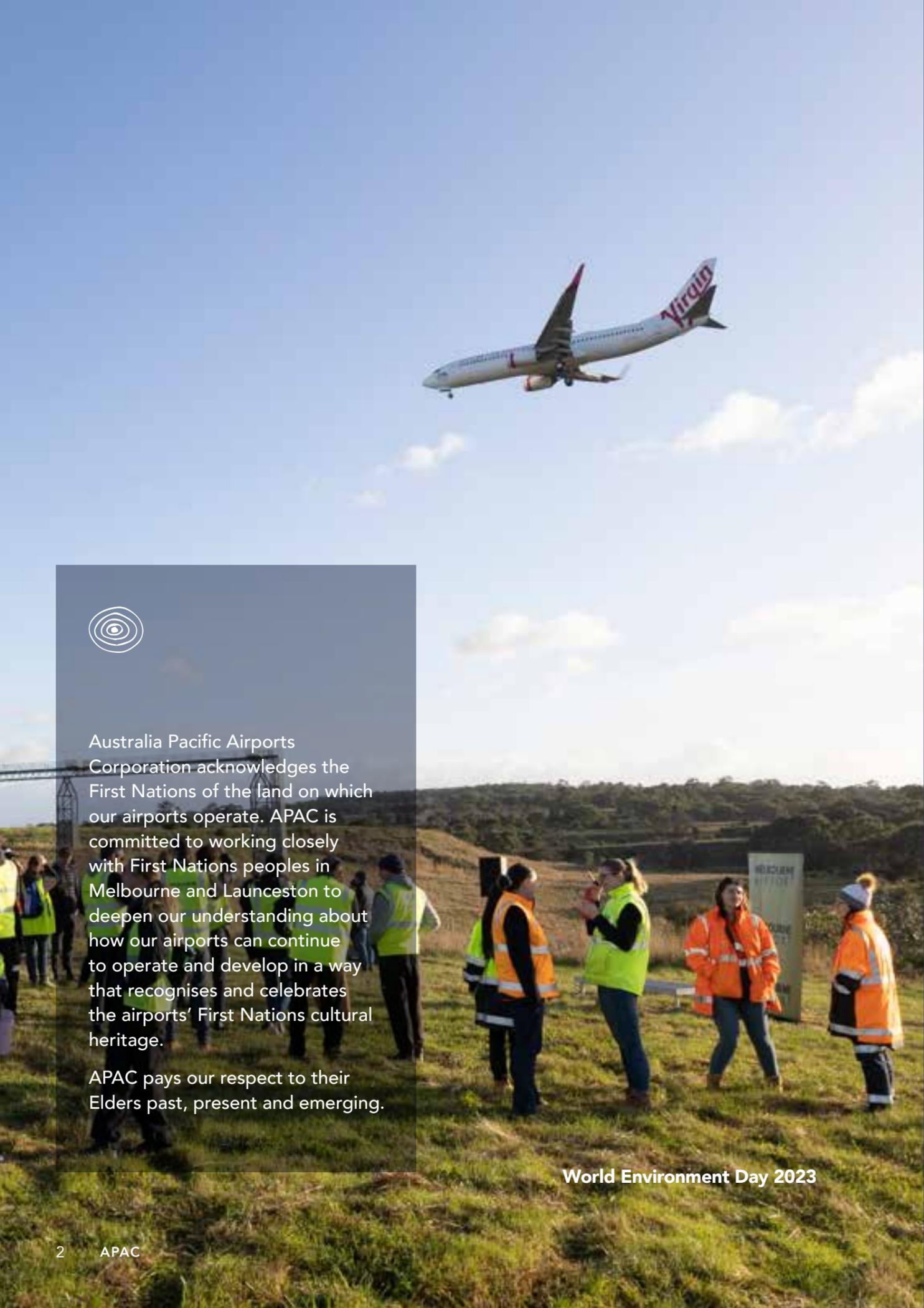


JUNE 2023

CARBON MANAGEMENT STRATEGY



**AUSTRALIA
PACIFIC
AIRPORTS
CORPORATION**



Australia Pacific Airports Corporation acknowledges the First Nations of the land on which our airports operate. APAC is committed to working closely with First Nations peoples in Melbourne and Launceston to deepen our understanding about how our airports can continue to operate and develop in a way that recognises and celebrates the airports' First Nations cultural heritage.

