified as additional to the grid.</i>	The previous target of "30 per cent of electricity from renewable sources by 2030" (Renewable Energy Master Plan) has been increased as the opportunities to utilise renewable energy in our operations have grown; as the Federal Government's RET target will deliver 23 per cent by 2020; and to align with stakeholder expectations.
70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 levels	No change (Sustainable Sydney 2030)

City operational targets in Strategy and Action Plan	Comments
Water sensitive city	
Annual potable water use of 180L/m ² of irrigated open space by end June 2021	It is anticipated that the City will achieve the same target by end December 2016 and aims to maintain the same level of efficiency.
Zero increase in potable water use by end June 2021 from 2006 baseline, achieved through water efficiency and recycled water	It is anticipated that the City will achieve the same target by December 2016 and aims to maintain no increase in potable water use.
Zero increase in potable water use by 2030 from 2006 baseline, achieved through water efficiency and recycled water	Previous target of 10 per cent reduction in 2006 drinking water consumption by 2030 (Decentralised Water Master Plan). Analysis undertaken by Kinesis and City staff shows that given the growth in the City's operations (such as parks serving an increasingly dense population), and the barriers to uptake of recycled water, a reduction in potable water consumption below the 2006 baseline is unlikely to be achieved. Achieving a zero increase from the baseline still presents a significant achievement towards maintaining a sustainable water supply.
Zero waste city	
70 per cent resource recovery of waste from City-managed assets by end June 2021	It is anticipated that the City will achieve the previous interim target of "54 per cent resource recovery of facilities waste by December 2016" (Council meeting 12 May 2014, Item 7.3) so a new target has been set.
95 per cent resource recovery of maintenance, construction and demolition waste by end June 2021	It is anticipated that the City will achieve the previous interim target of "98 per cent resource recovery of maintenance, construction and demolition waste (including waste from parks) by December 2016" (Council meeting 12 May 2014, Item 7.3) so a new target has been set. A specific target for organic waste from parks has been set as this is a distinct waste stream. The City is currently reviewing the way in which it reports and verifies recycling and landfill diversion performance data to improve accuracy. The review is likely to identify additional waste volumes not previously accounted for and therefore future landfill diversions rates may be lower than the reported 2015 performance. In light of these improved reporting processes, the City has set its 2021 target to reflect current industry best practice.
95 per cent resource recovery of organic waste from parks by end June 2021	

City operational targets in Strategy and Action Plan	Comments
No specific target	Previous target of "Replace 100 per cent of the City of Sydney's own fossil fuel natural gas consumption, including the City's planned trigeneration systems supplying the City's own buildings, with renewable gas derived from non-recyclable domestic waste" (Advanced Waste Treatment Master Plan). The City continues to investigate the suitability of waste to energy technologies. At this time, the City does not consider that a waste to energy facility located in proximity to its own operations is logistically feasible. A commercially feasible facility requires partnerships with surrounding councils which are not able to be progressed whilst council amalgamations are proceeding.
Active and connected city	
Zero increase in fleet emissions from 2014 baseline by end June 2021	It is anticipated that the City will achieve the previous interim target of "Zero increase in fleet emissions from 2014 baseline by 2016" (Council meeting 12 May 2014, Item 7.3) so a new target has been set.
Green and cool city	
Plant 600 new street trees each year until 2021	New target, consistent with existing City operational policies
Plant 1,300 new trees and shrubs in City parks each year until 2021	New target, consistent with existing City operational policies
Tree species diversity will not consist of more than 40 per cent for any particular plant family, 30 per cent for any genus or 10 per cent for any one species by 2021	No change from Urban Forest Strategy
The average total canopy cover is increased by 50 per cent by 2030 (from 15 to 23 per cent), and increased by 75 per cent by 2050 (to 27 per cent), from a 2008 baseline <i>This target relates to both City operations and the LGA</i>	No change from <i>Sustainable Sydney 2030</i>
Habitat sites in the city are protected and the area of bush restoration sites is increased by 100 per cent by 2023 from a 2012 baseline of 4.2 hectares	No change from Urban Ecology Strategic Action Plan
Indigenous fauna species diversity, abundance and distribution is maintained or increased by 2023 based on a 2012 baseline	No change from Urban Ecology Strategic Action Plan
A progressive increase in the number of habitat features for priority fauna species is established along potential habitat linkages by 2023	No change from Urban Ecology Strategic Action Plan

20. Local Government Area targets – the City is proactive in aiming to influence the environmental performance of the LGA but its control is limited. To achieve the LGA targets, the City will continue to call on strong collaboration from all levels of government, the private sector and the community.

