

2021 - 2026 STRATEGY

ENVIRONMENTAL SUSTAINABILITY STRATEGY



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FOREWORD

MESSAGE FROM OUR CEO

Connecting People with their World Safely.

Aviation generates economic growth, creates jobs, and facilitates international trade and tourism. It is essential in supporting our global social fabric and cohesion – linking family and friends and allowing people to experience other cultures, communities and places. Whilst the impact of the COVID-19 pandemic has had a significant impact on aviation, it will rebound.

Society's expectations in relation to environmental protection are evolving, with the impacts of aircraft emissions, aircraft noise and the industry's reliance on other natural resources, increasingly being called out at both a global, national and community level. In response, our industry is seeking to improve its sustainability, whilst also looking to address significant disruption, which is likely to flow from the exponential increase in Unmanned Aerial Vehicles (e.g. drones).

As Australia's airspace manager, we manage 11% of the world's airspace, delivering both Air Traffic Management (ATM) and Aviation Rescue and Fire Fighting (ARFF) services. As an integral part of Australia's aviation ecosystem, we are in a unique position to facilitate flight paths for airspace users which enable fuel burn reduction and work to minimise the impact of aviation noise on the communities, wherever practical.

Our service delivery is supported by geographically distributed assets, and we are committed to safeguarding the inherent environmental values and ecological systems of the land from which we operate. We recognise that environmental sustainability is a key driver in the future success of our organisation, and will invest to reduce resource consumption and any negative environmental impacts. Enacting the strategy will place our business operations on a trajectory to achieve net zero carbon emissions by 2050. Through the next five years, we will reduce our environmental impact, implement innovative solutions and advance the principles of environmental sustainable development.



Jason Harfield
Chief Executive Officer

AIRSERVICES' ENVIRONMENTAL SUSTAINABILITY STRATEGY 2021-2026

PARTNER OF THE AVIATION ECOSYSTEM IN ENVIRONMENTAL SUSTAINABILITY				
PILLAR	AIRCRAFT EMISSIONS	AIRCRAFT NOISE	ECOLOGICAL SUSTAINABILITY	SUSTAINABLE RESOURCE MANAGEMENT
GOAL	Facilitate aircraft emission reductions within our flight information regions	Minimise the impact of aviation noise on communities, where practicable	Preserve biodiversity health and minimise pollution	Ensure sustainable and resilient operations whilst reducing our environment footprint
PROGRAM OBJECTIVE	Shared Use Airspace Trajectory based operations Route Optimisation	Improved balancing of competing flight path design constraints Expansion of flight path monitoring data Continuous Descent Operations Unmanned Traffic Management: Flight Information Management System	Biodiversity protection prioritisation Waste Protection Measures Environmental Management Plans	Resource Profiling Opportunity discovery Waste process efficiency and reduction Sustainable Procurement Practices Resource efficiency performance enhancement Climate Change Impact Assessments
OUTCOME TARGET	Through improved ATM practices, reduce CO2 emissions per flight by an average of 10% by 2030	100% of aircraft complying with Noise Abatement Procedures (NAP) at large metropolitan airports - Preferred Runway Use (PRU) by 2026	Environmental protection measures are implemented at our top 30 sensitive regional sites and top 10 priority airport sites by 2026 Environmental Management Plans are effectively implemented to cover all airports and regional areas by 2026	10% reduction in our total environmental footprint by 2026 Asset transformation to improve resource efficiency and resilience will occur across 20 primary locations by 2030

WHO WE ARE

We provide safe, secure, efficient and environmentally responsible ATM and ARFFS to the aviation industry.

Facilitating the movement of passengers and freight over 11% of the world's surfaces, demands a complex infrastructure network. We have over 700 sites across the Australian continent and extending into the Indian, Southern and Pacific Oceans.

Many of our sites are located in areas recognised for their unique biodiversity and fragile ecosystems with some buildings acknowledged for their heritage values. Our 3000+ employees are situated at over 30 differing geographic locations and, like the wider Australian community, place an increasing scrutiny on their and their employer's impact on the environment.

RIGHT: A graphical representation of Australia's airspace.

