

Attachment C

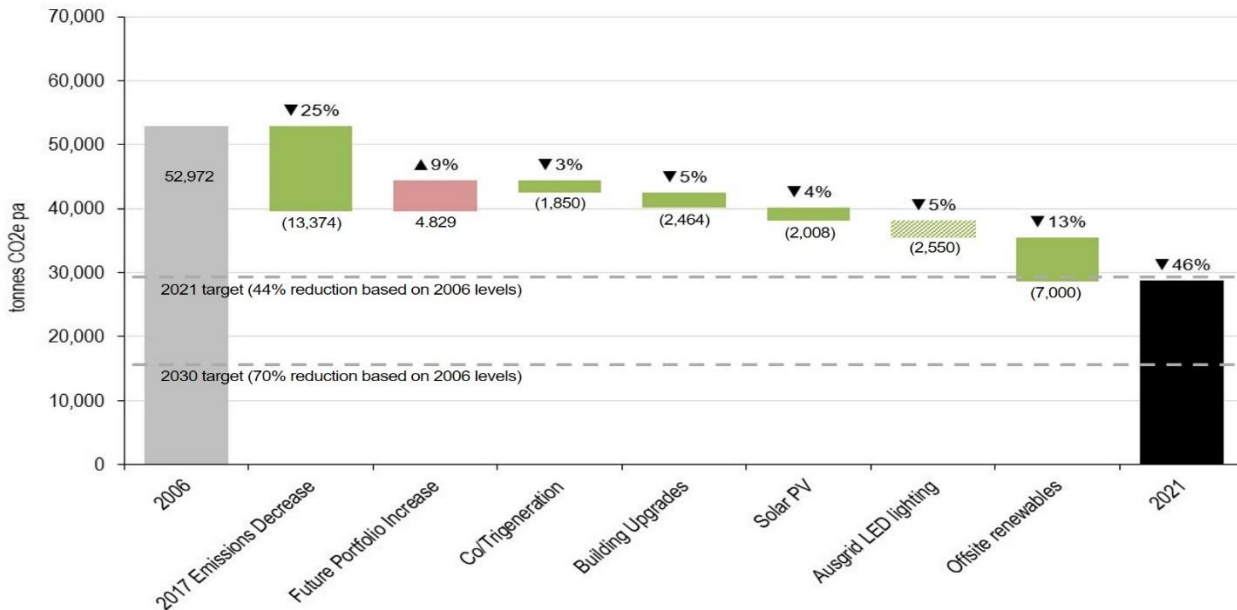
**Asset Environmental Target Schedule – to
be Included in the Asset Management Plan
within the Resourcing Strategy**

15. Asset Environmental Target

How we will get there

As at June 2017, the City has a verified emissions reduction of 25 per cent from the 2006 baseline. The chart below shows the initiatives that the City has undertaken and the estimated contributions of the initiatives we will implement across our operational portfolio to reach the target of reducing our emissions by at least 44 per cent by 2021. We will maintain our certified carbon neutral status each year through the purchase of verified offsets for those emissions we cannot eliminate, as we have since 2007. However the reduction target is absolute and does not allow for offsets.

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



Completed Initiatives - 25% reduction achieved

Portfolio change (+3 per cent) includes changes to the City’s property portfolio over time. Major additional facilities include Ian Thorpe Aquatic Centre, 343 George Street, Sydney, and Surry Hills Community Centre.

Management improvements includes emissions reductions achieved outside of the major efficiency initiatives. This includes solar installed to date, improved energy measurement and monitoring, behaviour changes and small works. **Other influences** on emissions include annual weather changes.

Initiatives to be completed by 2021

The 2021 emissions target remains at 44% reduction from the 2006 baseline and with a current forecast to a 46% reduction.

- Future portfolio increase (+9 per cent) assumes the expansion of the City’s property portfolio for community and operational purposes.

Increases: Alexandria Canal Depot, Waranara Early Education Centre, Green Square Community and Cultural Precinct, Green Square Library and Plaza, Gunyama Park Aquatic and Recreation Centre, Perry Park Recreation Centre and Green Square Water Reuse.

Increases through Developers Contributions to the City: Greenland Tower Creative Hub, Darling Library, and 178-186 George Street.

Proposed Divestments: Epsom Road Depot, Gerard Street Depot and Marian Street Depot.

- Co/Trigeneration (-3 per cent) - reductions will be accomplished through the operation of co/trigeneration facilities at Town Hall House, Cook and Phillip Park Aquatic Centre, Ian Thorpe Aquatic Centre and Gunyama Park Aquatic and Recreation Centre.
- Building upgrades (-5 per cent) reflects estimated savings from efficiency upgrades in the most resource intensive properties via the Major Properties Efficiency Project (MPEP).
- Solar Photovoltaics (PV) (-4 per cent) on City properties that can deliver 15 per cent of electricity demand if battery storage provides a cost effective solution and the City can take advantage of virtual net metering between our sites.
- Ausgrid LED lighting (-5 per cent) - The City pays for the electricity used by all street lighting in the local government area, however some of these lights are owned by Ausgrid. We will advocate for Ausgrid to upgrade all its street lighting to more efficient LED bulbs. This element is striped to indicate it is not within the City’s control.

Off-site renewables (-13 per cent) can be purchased by the City through the GreenPower scheme or directly from a renewable project such as Power Purchase Agreement (PPA) and integrates into the City’s retail contract renewal in 2019



Gunyama Park Aquatic and Recreation Centre: artist impressions

Operational Emissions Commitment and future year estimates

Similar in format to a financial budget, the following table provides annual Asset Portfolio carbon emission estimates to reach the City’s stated 2021 target. Estimates for water and waste will be provided next year.

GHG Tonnes CO2e	2018/19 2019/20 2020/21 TOTAL				
	2017/18				
Property Emissions Portfolio					
Carried forward Portfolio Balance	22,507	22,087	21,333	19,684	22,507
Add					
Net Portfolio Changes	157	520	646	3,261	4,584
Reduction Emissions Projects					
Co/Trigeneration Installations	(500)	(450)	(450)	(450)	(1,850)
Building Upgrades	0	(133)	(1,163)	(1,168)	(2,464)
Solar PV Installations	(77)	(691)	(682)	(558)	(2,008)
Total Property Emissions at End of Period	22,087	21,333	19,684	20,769	20,769
Street and Parks Lighting Emissions					
Carried forward Portfolio Balance	12,736	12,816	12,899	12,131	12,736
Add					
New Street Lights	80	83	82	0	245
Reduction of Emissions					
Ausgrid LED Street Lighting Program	0	0	(850)	(1,700)	(2,550)
Total Street and Parks Lighting Emissions at End of Period	12,816	12,899	12,131	10,431	10,431
Other Emissions					
Contractor Fuel	1,256	1,256	1,256	1,256	1,256
Organisational Fleet	2,417	2,417	2,417	2,417	2,417
Corporate Emissions (Events, Business Travel, Paper)	944	944	944	944	944
Total Other Emissions	4,617	4,617	4,617	4,617	4,617
Reduction of Emissions					
Offsite Renewables	0	0	0	(7,000)	(7,000)
Total OffSite Emissions	0	0	0	(7,000)	(7,000)
Total Emissions at End of Period	39,520	38,849	36,432	28,817	28,817
Baseline June 2006 Emissions GHG Tonnes CO2e	52,972	Emission Reduction June 2021			46%



Alexandra Canal Depot: Photovoltaic Solar Installation