Local government area targets in Strategy and Action Plan	Comments
Low-carbon city	
70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 levels	No change to <i>Sustainable Sydney 2030</i> target.
Net zero emissions by 2050	This is a new target. This additional target was added to align with the COP21 global agreement to limit temperature rise this century to well below 2°C and to drive efforts to limit the temperature increase even further to 1.5°C above pre-industrial levels. To achieve this global emissions will need to reach 'net zero' by 2050.
50 per cent of electricity demand met by renewable sources by 2030 <i>This target includes both renewable electricity available within the grid and classified as additional to the grid.</i>	The previously endorsed target from the City's Renewable Energy Master Plan was "30 per cent of electricity demand met by renewable sources by 2030. At least 12 per cent of the city's electricity demand can be met from renewable electricity generation within 250km of the LGA by 2030. Up to 18 per cent of the city's electricity demand can be met from renewable electricity generation within the LGA by 2030." The overall renewable energy target has been increased to align with the global COP21 agreement on climate change. In addition, stakeholder feedback demonstrated that the previous overall target did not meet expectations given that the federal government's RET target alone will deliver 23 per cent by 2020. A single renewable target, rather than location-specific targets, provides the City with the flexibility required given space constraints on local generation and ongoing regulatory issues.
No specific target Noting that the existing target of 70 per cent reduction in greenhouse gas emissions by 2030 based on 2006 is included the Strategy.	The previous target stated that "the city will have the capacity to meet 100 per cent of electricity demand by local electricity generation by 2030". This was also stated as: 'Renewable electricity and renewable gas can provide 100 per cent of the city's electricity, heating and cooling requirements'; and 'No reliance on coal-fired electricity by 2030', within <i>Sustainable Sydney 2030</i> . "70 per cent electricity produced from trigeneration by 2030 (Trigeneration Master Plan)" will not be included in the draft Environmental Sustainability Strategy. These two targets are dependent upon a large-scale trigeneration network being established in the LGA. As noted in the report to Council on 24 June 2013, such a scheme is not feasible in the current regulatory environment and the City has already agreed to focus on trigeneration in its own properties at this time (Council meeting 24 June 2013, Item 6.16). Higher renewable energy targets have been set reflecting the development of renewable energy technologies. The scope for trigeneration may be reviewed in future if circumstances change.