KEY STATISTICS



OVERVIEW

ENVIRONMENTAL CONTEXT

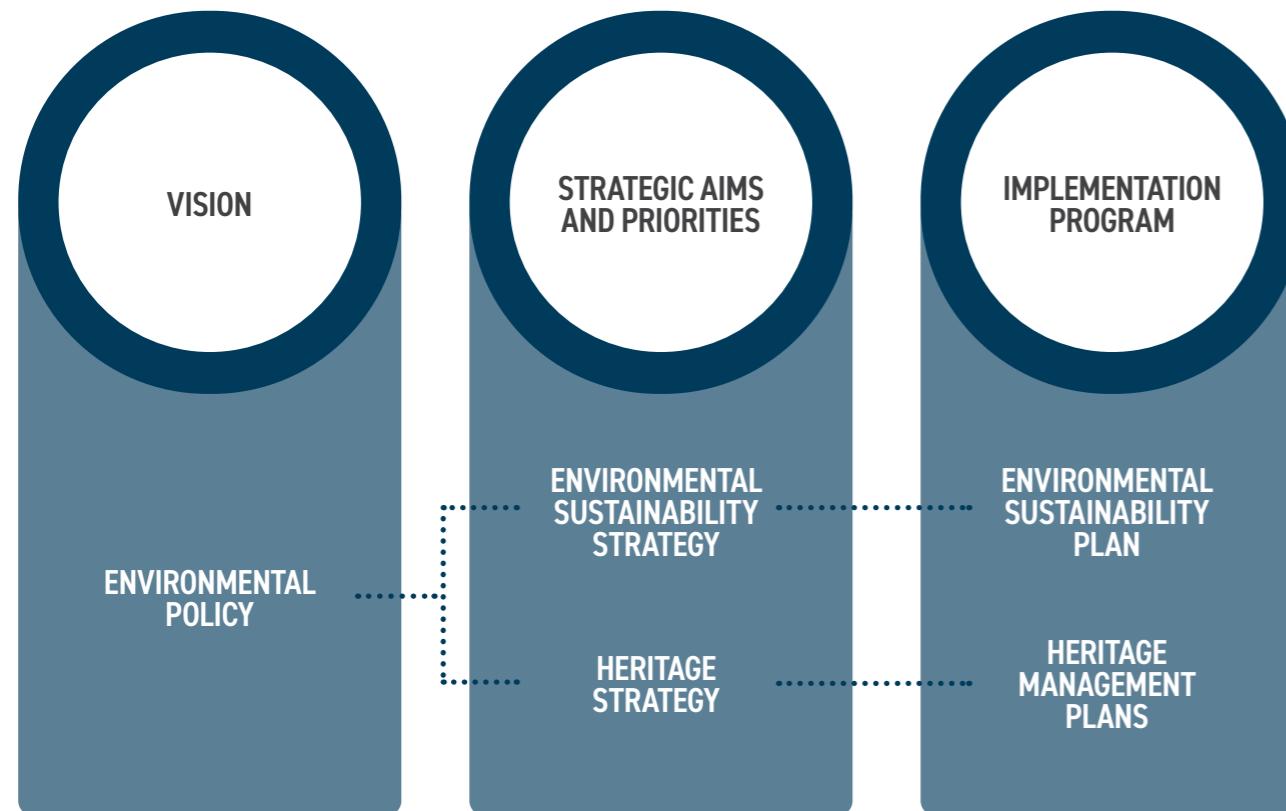
We have various legislated obligations in relation to environmental management.

In particular, we are bound by the:

- Air Services Act 1995;
- Environment Protection and Biodiversity Conservation Act 1999;
- Airports (Environment Protection) Regulations 1997; and
- Airports Act 1996.

Our Environmental Policy articulates our ambitions in relation to the environment and its management. Our policy is supported by subordinate environmental strategies, plans and our Environmental Management System. This document presents our strategic aims and priorities in relation to the environmental sustainability of our organisation; and how we intend to assist airspace users reduce their emissions and noise profile within the Australian Flight Information Regions.

We will produce an annual Environmental Sustainability Plan to demonstrate how we are enacting the strategy. The plan will detail program activities and achievements against agreed targets and key performance indicators.



OVERVIEW

INDUSTRY CONTEXT



Aircraft are now environmentally cleaner and quieter than in previous decades, however aviation is still responsible for both visual and noise pollution along with greenhouse and other gas emissions.

