

MELBOURNE AIRPORT

Energy and Carbon

Our energy efficiency

Melbourne Airport's 8-megawatt (MW) tri-generation plant generates lower-carbon electricity from gas and reuses waste heat for heating and cooling the terminals.

The tri-generation plant also provides an on-site energy source, which saves transmission losses while diversifying the airport's power supply. It is approximately 50% less carbon-intensive than grid electricity in Victoria.



Our renewable energy

Melbourne Airport's 12MW array is Australia's largest behind-the-meter solar installation – and the biggest of any airport in the country. With the airport's electricity demand expected to grow, our solar array generates 17 gigawatt hours of electricity per year, enough energy to power all four of our terminals.

The airport now has 3 operational solar projects:



A 12MW solar array



A 2MW roof array in our Business Park



A 100 kilowatt (KW) array + 140KW battery solar array to power our on-site water treatment plant



Our journey Timeline

2003 Energy Management Strategy developed

2008 Scope 1 and Scope 2 emissions mapped

2010 Annual carbon emissions publicly available

2013 Carbon offsets purchased for all staff travel and operation vehicles

2014 LED carpark lighting upgrade - stage 1

2015 8MW tri-generation plant

2017

- LEED accreditation for Terminal 4
- Carbon emissions reported in APAC Annual Report

2018 Airport Carbon Accreditation Level 1 achieved

2019

- Airport Carbon Accreditation Level 2 achieved
- Internal Science Based Carbon Target identified
- Carbon Management Plan developed
- LED carpark lighting upgrade - stage 2

2021

- Additional solar projects commissioned, bringing total on site to 14MW
- 100% renewable energy Power Purchase Agreement (PPA) signed December 2021
- Safeguarding future warehouse developments for roof-top solar

2022

- Site assessment underway for doubling on-ground solar
- Focus on Scope 3 emissions in supply chains including working with key industry partners
- Airport Carbon Accreditation Level 3 underway

Our emissions

Over 98% of our emissions are generated from electricity and natural gas used to power and heat our terminals and associated buildings. That's why we are focussed on reducing our reliance on grid energy and introducing renewables.

Achievement

Reduced emissions by



29%

between
FY16 – FY20

Target

Net zero for Scope 1 and Scope 2 carbon emissions by 2025



Net zero
by 2025



To view more about Melbourne Airport sustainable and environmentally responsible approach go to:

melbourneairport.com.au