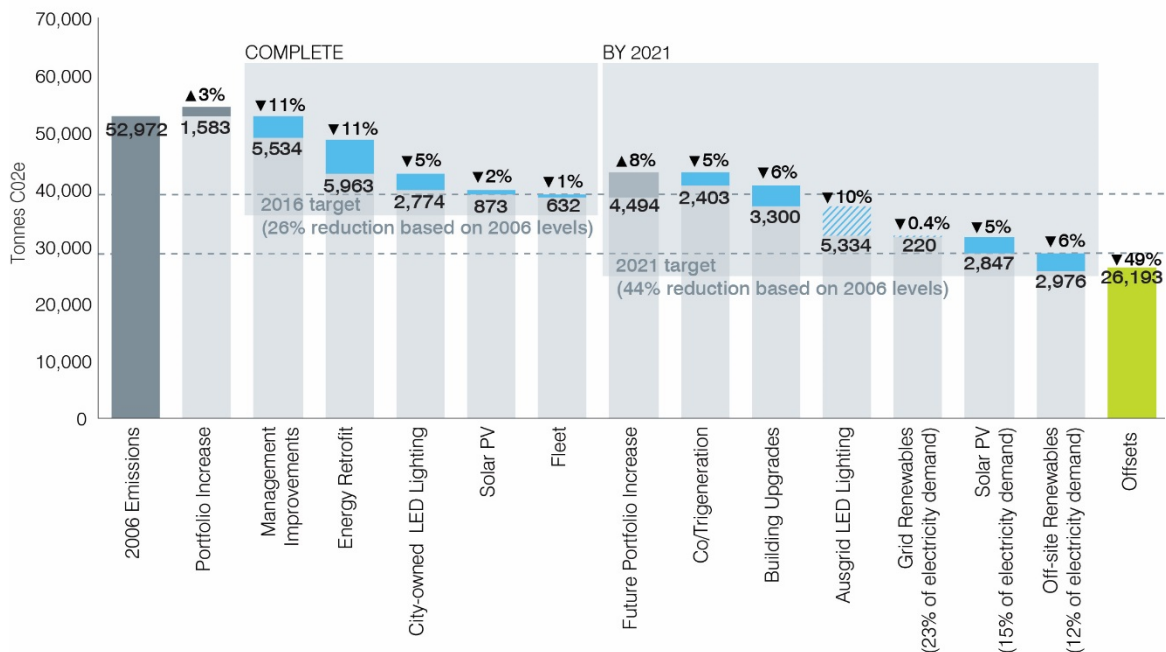
Local government area targets in Strategy and Action Plan	Comments
Water sensitive city	
Zero increase in potable water use by 2030 from 2006 baseline, achieved through water efficiency and recycled water	<p>Previous targets “Reduce mains water consumption by 10 per cent of 2006 levels by 2030 through water efficiency programs” and “30 per cent of 2030 total water demand met by recycled water” from the Decentralised Water Master Plan.</p> <p>The new target consolidates the previous two targets into an ‘absolute’ water efficiency target. Analysis undertaken by Kinesis and City staff shows that given the growth in the LGA’s population, and the barriers to uptake of recycled water, a reduction in potable water consumption below the 2006 baseline is unlikely to be achieved. A zero increase from the baseline will only be achieved if the private sector and the NSW Government implement recycled water schemes within the LGA.</p> <p>In addition strong stakeholder feedback suggested that the new target would significantly reduce confusion regarding the previously separate water efficiency and recycled water targets.</p>
50 per cent reduction in the annual solid pollution load discharged to waterways via stormwater by 2030	No change from Decentralised Water Master Plan.
15 per cent reduction in annual nutrient load discharged to waterways via stormwater by 2030	No change from Decentralised Water Master Plan.
Zero waste city	
70 per cent recycling and recovery of residential waste from the local government area by end June 2021	<p>The previous target of 66 per cent recovery of residential waste from the local government area by 2014 from the City’s Interim Waste Strategy, was achieved and the date has passed.</p> <p>The new target mirrors that outlined in the “NSW Waste Avoidance and Resource Recovery Strategy 2014–21”.</p>
70 per cent recycling and recovery of commercial and industrial waste from the local government area by end June 2021	<p>The previous target of 63 per cent recovery of commercial and industrial waste from the City LGA by 2014, from the Interim Waste Strategy has passed.</p> <p>The new target mirrors that outlined in the “NSW Waste Avoidance and Resource Recovery Strategy 2014–21”.</p>
Active and connected city	
33 per cent of trips to work during the AM peak undertaken by walking by 2030, by city residents	Walking to make up one third of commuter trips by City of Sydney residents – from the City’s “Walking Strategy and Action Plan”. Wording updated for consistency and clarity.
10 per cent of total trips made in the city are undertaken by bicycle by 2030	At least 10 per cent of city trips will be made by bicycle by 2030 – from “Sustainable Sydney 2030”. Wording updated for consistency and clarity.
80 per cent of trips to work during the AM peak are undertaken by public transport by 2030, by city residents and those travelling to Central Sydney from elsewhere	Trips to work using public transport will increase to 80 per cent, for both residents of the city and those travelling to the city from elsewhere by 2030 – from “Sustainable Sydney 2030”. Wording updated for consistency and clarity.