The International Civil Aviation Organisation (ICAO) has two aspirational goals for the international aviation sector, which includes a 2% annual fuel efficiency improvement through 2050 and carbon neutral growth from 2020 onwards. ICAO recognises the role which operational improvements led by Air Navigation Service Providers (ANSPs) will play in driving these goals. Many aviation institutions, including our industry body the Civil Air Navigation Services Organisation, are promoting a 'green led' aviation recovery post COVID-19.



Australia has set a target to reduce emissions by 26-28% below 2005 levels by 2030, and is a signatory to the Paris Agreement. An increasing number of aviation organisations, including our customers, have committed to carbon neutrality by 2050 in efforts to ensure the long-term sustainability of the industry.



From 2020, further runway capacity will be added to address future demand for air travel. A new parallel runway was opened in Brisbane in July 2020, planning for new runways in both Melbourne and Perth has commenced and a new airport being built in western Sydney. Aircraft noise profiles will alter.



Australia has been chosen by a number of companies for commercial trials of both delivery and passenger transport in lower airspace volumes. Increased numbers of aerial vehicles in this airspace segment will expand the amount of people who are potentially exposed to aircraft noise.



Services to aircraft are currently supported by a large and geographically distributed terrestrial infrastructure network. We were an early adopter of space-based surveillance. As technology advances, other core systems could be transitioned to space-based delivery thereby allowing us to reduce our geographic footprint.

OUR GOALS

COLLECTIVE INDUSTRY AND GLOBAL VISION

This strategy is based on the collective vision of an environmentally-sustainable aviation industry and recognition that in order to fulfil our key part in Australia's aviation ecosystem we need to focus on both our own internal operations and service delivery.

Refining, developing and implementing new and innovative practices will not only have environmental benefits, but will lead to better management of risk and produce operational efficiencies.

The United Nations' Sustainable Development Goals (SDGs) exist to drive global action for a more sustainable future. Whilst the SDGs are focused on impacting change on a global scale, this strategy demonstrates how we can contribute to a specific number of key goals:

 6 CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for all
 7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all
 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns
 14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
 11 SUSTAINABLE CITIES AND COMMUNITIES	Make cities and human settlements inclusive, safe, resilient and sustainable
 13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts
 15 LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems

These UN SDG's are translated into our Environmental Sustainability Strategy to ensure we will:

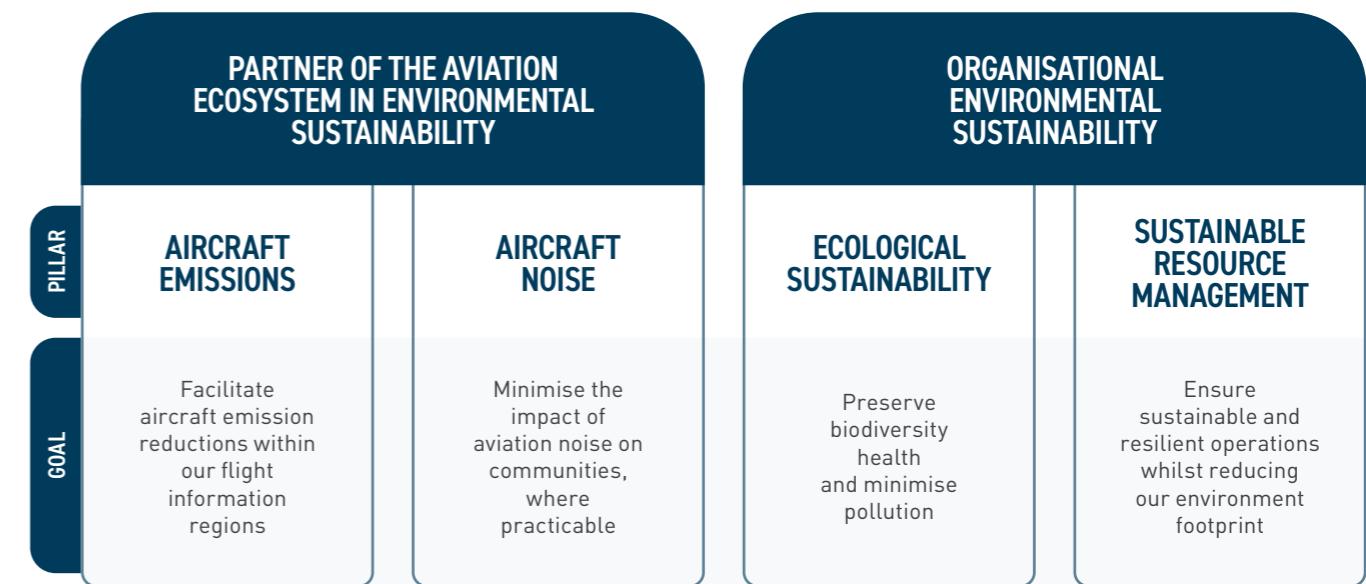
- continually reduce our environmental impact through our processes and sustainability values; and
- facilitate improved environmental outcomes for our customers and those who live in the communities surrounding airports that we service, where practicable.

