

Environmental Sustainability Report

2023-24





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Foreword



It is with great pleasure that I present Airport Development Group's (ADG) 2023-24 Environmental Sustainability Report.

ADG owns and manages a portfolio of critical infrastructure, including Darwin International Airport, Tennant Creek Airport, Alice Springs Airport, Darwin Airport Resorts, which includes the Mercure Resort, Novotel Hotels, and IBIS Hotel, and over 4,000 hectares of land across the Northern Territory. The effective stewardship of these diverse assets not only reinforces our role as a major contributor to the Territory's economy but also highlights our commitment to supporting the communities in which we operate and acting as a trusted custodian of the land.

We acknowledge the deep spiritual connection that the Traditional Owners, including the Larrakia people in Darwin, the Arrernte people in Alice Springs, and the Warumungu people in Tennant Creek, have with the land. Our continued collaboration with Indigenous groups to incorporate culturally appropriate land management techniques remains central to our sustainable practices.

At ADG, our vision is to lead in corporate sustainability by taking decisive actions today to protect our future. A key element of this commitment is our Board's ambitious pledge to achieve net zero carbon emissions (scope 1 and 2) by 2030. This pledge underpins our efforts to invest in environmentally robust practices and infrastructure, addressing the challenges posed by climate change and aligning our actions with the principles of responsible environmental stewardship.

We made significant progress toward this goal during this reporting period by investing in energy efficiency projects at our airports. Over \$7.5 million has been invested to upgrade Darwin International Airport's terminal cooling towers. The new infrastructure is over 40% more efficient and will reduce the terminal's annual carbon emissions by around 950 tonnes compared to the previous chillers. Additionally, we are implementing processes to enhance our resilience to climate change, ensuring our operations can adapt to evolving environmental conditions. Light poles along the general aviation and regular passenger transport aprons were switched from sodium lamps to energy efficient LEDs at a cost of over half a million dollars.

Strategic partnerships remain vital to our approach. In Darwin, our collaboration with the Larrakia Rangers supports the ongoing management of Rapid Creek Reserve, a crucial natural resource. In Alice Springs, our partnership with local stakeholders has fostered innovative land management practices resulting in reduced fuel loads and enhanced environmental resilience. We also remain focused on managing PFAS at our airports in collaboration with key stakeholders.

We have prioritised biodiversity and proactively managing flora and fauna across our airport precincts which has led to habitat improvements in our conservation reserves, enriching the biodiversity of the areas we manage.

Our efforts have not gone unnoticed. During the reporting period, ADG was a recipient of the Gold Award in the <8mppa (less than 8 million passengers per annum) category at the Airports Council International (ACI) Asia-Pacific and Middle East Green Airports Recognition Awards for the Gurumbai Cultural Trail in Darwin, which is a recognition of our commitment to long-term environmental sustainability and partnership with Larrakia Nation.

ADG's confidence in the future of the Northern Territory combined with our Board's commitment to net zero by 2030 continues to drive our investment in innovative sustainable practices. We are committed to leading the way in environmental sustainability, ensuring that our actions today safeguard the future of the Territory for generations to come.

Tony Edmondstone
Chief Executive Officer
Airport Development Group

Introduction

About Airport Development Group

Airport Development Group (ADG) has been an integral part of the Northern Territory community for over two decades.

ADG acquired leases from the Australian Government for the three Northern Territory airports as part of Australia's airport privatisation program. This included Darwin International Airport (DIA), Alice Springs Airport (ASA) and Tennant Creek Airport (TCA) in June 1998. Each lease is for 50 years, with an option of a further 49-year extension. ADG owns and operates the three airports and a rapidly growing business precinct in Darwin — Darwin Airport Central.

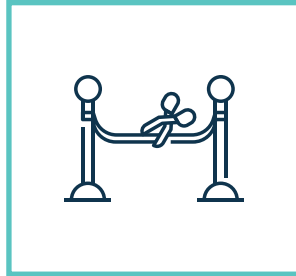
In addition to its main office located within the DIA terminal, ADG also maintains an office in Cairns, Queensland. ADG has significant investments across hotels, properties and utilities, and continues to invest in major infrastructure projects across the Top End to enhance the lives of all Territorians. ADG is Australian owned by IFM Investors (77.4%) and Palisade Investment Partners Limited (22.6%).