APAC pays our respect to their Elders past, present and emerging.

World Environment Day 2023



Be sustainable,
inclusive &
Influential

Introduction

APAC's (Australia Pacific Airports Corporation) vision to be 'Australia's favourite Airport destinations' includes a commitment to undertake our business in an environmentally sustainable manner.

In February 2022 APAC published its Environment, Social and Governance (ESG) Strategy with the following carbon commitments:

Achieve

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



Develop

Scope 3 emissions engagement strategy



This Strategy focuses on Melbourne Airport (Australia Pacific Airports Melbourne - APAM) but the framework will be applied to develop similar initiatives for Launceston Airport (Australia Pacific Airports Launceston - APAL) over FY24. Both airports are owned by APAC.

What are Scope 1, 2 and 3 emissions?



Scope 1 emissions

Direct emissions from owned or controlled sources (for example, combustion of diesel in company-owned vehicles and the use of natural gas to power Melbourne Airport's tri-generation plant).



Scope 2 emissions

Indirect emissions from the generation of purchased energy (for example, purchased grid electricity used to power airport facilities).



Scope 3 emissions

All relevant indirect emissions (not included in Scope 2) that occur in the value chain of the airport, including both upstream and downstream emissions (for example, aircraft movements, waste from airport tenants, and employee and passenger journeys to and from the airport).

Addressing Scope 3 emissions

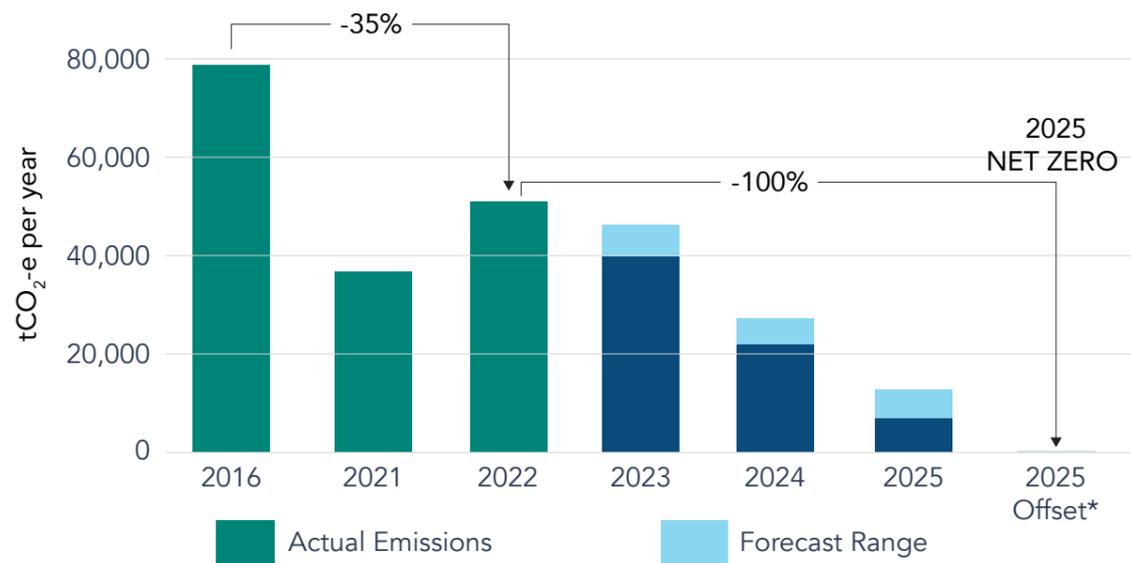
With work on our Scope 1 and 2 Net Zero carbon target well underway, we have turned our focus to reduce Scope 3 emissions.

Scope 3 emissions are a broad range of our Partner activities including aircraft movements, ground transport and tenant activities. Having been on our sustainability and carbon reduction journey for some time, APAC is well positioned to collaborate with, and support our operational Partners in realising their own sustainability objectives.