OUR AMBITION

STRATEGY PILLARS

Our ambitions in relation to environmental sustainability cover four key areas, each with their own goal and key focus areas.

Our strategic vision has two distinct drivers, the first is centred on being a partner to the aviation industry, and the second is our responsibility for our organisation's performance.



Each pillar is described below and builds on our existing environmental management programs, which in some cases have been subject to:

- significant refinement in recent years; and
- significant infrastructure investment that are being made in efforts to improve both Air Traffic Management and Aviation Rescue and Fire Fighting service delivery.

A series of high level targets have been established to support the implementation of the strategy. Lower order measures and targets that enable the achievement of the top level outcome will be detailed within our Environmental Sustainability Plan.

STRATEGY PILLAR: AIRCRAFT EMISSIONS



GOAL	Facilitate aircraft emission reductions within our flight information regions
OUTCOME TARGET	Through improved ATM practices, reduce CO2 emissions per flight by an average of 10% by 2030

The contribution of aviation to global emissions is relatively low (circa 2%), but to ensure the long term viability of the industry, growth must be achieved in an environmentally sustainable manner.

Emission reductions in the commercial aviation sector will be primarily driven through aircraft technology advances including the deployment of sustainable aviation fuels and market measures, it is, however, acknowledged that Air Traffic Management must play a role in improving flight efficiency.

Our focus through the life of the strategy will be implementation of the OneSKY program which is supported by the Civil Military Air Traffic Management System (CMATS). The program when fully operational by 2026 will enable reduction of 145,000 tonnes of Carbon Dioxide (CO2) emissions per annum within the Australian Flight Information Regions. These benefits will be delivered through:



Shared Use Airspace: providing greater access for all users to available airspace, better fuel planning, and optimal airspace design to deliver preferred routes and flight levels.



Trajectory based operations: airspace users will be able to plan their arrival using a continuous descent from cruise to touchdown, enabling opportunities to not only save fuel but also decrease noise.



Route Optimisation: enabling airspace users to operate on User Preferred Routes (UPR) and access Dynamic Airborne Reroute Procedures (DARP). Both initiatives will allow aircraft to operate in a manner that aims to reduce fuel burn through using prevailing weather patterns.

As demand for our services return, we will ensure that our previous commitments to deliver programs which aim to optimise fuel burn in a capacity constrained environment are enacted within the Australian Flight Information Regions. These will deliver emission reductions within a 7 year period from commencement, which include:



Long Range Air Traffic Flow Management – Reduction of 48,535 tonnes of CO2 emissions.



Airport Collaborative Decision Making – Reduction of 183,000 tonnes of CO2 emissions.

Implementation of these programs along with other more tactical route and aerodrome optimisation practices will enable a reduction in aviation's CO2 emissions within the Australian Flight Information Regions by an average of 10% per flight by 2030.

STRATEGY PILLAR: AIRCRAFT NOISE



GOAL	Minimise the impact of aviation noise on communities, where practicable
OUTCOME TARGET	100% of aircraft complying with Noise Abatement Procedures (NAP) at large metropolitan airports - Preferred Runway Use (PRU) by 2026 ¹

We need to cater for the changing nature of aircraft operations, air traffic growth, airport expansion and advances in aviation technology, while keeping aviation safety as our first priority.

This requires a careful balance of ensuring safety, operational efficiency and minimising the effects of aviation noise on the community, wherever practicable. These efforts seek to make cities and other built environments more resilient and liveable, and allow us to take meaningful actions to deliver more sustainable services into the future. Responsibility for aircraft noise management is shared between a number of key stakeholders including aircraft operators, airports, government regulatory and planning agencies and the community. We will continue our commitment to accurately measure noise impacts in communities, and provide quick access to accurate information on aircraft movements and associated noise levels.