2023-24 highlights



Almost **500m³** of **recycled construction material** reused across new projects



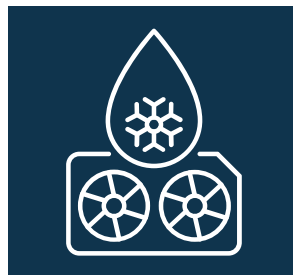
Opening the upgraded **Gurumbai Cultural Trail** at an official event on 19 April 2024 by stakeholders, ADG staff and ADG Indigenous Training Academy students



Winning the **Gold Award in the <8mppa category at the Airports Council International – ACI Asia-Pacific & Middle East Green Airports Recognition Awards** for the Gurumbai Cultural Trail



Hosting the **2024 Inter-Airports Environment and Sustainability Forum** at Darwin Airport Resort, attended by representatives of **17 airports**



\$7.5 million Eastern Chillers Project completed providing new water-cooled infrastructure that is **over 40% more energy efficient** and will reduce carbon emissions at DIA by approximately 950 tonnes



Over **half a million dollars** invested to install energy efficient LED lighting along the general aviation (GA) aprons and regular passenger transport (RPT) apron at DIA



Collaboration with Jetstar to **enhance recycling of onboard waste** generated from domestic flights in Darwin



Continued **effective and genuine consultation with all key stakeholders**, including the Australian and Northern Territory governments, Defence, Traditional Owner groups such as Larrakia Nation, airline partners, and community groups such as Rapid Creek Landcare Group.



Environment

Reusing and recycling material for projects

Reusing and recycling construction materials has been a strong focus across 2023-24, resulting in significant sustainability outcomes and cost efficiencies for projects and maintenance activities. These included:

- Reusing stockpiled gravel generated from past projects that was stored on-site, including:
 - 250m³ reused as building pads/foundation for two new storage sheds
 - 20m³ reused to repair 100 metres of the Gurumbai Cultural Trail, where the old boardwalk was deteriorating and causing safety concerns
 - 15m³ reused to repair airside perimeter roads.

- Reusing approximately 200m³ of crushed concrete to construct temporary access tracks for projects during the wet season to limit erosion and sedimentation.
- Recycling approximately 100 café chairs as part of terminal food and beverage upgrades by donating them to airport staff and a local charity store.

ADG continues to prioritise reusing stockpiled soil and fill for new developments rather than importing new material from quarries. This requires stringent excavation, stockpiling and environmental testing processes to ensure materials are suitable for reuse.



Figures 1 and 2: Reusing stockpiled gravel to cost-effectively repair an unsafe section of the Gurumbai Cultural Trail

Environment/sustainability outcomes

Key activities and achievements:

- **E-Waste recycling:** Recycling approximately one tonne of obsolete IT equipment (e-waste) present throughout the terminal and resorts.
- **Vegetation mulching:** Purchasing a woodchipper to mulch pruned vegetation to reuse in garden beds throughout the DIA precinct. This minimises ongoing costs and reduces the chance of importing weed seeds, pests and diseases from purchased mulch.
- **Energy transition:** Converting terminal food and beverage operators from gas to electric cooktops to reduce reliance on fossil fuels. Blocks 5 and 6 at Darwin Airport Resorts also made the switch, with upgrades to remaining buildings planned for upcoming years.
- **Palm salvage and replanting:** Salvaging 25 mature palms from a development site and replanting as part of landscaping upgrades.
- **Water conservation:** Irrigation repairs at Alice Springs Airport to reduce water wastage due to leaks.
- **Chemical storage upgrades:** Upgrading the chemical storage shed at Tennant Creek Airport including bunded pallets for paint storage and bunded flame cabinets for chemicals.
- **Solar infrastructure:** Repairing six solar trackers at Alice Springs Airport to improve the solar infrastructure's efficiency and performance.
- **Wildlife Hazard Management Plan:** Updating the Wildlife Hazard Management Plan for Darwin International Airport and Alice Springs Airport. Training was provided to all airside staff, including species identification, risk identification and wildlife hazard management techniques.
- **Hazardous waste removal:** Removing 13 discarded 240 litre drums and two 1,000 litre pod containers holding bitumen emulsion mix from historical projects.