Our Journey Timeline



Our Path to Net Zero (Scope 1 & 2)



- *includes ~9,000 tonnes pa of carbon offsets for hard to abate sources (primarily HVAC)
- Forecast range of emissions subject to demand and emissions intensity
- Assumes some continued operation of tri-generation plant

Our Net Zero (Scope 1 & 2) Levers



Energy Demand

Reduce electricity load with LED upgrades across runway aprons, street lights and terminals



Energy Source

Our 100% renewable energy green Power Purchase Agreement (80 GWh) starts on 1 Jan 2024 reducing our absolute carbon emissions:

~49,000t CO₂e (FY23) → **~32,000t** CO₂e (FY24) = **~34.5%**



Solar Generation

as at June '23
= **18GWh/yr**

June '25 ↑
= **34GWh/yr**



Roof-top Solar

All new Business Park developments built to be roof-top solar ready



Residual Emissions

Implement projects over the medium term (by 2030) to replace our legacy gas-powered HVAC system, re-new our vehicle fleet with low or no-emission options and find alternatives for remaining emission sources where possible



Fleet

EV pilot program underway now and trending to zero-emissions by 2030



Australian Carbon Credit Units

From FY25 APAC will secure Australian Carbon Credit Units (ACCUs) as carbon offsets to meet our 2025 net-zero Scope 1 and Scope 2 target

Our Scope 3 Strategy

APAC's Scope 3 Carbon Strategy is focused on delivering meaningful and credible absolute carbon reductions across our business.

The key principles of our strategy are:

1. demonstrating that our business takes climate change and absolute emissions reduction seriously
2. ensuring our actions serve our licence to grow and are consistent with our travellers' mindset on sustainable travel
3. delivering foundational action with an open door to evolve - undertaking quick wins and setting the stage to innovate.

How we developed our Strategy

This strategy and its initiatives have been developed in-line with our corporate strategy, stakeholder insights and baseline emissions data.



Baselining

- Completed a boundary and baseline of our Scope 3 emissions (externally validated)
- Results presented in our FY22 annual report and will be embedded in ongoing reporting
- Scope 3 reporting will be undertaken annually



Stakeholder Engagement

- Engaged more than 25 operational Partners on their sustainability plans and explored avenues for our Airports to support
- Engagement informed areas of focus and ensured our plans support the sustainability aspirations of our operational Partners



Strategy Framework

- Developed a strategic framework to guide our actions on Scope 3. This ensures we're focussing on the right areas and can affect change across our operations
- Developed 'key principles' to guide action and targets on Scope 3



Initiative Development

- Developed framework, analysis, business case, medium-term success measures definitions and implementation plan for initiatives
- Individual initiatives are what will drive reduction in Scope 3 right across our operations