Noise profiles in cities will change as airports expand their runway capacity and a new airport is built in Western Sydney. The Unmanned Aerial Vehicle sector is growing quickly, and over the coming years our role in Unmanned Traffic Management will evolve in response to these trends. This new service domain provides the opportunity to embed environmental sustainability principles and facilitate protection for all community stakeholders. We are committed to working with all stakeholders to deliver better noise outcomes and achieve best practice in aircraft noise management. Our programs will enable:



Improved balancing of competing flight path design constraints

Over the last few years, we have focused on maturing our approach to community engagement and developing flight path design principles in concert with industry and community stakeholders. These principles allow us to embed a repeatable and transparent "environment by design" approach at the core of planning, development and implementation of new and revised flight paths.

With noise management principles and a revised engagement approach in place, we will measure and monitor our success against an agreed set of indicators and targets, and continually refine and adapt our approach based on the feedback we receive from community and stakeholder groups including the Aircraft Noise Ombudsman.



Expansion of flight path monitoring data

We will implement improved technology to monitor and report on aircraft flight path compliance, and create wider opportunities to reduce noise impacts through critical data gathering and analysis.



Continuous Descent Operations

Our OneSKY program will allow us to implement Continuous Descent Operations which allow aircraft to minimise thrust on approach to airports. Reductions in thrust deliver better noise and emissions outcomes.



Unmanned Traffic Management: Flight Information Management System

As we seek to support the increased demand for access to lower level airspace, environmental protection will be a key consideration in the development of our approach.

¹ Non-compliance due to weather, safety and operational requirements are excluded.

STRATEGY PILLAR: ECOLOGICAL SUSTAINABILITY



GOAL

Preserve biodiversity health and minimise pollution

OUTCOME TARGET

- Environmental protection measures are installed at our top 30 sensitive regional sites and top 10 priority airport sites by 2026
- Environmental Management Plans are effectively implemented to cover all airports and regional areas by 2026²

Our Environmental Management System helps manage our organisational environmental performance, and achieve continuous improvement to enable sustainable operations. Our approach aims to ensure that our impact is kept to a minimum and that we monitor our impacts.

As an organisation, we are committed to protecting the biodiversity of the sites from which we operate to ensure sustainable management for the future. In the past, we have made all efforts to avoid operational activity in places of environmental significance. However, as safety is our paramount priority, on occasions there have been no practical alternatives to locating aids in National Parks or conservation areas.

A sustainable ecosystem relies on the biodiversity health of our waterways, soils, groundwater, and the animals and plants that occupy those habitats must be safeguarded from harm.

As we perform our services, there is potential for contaminants to enter the ecosystem, including:

- wastewater from fire-fighting operations, training, and vehicle wash-down;
- overland water flow contaminated with general dirt, road grime, various residues of hydrocarbons such as oils and grease; and
- other substances (e.g. foam residue).

We recognise that we must improve current operations to minimise risk of further harm and address the pollution legacy of our past use of fire-fighting agents which included per-and poly-fluoroalkyl substances (PFAS). If not managed appropriately, this legacy contamination can increase risk of potential harm to the environment and human health. We are committed to meeting our statutory obligations and being a good corporate citizen. Our focus will be on impact management of historical PFAS use and involve site characterisation and provision of management plans through building further on existing studies and site assessments.

Advances in technology will provide us with opportunities to review how our services are provided, which may allow us to divest some sites following appropriate rehabilitation. Until these opportunities arise, we need to manage our impacts, and continue to care for our unique Australian natural beauty and diversity of ecosystems.



IMAGE: Arron Downes - Smoky Fire Station at sunset.

This would be enabled through these programs:



Biodiversity protection prioritisation

We will enhance the protection of our sites addressing both the biodiversity health impact which come from invasive weeds and pest animals, and potential pollution events from the storage of fuels and chemicals. We will identify priority sites for protection and conservation due to their environmental sensitivity, documenting action plans and implementing measures.



Waste protection measures

As acknowledged above, some of our historic and current practices may increase the potential for contaminants to be released into the ecosystem. We will implement asset modifications and other treatment options to mitigate impacts, and manage contamination risks to acceptable levels.



Environmental Management Plans²

We will extend the reach of our current Environmental Management Plans and assure they are effectively implemented at all airports and regional areas. Our collective efforts to manage environmental risks and impacts from our activities will be described within these plans, including clear commitments to protect the environment from pollution and waste mis-management practices that could affect the surrounding environment.