Local government area targets in Strategy and Action Plan	Comments
30 per cent of city residents who drive [with an unrestricted drivers licence] are members of a car sharing scheme by 2030	The City's previous target from the "Car Sharing Policy 2011" was "The City of Sydney will work to increase penetration of car sharing to 10 per cent of all households by 2016". This target has been achieved so a new target has been set.
Green and cool city	
The average total canopy cover is increased by 50 per cent by 2030 (from 15 to 23 per cent), and increased by 75 per cent by 2050 (to 27 per cent), from a 2008 baseline. <i>This target relates to both City operations and the LGA</i>	No change from <i>Sustainable Sydney 2030</i> .

Major actions to achieve key organisational environmental targets:

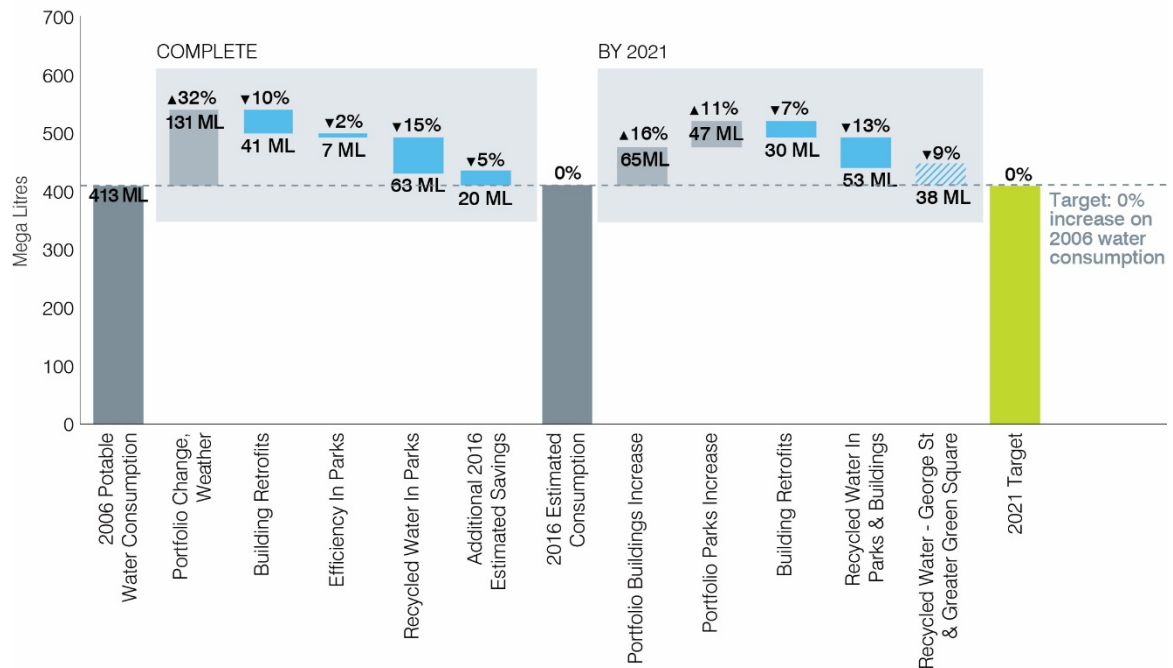
21. **City operations greenhouse gas emissions target:** The chart below shows the initiatives that the City has undertaken to date to achieve a 27 per cent emissions reduction and the estimated contributions of the initiatives we will implement across our operational portfolio between now and 2021.

City of Sydney operations greenhouse gas emissions target to 2021
Estimated contribution of initiatives



22. **City operations potable water consumption target:** The chart below shows the water savings initiatives that the City has undertaken to date and the estimated contributions of the initiatives we will implement across our operational portfolio between now and 2021.