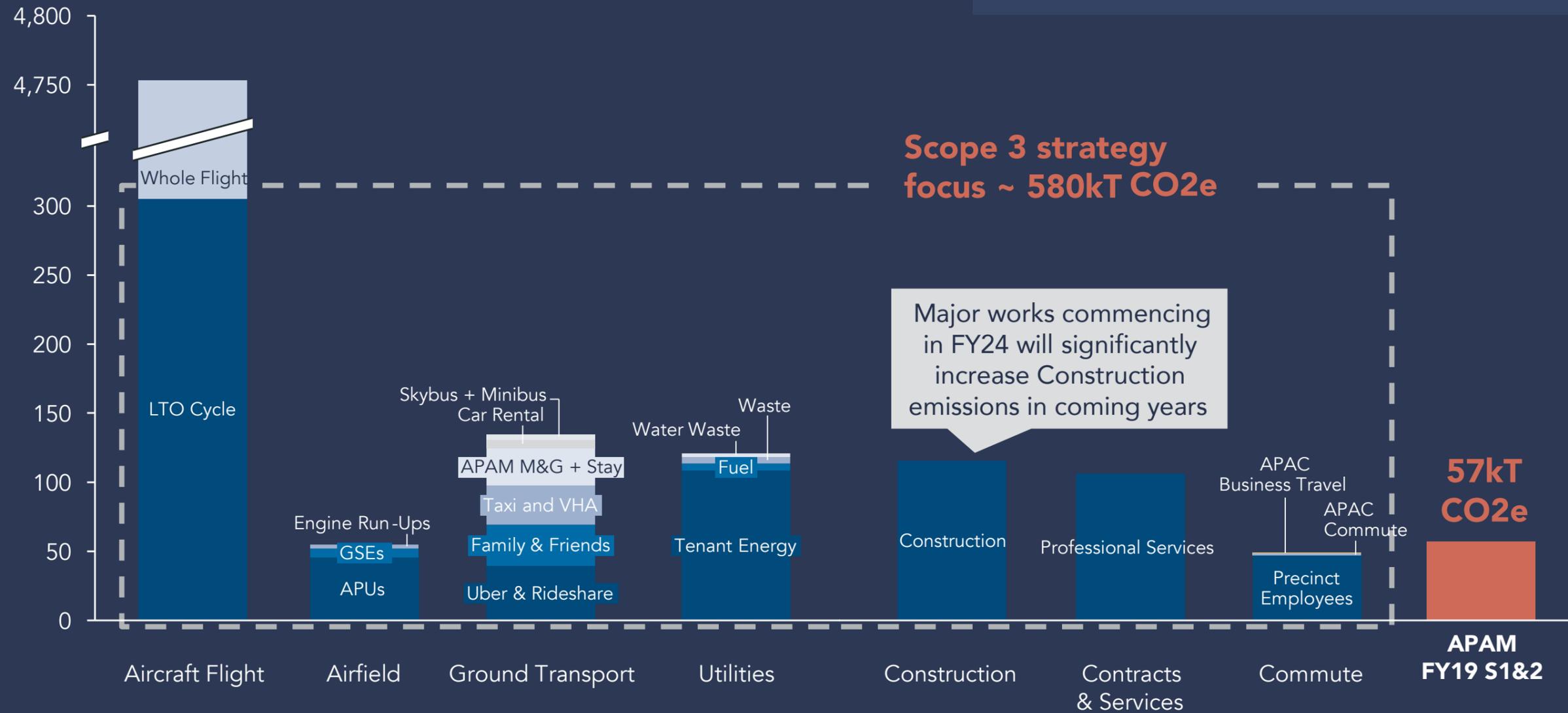
APAM Scope 3 Emissions Baseline

FY19 Baseline (000's tonnes CO2e)

Our Scope 3 Strategy focusses on reducing absolute indirect emissions from multiple sources across our operations.

Whole of flight aviation emissions are the largest source - an area we have less influence. There is greater opportunity to influence Partner carbon reduction in airfield operations, ground transport, tenant energy, construction and our contract procurement.

000's tonnes CO2e



Note: Landing & Take Off (LTO); Auxiliary Power Unit (APU); Ground support equipment (GSE); Victorian Hire Accreditation (VHA); Meet & Greet (M&G)



Melbourne Airport 12MW Solar Farm

Our Scope 3 Plan

Our Scope 3 plan centres on four key pillars. For each pillar, an aspiration and key focus area has been set and our progress will be reported against annually.

Pillar	Our Action Plan	Our Aspiration	Addressable Emissions (CO ² -e)
 Sustainable flying	<ul style="list-style-type: none"> Support decarbonisation in flying Promote the development of alternative fuels and flight technology 	<ul style="list-style-type: none"> Play our part by working with our Airline partners to achieve industry Net Zero by 2050 Partner with Airlines and ground handlers to minimise on-ground emissions Advocate for the introduction of a domestic Sustainable Aviation Fuel (SAF) supply chain 	~350k tonnes (LTO cycle, APU)
 Green energy precinct	<ul style="list-style-type: none"> Provide Partners (such as Airlines, ground transport, retailers and other tenants) with green energy 	<ul style="list-style-type: none"> Make green (renewable) energy available to our embedded network customers, and our electric vehicle charging Continue to grow our solar farm and rooftop solar network 	~100k tonnes
 Electrify operations	<ul style="list-style-type: none"> Support the electrification of petrol / diesel transport across our precinct 	<ul style="list-style-type: none"> Supply EV charging to our travellers and operational partners to encourage the transition to low-emission and electric vehicles (EVs) Use of green (renewable) energy in vehicle charging 	~150k tonnes
 Sustainable design, construction and procurement	<ul style="list-style-type: none"> Greener buildings, infrastructure and construction Sustainable procurement standards (services and projects) 	<ul style="list-style-type: none"> Consider sustainable performance across every construction project Our major projects are a focus for sustainable innovation Ensure procurement policies and supplier selection considers sustainable performance 	~250k tonnes