Gurumbai Cultural Trail

The Gurumbai Cultural Trail is a 3.5 kilometre return walk located only 60 metres from the Darwin Airport Resorts. The trail showcases the extraordinary natural beauty of the Top End and introduces path users to Larrakia Country and culture.

ADG invested \$434,000 in this project, as well as \$116,000 secured through two grants; the NT Tourism Visitor Enhancement Experience Program (VEEP) and an IFM (ADG's) Community Grant, being a total investment of \$550,000.

Gurumbai Creek (Rapid Creek) is a special place for the Larrakia people. ADG together with Larrakia Nation wanted to upgrade the area to help share Larrakia culture with the community including tour groups, schools and other community members who will use this path.

The project upgraded the existing walking trail and made key improvements including installing 650 metres of wheelchair accessible concrete pathways, a new ramp, a 25-person seating area, a presentation stage for small groups, a new water access point and additional waste bins.

Culturally informed signage developed in conjunction with Larrakia Nation has been incorporated along the length of the trail with QR codes to introduce visitors to Larrakia culture and provide information about the flora, fauna and land management in the region.

Due to the trail crossing multiple land tenures, diverse stakeholders were consulted on the project including the Northern Territory Government, City of Darwin, Defence, Larrakia Nation and the Rapid Creek Landcare Group.

The trail was officially opened on 19 April 2024 at an event attended by stakeholders, government ministers, ADG staff and ADG Indigenous Training Academy students. Larrakia Nation accompanied by the Larrakia Rangers led the Welcome to Country, followed by a tree planting which added 370 native plants from 35 different species to the reserve, contributing to the overall biodiversity of the area.

In May 2024, ADG was awarded the Gold Award in the <8mppa (less than 8 million passengers per annum) category at the Airports Council International – ACI Asia-Pacific & Middle East Green Airports Recognition Awards for the Gurumbai Cultural Trail.

The program promotes environmental best practice to minimise the impact of aviation on the environment and recognises airport members for outstanding environmental projects. For the 2023-24 period, the theme was Biodiversity and Nature-Based Solutions.

This project underscores ADG's commitment to sustainability, biodiversity and cultural preservation. Further long-term improvements to amenities, safety, accessibility and usability are scheduled. The aim is to acknowledge and honour culture, respect the environment and for the trail to serve as a welcoming destination for all.

Partnership with Larrakia Rangers

The Larrakia Rangers continue to be the primary contractor for environmental management of Rapid Creek Reserve at DIA. The team conducts weekly site visits to maintain the health and amenity of the reserve. Their primary remit includes weed and fuel load management, firebreak maintenance, brush cutting, trail maintenance and litter collection. The rangers also undertake controlled burns and revegetation activities where necessary.

ADG's partnership with Larrakia Nation was pivotal in developing the cultural aspect of the Gurumbai Cultural Trail project. ADG plans to continue collaborating with Larrakia Nation to expand tourism offerings, including Gurumbai Cultural Trail tours.



Inter-Airports Environment and Sustainability Forum

ADG hosted the 2024 Inter-Airports Environment and Sustainability Forum at Darwin Airport Resorts in June. This event brought together environmental representatives from airports across Australia and New Zealand to discuss pressing environmental issues and share best practices.

Seventeen airports were represented in-person and online, with 15 delegates travelling to Darwin to attend the event. Airports from Australia and New Zealand provided updates on environmental, sustainability, cultural and heritage initiatives being implemented.

A highlight of the event was the inaugural Indigenous-led tour of the Gurumbai Cultural Trail, conducted by Larrakia Nation with the Larrakia Rangers. Attendees also enjoyed a guided tour of the Darwin Aviation Museum, which offered a fascinating glimpse into the history of our airport and its significant contribution to the region.