² Includes: Operational Environmental Management Plans / PFAS Management Plans / Trade Waste Management Plans / Regional Environmental Management Plans.

STRATEGY PILLAR:

SUSTAINABLE RESOURCE MANAGEMENT



GOAL

Ensure sustainable and resilient operations whilst reducing our environmental footprint

OUTCOME TARGET

- 10% reduction in our total environmental footprint by 2026
- Asset transformation to improve resource efficiency and resilience will occur across 20 primary locations by 2030

The principles for sustainable resource management embrace the promotion of conservation and the sustainable use of Australia's natural resources for future generations. By adhering to these principles, we will build resilience into our infrastructure, by addressing factors which include the impacts of climate change, and deliver sustainable operations.

Our current operations directly contribute greenhouse gas emissions in the region of 40 kilotonnes³ of CO₂e per annum. Over the life of the strategy, we will ensure that our environmental footprint is reduced in a manner that is both good for the environment and makes fiscal sense.

Our focus will be on efficient management of energy, water, land, materials, and waste. Efficiency may be measured through the reduction in the consumption of natural resources and increased use of renewable resources, which is delivered through improved equipment, infrastructure, alternative technology, change in behaviours and improved processes.

By the end of 2023, we will have developed a roadmap to drive Airservices' business operations to achieve **net zero carbon emissions by 2050**, thereby demonstrating our support to the government's commitment to the Paris agreement.

AIRSERVICES BUSINESS OPERATIONS: TRAJECTORY FOR NET ZERO CARBON EMISSIONS BY 2050

	TARGET 2035 (MID POINT)	ASPIRATION 2050
CARBON EMISSIONS	20,000K PER ANNUM	CARBON NEUTRAL
PRODUCTION OF RENEWABLE ENERGY (% OF ANNUAL CONSUMPTION)	40%	70%

³ Total of Airservices emissions reported for 2019-20 under Australia's National Greenhouse and Energy Reporting Scheme.

To achieve our strategy outcome targets and as a stepping stone to our 2050 strategic aim, we will drive:

1 Reductions in Environmental Footprint

These reductions will be supported by:



Resource Profiling

To gain an understanding of our footprint, we currently undertake National Greenhouse and Energy Reporting (NGER) focused on electricity and fuel consumption. We will extend our benchmarking and baselining delivering a comprehensive and complete view of resource consumption practices across the full suite of energy, water, land, materials, and waste.



Opportunity discovery

We will determine resources and sites that can deliver the greatest efficiency impacts by applying results from the resource profiling program. This will establish locations best placed for asset transformation, facility and site improvement and increased production of renewable energy. We will also examine emerging technologies and trends in sustainable procurement and supply chain assessment (e.g. electric vehicles) in our efforts to reduce our footprint.



Waste process efficiency and reduction

A streamlined approach to our waste management (e.g. solids, industrial, wastewater) will be enacted. We will also increase our data analysis in efforts to determine reduction opportunities and allow greater flexibility for recycling and reuse.



Sustainable Procurement Practices

Our supply chains will be examined to view the impact of our business from the widest vantage point and we will embed sustainable procurement processes to support this critical aspect of our approach.



Resource efficiency performance enhancement

We will formalise resource efficiency requirements within our Environment Management Systems and other business processes which oversight asset and facility management.

2 Manage the effects of Climate Change

This will be supported by:



Climate Change Impact Assessments

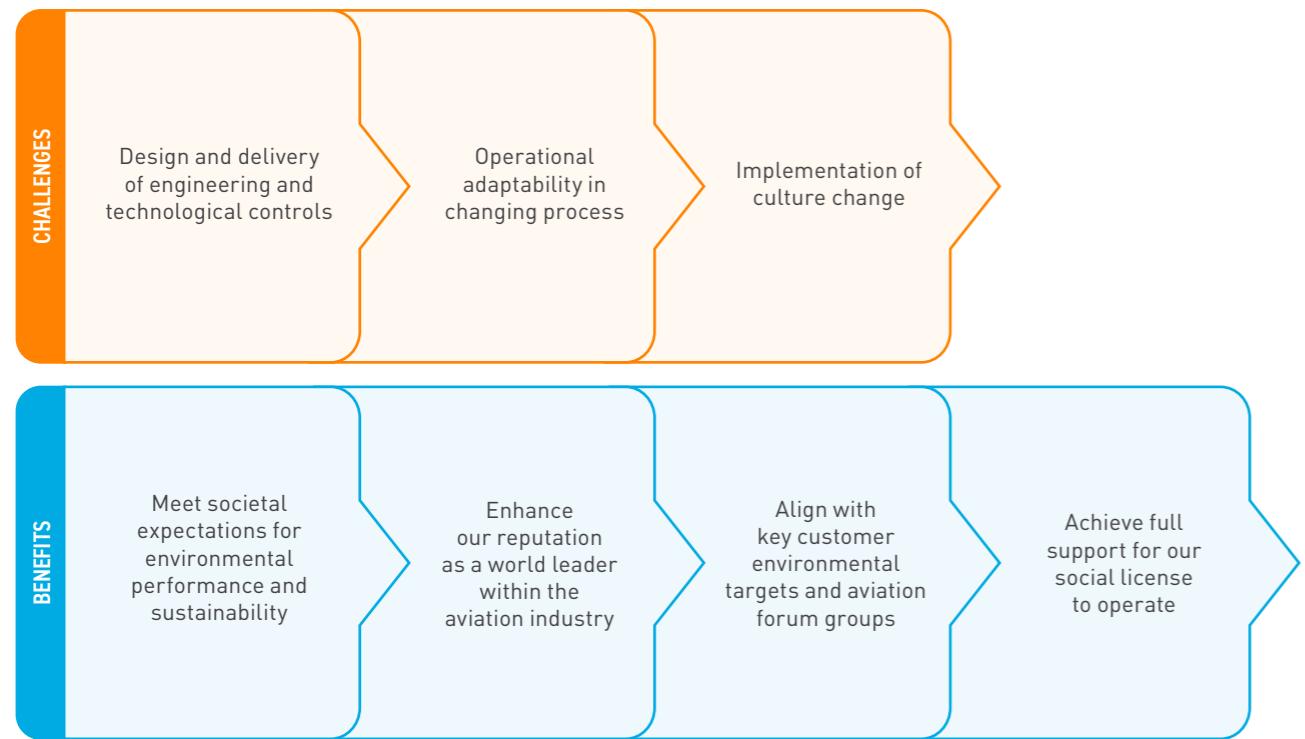
The global climate is changing, and will continue to change, in ways that have the potential to affect the planning and day to day operations of our services and business. The manifestations of climate change include higher temperatures, altered rainfall patterns, and more frequent or intense extreme events such as heatwaves, drought, floods and storms. Our assets will need to be adaptable to climate, and as a consequence we will explore risk profiles that may affect our operations and work to improve resilience of our infrastructure.

The programs and initiatives which will be delivered over the next five years will seek to improve our resilience against climate change, lessen our environmental footprint, scope our transformation to full environmental sustainability and drive changes in the business practices within our supply chain. We will leverage the interest and commitment which our staff have to the environment and embed a culture of environmental efficiency. This will support the delivery of at least a 10% reduction in our environmental footprint within the strategy period, predominantly by improved waste management and a reduction in the total equivalent carbon emissions (CO₂e)⁴ from our operational activities.

⁴ A standard unit for measuring carbon footprints which have the equivalent global warming impact. Emissions will be calculated from scopes 1, 2, and 3 emissions and can be balanced by purchasing offsets.

CHALLENGES AND BENEFITS

Implementation of our aspirations for the environment are not without their challenges, but we believe that the benefits of the work justify the effort involved.



ENACTING OUR STRATEGY

Our strategy details how commitments within our Environmental Policy will be achieved through aligned goals, objectives and targets. Progress will be overseen by the organisation's Executive and Board to ensure we are achieving the intended outcomes.

Governance mechanisms will be established to oversee implementation of the strategy across all pillars and the entire value chain within Airservices.

The annual Environmental Sustainability Plan will have clear measures for success to ensure traceability with pillar goals and objectives. Periodic reviews will be conducted to identify improvements in effective implementation, and validate progress and achievement of targets.

Most importantly, the success of this strategy is dependent on the commitment and advocacy of our people who will be charged with developing, implementing, operating and continually improving the programs of work that underpin the commitments made within the strategy, which will be embedded into our culture.

IMAGE: Tony Winters - Bushfires





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