*LTO = Landing and Take Off, *APU = Auxiliary Power Unit



Sustainable Flying

Summary

- Working with airline partners to support industry Net Zero by 2050 with initial focus on the Landing / Take-Off (LTO) cycle, and a future focus on whole flight
- Advocate for introduction of a domestic Sustainable Aviation Fuel (SAF) supply chain with a view to achieving 10% industry supply by 2030
- Partner with Airlines and ground handlers to minimise LTO emissions through Fixed Ground Electrical Power (FGEP) and Pre-conditioned air (PCA)

Success Measures

- ACA Level 3+ (or higher) by 2025
- FGEP/PCA use mandate across all terminals (Dom / Intl) and minimise engine use for taxiing
- All existing FGEP / PCA units metered and monitored

Key Actions

Action	Initiative Detail	Steps to Complete	Timeframe (FY)			
			2023	2024	2025	2026+
ACA	Achieve Airport Carbon Accreditation (ACA) L3+ (renewal requirements and neutrality) or higher	Maintain Level 3 accreditation requirements and achieve Level 3+ (or higher)		●	●	●
Electrical Ground Power	Undertake a baseline study on Fixed Ground Electrical Power (FGEP) and Pre-Conditioned Air (PCA) use on International and Domestic gates	Install power-use meters on existing power units (all gates) and monitor consumption and use meter data to inform gate operations		●	●	
		Scope remaining aircraft stands (incl. remote) for installation of FGEP and PCA, and investigate legacy GPU replacement	●	●		
		Devise and deliver staged capital plan for additional FGEP / PCA		●	●	●
	Airline procedures at landing and gates	Revise operating procedures to mandate use of ground power (green power) and minimise engine use for taxiing	✓			
SAF	Advocate for 10% SAF by 2030 through stakeholder engagement, partnership and membership	Continue engagement with stakeholders on 10% SAF in industry by 2030		●	●	●
		Engage with government on SAF through Jet Zero Council and active membership of Sustainable Aviation Fuel Alliance of Australia & New Zealand (SAFAANZ)	●	●	●	●
		Ensure APAM infrastructure is SAF ready and explore onsite development		●		

FGEP = Fixed ground electrical power PCA = Pre-conditioned air ✓ = completed



Green Energy Precinct

Summary

- From FY25, APAM will have green energy to supply up to ~50% of embedded network users
- Make green (renewable) energy available to all embedded network customers, and electric vehicle charging facilities (when installed)
- Leverage solar farm, rooftop solar network and green Power Purchase Agreement (PPA) for renewable energy supply

Success Measures

- Creation and implementation of competitive green energy offer
- Encourage all small APAM energy customers (<40MWh pa each) to green power by 2024
- Pursue commercial power agreements with the Top 10 power users on network

Key Actions

Action	Initiative Detail	Steps to Complete	Timeframe (FY)			
			2023	2024	2025	2026+
Create Offer	Create a green energy offer for our embedded network tenants	Create and market a green energy offer for our tenants from January 2024		●		
		Achieve certification through the National GreenPower Accreditation Program to market energy provided as 'green' to customers		●		
Implement	Convert our tenants to green energy	Supply green energy to small customers at low / no cost to encourage uptake (~200 tenants, ~8GWh pa total)		●		
		Target 'Top 10' and other high use APAM-supplied and non APAM-supplied customers which account for more than 50% of precinct power consumption. Targeting aligned to contract end dates		●	●	
		Establish a monitoring and reporting suite on green energy consumption for both APAM-supplied and non-APAM customers		●		