City of Sydney operations potable water use target
Estimated contribution of initiatives

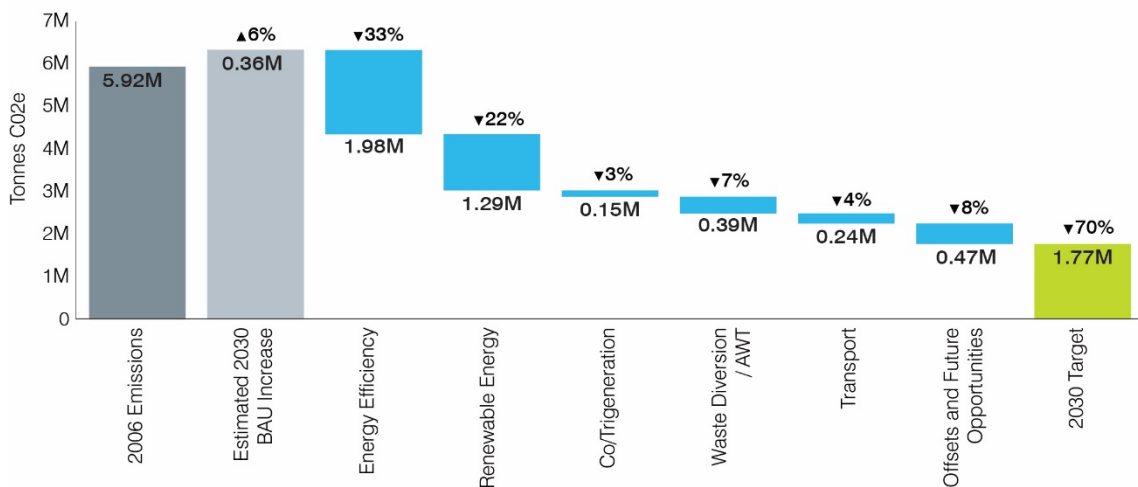


23. Further detail on these initiatives, and the actions the City will take to achieve its other operational targets, is provided in the Strategy.

Pathway to local government area environmental targets:

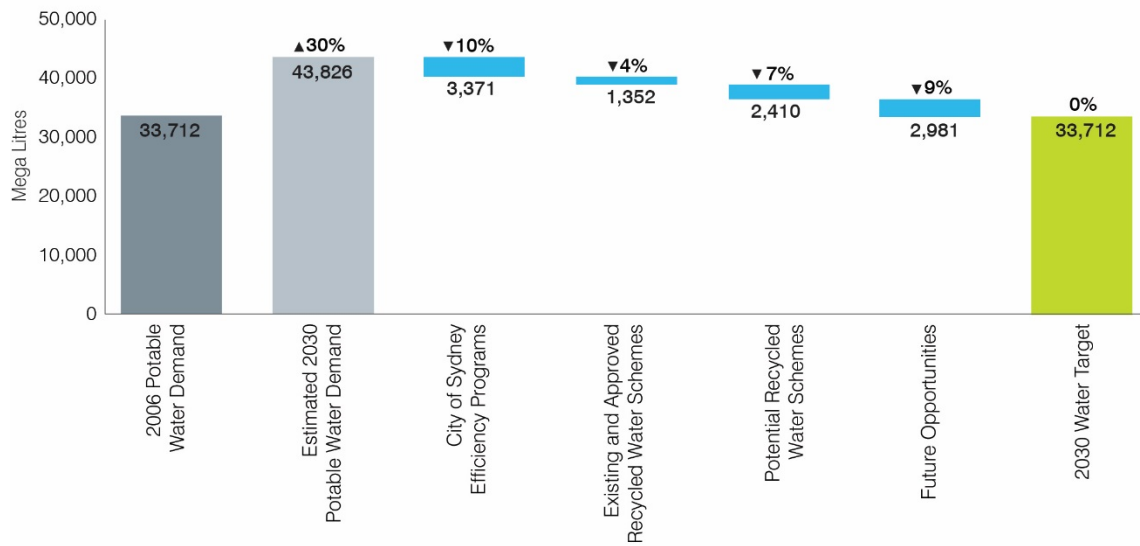
24. **Local government area greenhouse gas emissions target:** The chart below shows the estimated contributions of the initiatives that could lead to achievement of the LGA target of 70 per cent greenhouse gas reduction by 2030 from a 2006 baseline.