The forum was well received and fostered strong and collaborative connections among the environment and sustainability professionals who attended.

DIA Integrated Vegetation Management program

The Integrated Vegetation Management (IVM) program is an innovative and effective approach that has contributed to a reduction in the wildlife strike rate at DIA. The program involves targeted herbicide and insecticide applications across a 90-hectare treatment area around the main runway, aiming to remove food sources and reduce the area's attractiveness to wildlife.

The 2023-24 period marked the fourth year implementing the IVM program. This year, the program was expanded to include a round of grass suppression and seed head control to manage wet season growth, as well as an additional insecticide treatment late in the wet season to extend the effects of treatment into the dry season.

This successful project involved several stakeholders and required a significant collaborative effort from many ADG staff to ensure the program ran smoothly in a complex operating environment.

Fuel load management at Alice Springs Airport

Fuel load assessments undertaken at Alice Springs Airport (ASA) highlighted the need for cattle grazing in 2023-24. The assessments indicated an increased fire risk across many areas of the airport due to the proliferation of buffel grass, spurred by higher-than-average summer rainfall (482mm compared with the long-term average of 290mm). Most of this rainfall occurred in November (92mm) and March (223mm), resulting in significant vegetation growth throughout the summer period.

To manage this risk, approximately 200 cattle and 10 camels were introduced across several areas of the airport. This approach aims to balance maintaining buffel grass as a soil stabiliser while protecting native vegetation and airport assets by reducing potential fire fuel loads.

Overgrown firebreaks were reinstated in the Butchers Paddock, Southern Paddock, VIP Paddock and Horticulture Paddock to separate areas of higher fuel loads and decrease the risk of a widespread wildfire.

Cattle grazing is a useful vegetation management tool at ASA and complements other fuel reduction activities such as mowing, slashing and grading to effectively reduce fire risk.

PFAS management

ADG continues to collaborate closely with stakeholders to address PFAS contamination at both DIA and ASA.

PFAS (per- and poly-fluorinated alkyl substances) are synthetic chemicals historically used in firefighting foam at aerodromes around Australia. These substances have been identified as environmental contaminants due to their persistence in the environment.

In 2023-24, ADG's PFAS management efforts included:

- **Risk assessments:** Ongoing risk assessments for all soil excavations related to new projects.
- **Environmental monitoring:** Continuous environmental monitoring and site investigations at proposed development sites.
- **Compliance audits:** Conducting audits to monitor tenant and contractor compliance with legislation and national guidelines.

ADG actively engaged key stakeholders including RAAF Base Darwin and Airservices Australia, who provide aviation rescue firefighting services at both DIA and ASA.

ADG continues to work with all stakeholders to responsibly manage PFAS contamination at its airports, ensuring environmental safety and compliance.

Key activities and achievements:

- **Alice Springs Airport:** Airservices Australia removed and disposed of approximately 780 tonnes of PFAS-impacted soil. This project involved excavating soil to a depth of 200mm around the existing Large Mock-up Unit (LMU) concrete pad at the fire training ground, followed by reinstating the area with certified clean fill. Historic PFAS-contaminated stockpiles and the top layer of soil in the downstream drain were also removed. The contaminated soil was shipped interstate for thermal destruction, reducing the mass of PFAS on site and limiting potential downstream impacts.
- **Darwin International Airport:** ADG continues to liaise with Defence to remediate PFAS contamination at Former Fire Training Area 2 (FFTA2) within the DIA lease area. Remediation efforts include additional soil testing and investigation, developing a Remediation Action Plan (RAP) and subsequent soil removal and treatment. Remediation is expected to occur in the 2025 dry season with ongoing monitoring to ensure suitable outcomes are achieved.