Electrify Operations

Summary

- Facilitate the uptake of electric vehicles (EV) and equipment across airside and landside precincts
- Support our travellers and operational partners to transition to electric and low emission vehicles and equipment through the provision of electric vehicle charging infrastructure
- Encourage the use of green energy in vehicle charging

Success Measures

- Implement an electric Ground Support Equipment (eGSE) design standard for existing and greenfield terminal piers
- Facilitate the installation of EV charging points (airside and landside)

Key Actions

Action	Initiative Detail	Steps to Complete	Timeframe (FY)			
			2023	2024	2025	2026+
EV Landside	Provide public EV charging in our landside precinct	Develop a fire safety strategy and checklist to inform EV charging installation	✓			
		Facilitate the addition of EV charging points to existing petrol station sites	●	●		
		Develop an EV masterplan and delivery roadmap for the landside precinct across a range of use cases (such as car-park, valet and the feasibility of a common-user charging hub)		●		
		Deliver EV charging opportunities according to the masterplan and delivery roadmap above		●	●	●
		Develop a Tenant EV Policy and facilitate tenants in installing EV charging points on their premises	●	●	●	●
EV Airside	Provide electric vehicle charging for airside vehicles and equipment	Install initial charging points for GSE on freight apron (3+ charging points) ¹	●	●		
		Create an eGSE design standard to apply to existing and greenfield pier developments	●	●		
		Develop a roadmap to increase the conversion of fleet to eGSE (working with ground handlers)		●	●	

Note: 1: EV charging installations subject to HV network requirements and tenancy agreement

✓ = completed



Sustainable Design, Production & Procurement

Summary

- Consider sustainable performance in all capital projects including the implementation of sustainable design, material specification, procurement and contractor activity
- Leverage major capital projects (including M3R) to work with stakeholder and industry to showcase sustainable innovations

Success Measures

- Introduce minimum sustainability requirements / targets into Sustainability in Design checklist
- M3R considered a showcase for sustainable runway design

Key Actions

Action	Initiative Detail	Steps to Complete	Timeframe (FY)			
			2023	2024	2025	2026+
Checklist	Create and implement a Sustainability in Design checklist	Create a design reference guide and checklist for all capital projects	Completed FY22			
		Liaise with major project owners to embed bespoke sustainability requirements into projects	Completed FY22			
		Review and refine checklist based on applications to date to include minimum sustainability specifications / targets where practicable		●		
Innovation	Showcase sustainable innovation through major projects	Ensure explicit sustainability KPIs are incorporated within contract tenders incl. M3R	●	●	●	●
		Complete detailed design of end of line water treatment facility on Arundel creek		●	●	
		Commence advanced ecological offsets for airport development (on and off airport)	●	●		
Procurement	Review carbon impact of planned capital spend	Undertake a review of the carbon impact across all areas of project spend (capital plan)		●		
		Identify carbon abatement (e.g. low carbon materials, further sustainable design specifications) and carbon offset opportunities		●	●	
	Sustainability in services procurement	Review procurement policy, associated supplier selection and contract management, embedding sustainability metrics (incl. a carbon management plan) in the delivery of goods and services		●		

Our Carbon Offsets

APAC is committed to absolute carbon reductions where they can be achieved.

As we implement projects over the medium term (by 2030) to replace our legacy gas-powered HVAC system with heat-pumps or other suitable technology, and re-new our vehicle fleet with low or no-emission alternatives, we will secure Australian Carbon Credit Units (ACCUs) as carbon offsets to meet our 2025 net-zero Scope 1 and Scope 2 target.

The reliance on carbon offsets for our Scope 1 and Scope 2 emissions will reduce over the coming years as further absolute emission reduction is achieved.



Who are we working with

As part of our strategy to reduce absolute emissions across our airports, we are working with our partners and tenants to reduce our and their emissions.