Local government area greenhouse gas emissions target
Estimated contribution of initiatives



25. **Local government area potable water use target:** The chart below shows the estimated contributions of the initiatives that could lead to achievement of the LGA target of zero increase in potable water use by 2030 from a 2006 baseline.

Local government area potable water use target
Estimated contribution of initiatives



26. Further detail on these initiatives, and the actions the City will take to support and influence these and other LGA targets, is provided in the Strategy and Action Plan.

Action plan

27. Appendix 1 of the Strategy and Action Plan is the detailed Action Plan. It comprises 110 actions that can be implemented by the City to improve environmental performance in its own operations and to influence the environmental performance of the LGA.

28. The actions were developed in consultation with City staff responsible for implementing them, and they have agreed to include relevant actions in business plans from 2016-17 onwards.

29. The Action Plan will be reviewed annually and revised if necessary. This will ensure that the City can identify the most effective actions to achieve the desired outcomes as the technological and regulatory environment evolves.

Advocacy for action by other levels of government

30. Achievement of the LGA targets requires action by other levels of government, the private sector and the community. The Strategy and Action Plan outlines the important role that City has in supporting and influencing change across the LGA by advocating for change to take place within state and federal government policy.

31. Key priorities that the City will be advocating for include:

- (a) Review BASIX targets – NSW Government to increase BASIX targets for minimum environmental performance in residential buildings;
- (b) Mandatory disclosure of environmental performance for non-commercial buildings – Federal Government to revise Commercial Building Disclosure scheme to have a reduced threshold and be expanded to other building types and whole building ratings, with greater engagement of information with tenants;

- (c) Rating tool for residential apartments – NSW Government to develop a NABERS tool (or equivalent) to benchmark the actual performance of residential apartment buildings;
- (d) Energy market reform – Federal Government to adopt changes to the National Electricity Rule to better support local energy generation; and changes to the National Electricity Objective to include climate change;
- (e) LED streetlights – Ausgrid to upgrade all its streetlights in the LGA to efficient LED lamps;
- (f) Water pricing – NSW water industry pricing regime to support the viability of recycled water schemes and to encourage water efficiency;
- (g) Land allocation for waste management in metropolitan region – NSW Government's regional land use planning to allocate space for waste management facilities in proximity to urban areas; and
- (h) High environmental standards for urban renewal precincts – NSW Government to set and enforce high environmental standards for the redevelopment of urban renewal areas under its control.

STATUS OF OTHER ENVIRONMENTAL POLICY

- 32. As the Strategy and Action Plan is a high-level strategy covering six major topic areas, endorsement of it necessitates the following changes to other environmental policy documents previously endorsed by Council.
- 33. On 25 June 2007, Council endorsed the Environmental Management Plan 2007, which set an overarching framework for the City to establish environmental visions, targets and actions for the following 10 years (Council meeting 25 June 2007, Item 8.2). The work undertaken by the City since that time in *Sustainable Sydney 2030*, the environmental strategies listed in paragraph 4, and the Strategy and Action Plan supersede the Environmental Management Plan 2007. It is recommended that Council rescind it.
- 34. To guide the implementation of *Sustainable Sydney 2030*, the City developed environmental master plans and strategies. The existing master plans and strategies are now considered as either:
 - (a) *Supporting documents* – containing actions and targets consistent with this Strategy:
 - (i) Energy Efficiency Master Plan – improving energy productivity: 2015-2030;
 - (ii) Adapting for climate change – a long term strategy for the City of Sydney: 2015-2070;
 - (iii) Cycle Strategy and Action Plan: 2007-2017;
 - (iv) Connecting our city: 2012;
 - (v) Walking Strategy and Action Plan: 2014;
 - (vi) Greening Sydney Plan: 2012;

- (vii) Urban Forest Strategy: 2013;
 - (viii) Urban Ecology Strategic Action Plan: 2014; and
 - (ix) Residential Apartment Sustainability Plan: 2015.
- (b) *Reference documents* – containing useful background information, with actions and targets superseded by this Strategy.
- (i) Decentralised Energy Master Plan – Renewable Energy: 2012-2030;
 - (ii) Decentralised Energy Master Plan – Trigeneration: 2010-2030;
 - (iii) Decentralised Water Master Plan: 2012-2030; and
 - (iv) Advanced Waste Treatment Master Plan: 2013-2030.
35. It is recommended that Council approve the change in status of these documents. The PDF versions of these documents on the City's website will be annotated to communicate their updated status, following endorsement of this draft Strategy and Action Plan for public exhibition.