Biosecurity management

ADG collaborates with NT Health and the Department of Agriculture, Fisheries and Forestry (DAFF) to prevent invasive species being introduced to Darwin and the surrounding areas. It is important biosecurity risks are managed effectively given DIA is a 'first port' due to international flights. This includes:

- **Quarterly mosquito treatments:** Quarterly preventative mosquito treatments are conducted at DIA. This involves spraying walls, vertical surfaces, drains and dark areas around aircraft arrival and baggage handling areas with a residual insecticide that lasts for approximately 12 weeks.
- **Mosquito traps:** Several mosquito traps are set around the terminal and are monitored weekly by DAFF.
- **Ongoing monitoring:** Routine monitoring and preventative treatments are ongoing to ensure biosecurity risks are effectively managed.

In February 2024, the exotic mosquito species *Aedes aegypti* was detected at DIA, marking the first occurrence of this species since 2016. This mosquito species is a known carrier of various diseases including dengue fever, yellow fever and Zika virus.

The *Aedes aegypti* detection triggered an emergency response. ADG worked with stakeholders to facilitate a comprehensive survey and treatment within 24 hours. Additional treatments and daily surveillance activities were carried out over the following 30 days to ensure a breeding population did not establish. There were no further detections during this time, indicating the treatment program's success.

ADG remains committed to ensuring biosecurity risks are managed effectively, protecting the airport and the surrounding community.



Sustainability

ADG views corporate sustainability as conducting business to create value for present stakeholders while protecting the rights of future stakeholders. Not only is sustainability good for the environment and the communities we work across, but it also represents good business.

Sustainability is incorporated across our business operations, our employees our community, and our environment.

Adopting corporate sustainability across our airport operations delivers value to our business through:

- maintaining our social licence to operate
- growing investor confidence
- driving efficiency improvements in the use of natural resources
- minimising waste
- providing safe work environments
- supporting employee learning and development
- driving innovation within our projects
- managing risk.

Sustainability data

Energy consumption:

- 16.2 GWh — equivalent to powering approximately 1,906 average-sized NT households for one year.

Greenhouse gas emissions (scope 1 and 2):

- 9,586 tonnes of carbon dioxide equivalent (tCO₂e).

Work health and safety:

- 1,469 people registered in the Working on Airport induction system
- 750 hazards (including maintenance requests) identified and reviewed to prevent potential future events.

Sustainability reporting

Our sustainability data provides technical information that further demonstrates our sustainability performance in the following areas:

- approach to sustainability reporting
- stakeholder engagement processes
- workforce profile
- work health and safety systems
- resource use, emissions and waste.

Stakeholder engagement

Our stakeholders

ADG is committed to effective and genuine consultation with all key stakeholders across our three airports. Fostering positive, strong, long-term relationships with those who are directly involved in, or may be affected by, airport operations and development is a priority and vital to our long-term success.

Stakeholder engagement occurs at many levels, from developing our airport master plans through to daily airport operational activities. The stakeholders we engage with can be grouped loosely into the following categories:

- internal and financial stakeholders
- on-airport stakeholders
- active interest stakeholders.

We recognise that our stakeholders have different interests, expectations and interactions with our airports. The stakeholder engagement and areas of interest table (Table 1) describes how we engage with each stakeholder group and summarises their particular areas of interest in relation to our airports.



Table 1: Stakeholder engagement and areas of interest.

Stakeholder	Engagement methods
Internal and financial stakeholders	
Employees	Our monthly online newsletter provides staff with regular updates on the organisation's activities. Regular strategic sessions were held with management staff, as well as departmental and organisation-wide staff meetings. We hosted informal morning teas, provided an annual survey to encourage feedback for continuous improvement, and delivered biannual staff reviews.
Board and shareholders	The Airport Development Group Board was established to oversee business management and performance. Board members regularly engage with ADG management and convene five times a year. ADG is 77.4% owned by IFM Investors, and 22.6% owned by Palisade Investment Partners Limited. Reporting is provided to these stakeholders on a regular basis.
On-airport stakeholders	
Contractors working on airport	Online inductions engaged contractors with our airport standards and requirements. Airport project managers, safety and environmental staff provided face-to-face engagement with contractors prior to and during work delivery. Safety bulletins were regularly shared with contractors and Safety Month events were well attended.
Passengers and other airport users	In 2023-24, approximately 2.2 million passengers passed through our airports in Darwin, Alice Springs, and Tennant Creek. The most substantial means of engagement for passengers and other people that visit the airport, including family and friends, was through our website, social media and our 'Happy or Not' mobile surveys throughout the terminal areas.
Airlines	During 2023-24, a total of 106,990 aircraft movements occurred across Darwin, Alice Springs, and Tennant Creek airports. Regular meetings were held with airlines to discuss new projects, safety, security, environment and other business.
Airport tenants and service providers	Our airports have more than 100 tenants within our terminals and across our airport estates. Key departmental staff engaged with tenants on a regular basis to manage operational requirements, and provide news and updates, including safety and environmental information. Tenant audits supported compliance with legislation and lease agreements.