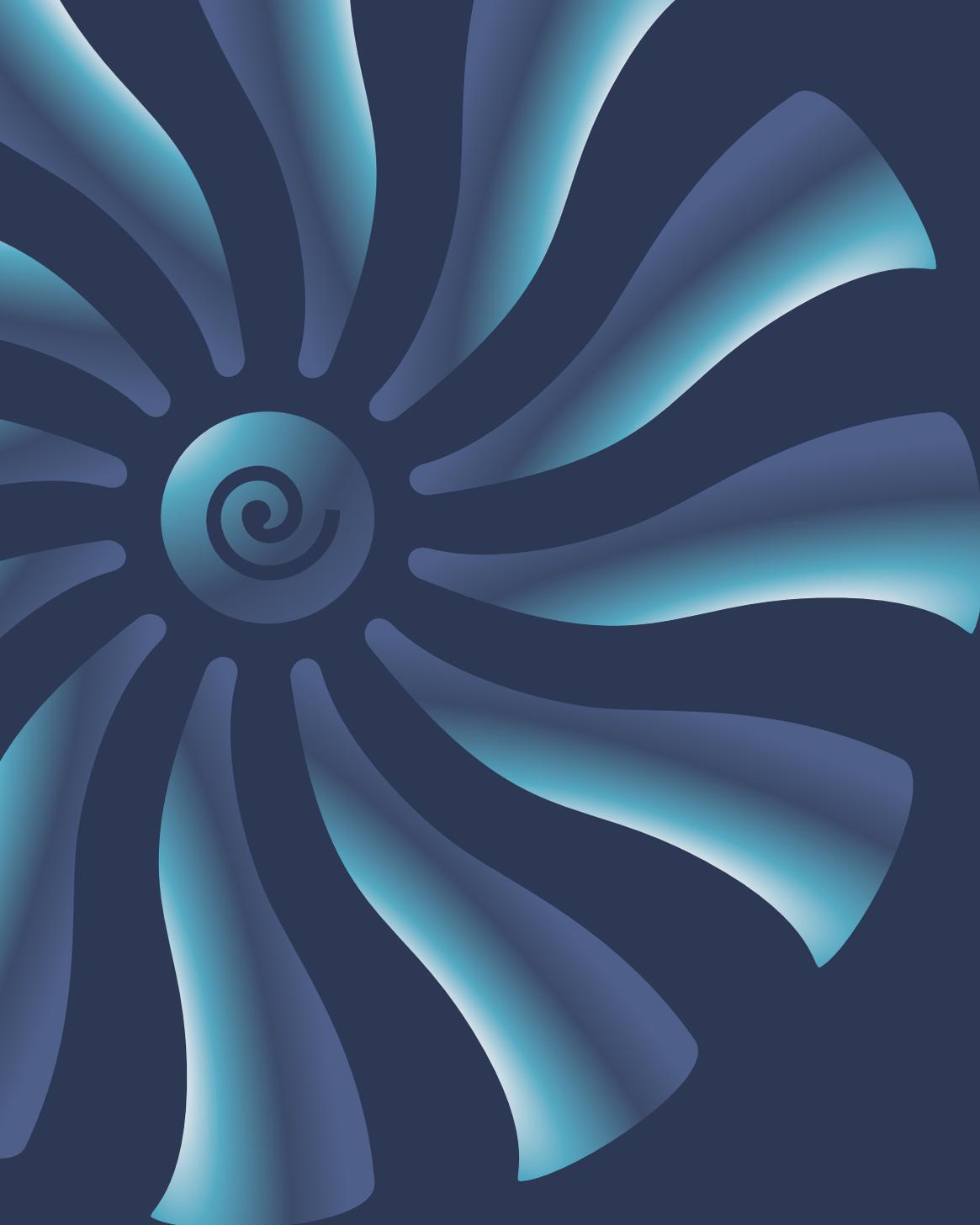
Disclosure and Assurance

APAC now reports annually on our Scope 1, 2 and 3 emissions. Our Scope 1 and 2 emissions have been publicly available since 2010, and Scope 3 from our FY22 Annual Report.

Our emissions reporting data is collated and reviewed by industry accredited professionals and in accordance with the NGER (Measurement) Determination and GHG Protocol.

It is also third-party reviewed and presented in our APAC Annual Report (Scope 1,2 and 3) and on the Australian Commonwealth Government's Clean Energy Regulator website as part of the National Greenhouse and Energy Reporting requirements.





**MELBOURNE
AIRPORT**