KEY IMPLICATIONS

Strategic Alignment - Sustainable Sydney 2030

36. *Sustainable Sydney 2030* is a vision for the sustainable development of the city to 2030 and beyond. It includes 10 strategic directions to guide the future of the city, as well as 10 targets against which to measure progress. This Strategy and Action Plan is aligned with the following strategic directions and objectives:
- (a) Direction 1 - A Globally Competitive and Innovative City – Sydney is globally recognised for its environmental ambition and performance. The Strategy and Action Plan will enable the City to maintain and enhance this reputation.
 - (b) Direction 2 provides a road map for the City to become A Leading Environmental Performer – the outcomes and actions proposed in the Strategy and Action Plan will help the City to lead by example in its own operations and contribute towards improved environmental performance in the LGA.
 - (c) Direction 3 - Integrated Transport for a Connected City – the Strategy and Action Plan outlines the importance of moving to more environmentally-friendly forms of transport to reduce the city's environmental impact.
 - (d) Direction 4 - A City for Walking and Cycling – the Strategy and Action Plan reinforces the importance of shifting to active modes of transport to reduce the city's environmental impact.
 - (e) Direction 9 - Sustainable Development, Renewal and Design – the Strategy and Action Plan highlights the crucial role that sustainable design will play in achieving the environmental targets for the LGA.
 - (f) Direction 10 - Implementation through Effective Governance and Partnerships – the Strategy and Action Plan states clearly that the City alone cannot achieve the targets set for the LGA. This can only be done through collaboration with other levels of government, business and the community.

Organisational Impact

37. The Strategy and Action Plan outlines the actions that the City can and should take to directly impact the environmental performance of its own operations; and to indirectly impact the environmental performance of the LGA.
38. The actions were developed in conjunction with relevant City staff. Actions to commence in the 2016-17 financial year have been adopted by the responsible business units and addressed in their business plans.
39. Implementation of the actions will largely be undertaken with existing human resources. Some business units requested changes to staffing levels to accommodate actions proposed in this Strategy and Action Plan – however these actions relate to projects that had already been identified by those business units, not new projects. The City Infrastructure and Traffic Operations (CITO) team requested an additional role to undertake a number of actions associated with water sensitive urban design, which would contribute to the achievement of the storm water pollution targets set for the LGA. This role has been included in the draft 2016/17 budget. The City Properties team requested additional resources to complete a number of projects to improve the environmental performance of our own properties. This resourcing gap is currently being filled with part-time contractor resources. The Sustainability Programs team requested an additional role to deliver the High Rise Leaders Retrofit Program for residential apartments, which was endorsed by Council as part of the Residential Apartment Sustainability Plan on 10 August 2015 (Council meeting 10 August 2015, Item 7.8). This role has been included in the draft 2016/17 budget.

Risks

40. The Strategy and Action Plan proposes environmental targets for both the City's own operations and for the LGA. The LGA targets, the City operations greenhouse gas target (due to need for Ausgrid to convert streetlights to LED) and water target (dependant on George Street light rail including recycled water pipe) present a risk, as the City cannot control whether or not they are met. Achievement of those targets is dependent upon federal and state government policy and decision making. This risk will be mitigated through a program of strategic advocacy actions designed to influence these policy levers for the desired outcome.

Social / Cultural / Community

41. This Strategy and Action Plan does not propose interventions for specific social or cultural groups. However, improved environmental performance is expected to deliver the following benefits in these areas:
 - (a) Social benefits
 - (i) lower-income and more vulnerable community members will save money through lower utility bills by using less energy and water;
 - (ii) green spaces in the city contribute to people's physical and mental health and wellbeing, by providing places to socialise, play, exercise and relax;
 - (iii) improved active transport options enable improved health outcomes for and greater access to essential services and employment opportunities;

- (b) Cultural benefits
 - (i) increasing and improving green public spaces will encourage creative and cultural events to be hosted in the city's parks;
 - (ii) a connected network of high quality walking and cycling routes will enhance access to our diverse cultural, heritage and creative assets; and
 - (iii) better public transport systems will improve participation in the city's cultural and creative venues and events.

Environmental

- 42. This Strategy and Action Plan provides a focussed, realistic plan of action for the City to follow to improve environmental performance in its own operations and in the LGA over the next five years. Details of relevant environmental targets and proposed actions to achieve these target are outlined within the Strategy and Action Plan.

Economic

- 43. Reducing greenhouse gas emissions and adapting to climate change will create a low carbon economy, increase job opportunities and lower utility bills. Our Energy Efficiency Master Plan identified that \$208 million in avoided energy costs could be achieved in our city through energy efficiency initiatives.
- 44. A greener, cleaner and cooler city will improve attractiveness for residents and workers to choose to live and work, and businesses to invest in Sydney (Source: Deloitte's fifth edition of 'Building the Lucky Country: The purpose of place: Reconsidered': <http://www2.deloitte.com/au/en/pages/building-lucky-country/articles/purpose-of-place-reconsidered.html>.)
- 45. Environmental leadership will improve decisions to host international cultural and tradeshow events in Sydney, increasing tourism and spending.
- 46. Greater options for, and increased efficiency of, transport systems will reduce congestion and improve economic productivity.

BUDGET IMPLICATIONS

- 47. The cost of the actions included in the Strategy and Action Plan have been included in the draft 2016/17 operational budget and forward estimates. As implementation of actions progresses and the Action Plan is revised, future financial implications necessary to maintain environmental leadership may be identified. Approval from Council would be sought where required in accordance with existing financial delegation and budget approval processes.

RELEVANT LEGISLATION

- 48. The Strategy and Action Plan focuses on voluntary commitments and opportunities associated with improved environmental performance at the organisational and LGA scale. In general these matters are not the subject of legislation with which the City has to comply. City operations are affected by numerous environmental regulatory requirements. The City ensures compliance with these regulatory requirements through the operation of its Environmental Management System.

CRITICAL DATES / TIME FRAMES

Commencement of public exhibition period of 6 weeks	30 June 2016
Conclusion of public exhibition	12 August 2016 – please note this falls after the commencement of the caretaker period on 10 August 2016
Final Strategy submitted to Council for endorsement	Late 2016 – dependent upon feedback received in the public exhibition period.

OPTIONS

49. The City considered developing separate strategies for each of the key environmental areas listed in paragraph 8. However, this option was not determined to be the most efficient method for streamlining the City's activities or for engaging stakeholders.

PUBLIC CONSULTATION

50. The majority of the content in the Strategy and Action Plan is drawn from existing environmental strategies and *Sustainable Sydney 2030*, all of which were subject to extensive consultation.
51. The development of the Strategy was informed by an external reference group, who provided advice and review of the draft content through a series of face-to-face meetings with City staff.
52. Members of the group comprised:
- (a) Property Council Australia;
 - (b) NSW Office of Environment and Heritage;
 - (c) Sydney Water;
 - (d) NSW Department of Planning & Environment;
 - (e) Transport NSW;
 - (f) NSW Department of Industry;
 - (g) Green Building Council Australia;
 - (h) Energy Efficiency Council;
 - (i) Better Buildings Partnership;
 - (j) Facilities Management Australia representative;
 - (k) Jemena; and
 - (l) Institute of Public Works Engineering Australia.

53. Following endorsement by Council, the draft Strategy and Action Plan would be placed on public exhibition for six weeks. Consultation activities during the exhibition period would include a stakeholder briefing and a community workshop.

KIM WOODBURY

Chief Operations Officer

Chris Derksema, Sustainability Director

Anna Mitchell, Senior Sustainability Strategist