Stakeholder	Engagement methods	Areas of interest
Active interest stakeholders		
Local community	We engaged with our local community through formalised consultation processes when establishing our airport master plans, through our community consultation meetings and through environmental committees. We engaged with Traditional Owners at our airports to assess sites of cultural significance and build relationships through engagement. ADG also maintained strong community engagement through major events, and various partnerships and sponsorships. Our website and social media provided the community with a broad range of airport information and regular updates.	
Business	ADG engaged with hundreds of businesses to deliver a high level of service, new projects and initiatives. Airport staff are members of regional business development groups and provided updates, assessed innovation opportunities and successfully achieved synergies with business activity across northern Australia.	
Government agencies	Our airport business has ongoing engagement with federal, state and local government agencies through partnership projects and as part of airport compliance. ADG consulted with government agencies in developing master plans, designing major projects and when there were significant changes to operations.	



Workforce Profile

We actively encourage our people to create a positive culture through living our values of Safety, Our People, Sustainability, Innovation and Passion. Through our focus of building capability, our staff received professional development opportunities including specialist and technical training, leadership workshops specific to ADG with a focus on resilience and corporate training, and anti-discrimination and cultural awareness workshops.

In 2023-24, ADG staff attended approximately 856 hours of learning and development training across 13 different workshops sessions. Specialist contractors also work at the airport in addition to our staff. Areas of the airport with significant contractor involvement include security, cleaning, maintenance and construction.



Work, Health, Safety (WHS) system

ADG uses the Aerodrome Safety Management System (SMS), audited by the Civil Aviation Safety Authority (CASA), as a framework for our entire organisation's SMS. Airports have two distinct areas:

1. Airside, which is strictly controlled by CASA and other Commonwealth agencies for security, border force and transport safety.
2. Landside, which comes under the jurisdiction of NT WorkSafe.

A 'Working on Airport' induction must be completed by all airport workers airside or landside and this covers safety requirements applicable to the airport environment, including:

- work health and safety (WHS)
- security
- environment, including biosecurity.

All inductees must answer critical questions relating to induction topics and score 100% before being deemed competent. All inducted personnel are recorded electronically and management is notified of all results, triggering the need for further competency assessments where required. Employees and contractors must undertake inductions every two years. At 30 June 2024, 1,469 people were registered in the Working on Airport induction system.

Hazard identification, risk assessment, and incident investigation

All staff working on airport complete an online safety induction.

Staff and selected contractors have an additional face-to-face induction conducted by airport Health and Safety, Security, Environment personnel. The focus of these induction processes is to ensure all personnel working on airport are familiar with the hazard identification, risk assessment and risk control processes at our airports.

Our risk management system incorporates the hierarchy of controls to determine the best way to reduce the risk to as low as reasonably practical.

Health, Safety and Environment Committee

Every three months, at least one representative from each of work group and department across our airports attends the Health, Safety and Environment (HSE) Committee meeting.

Minutes from HSE Committee meetings are emailed to all staff and posted in lunchrooms and other high use areas. Actions are assigned and followed up at every meeting. Senior executives attend multiple meetings every year, highlighting senior management's commitment to safety.



2023-24 Work Health and Safety indicators

In 2023-24, focus was placed on improving the reporting culture at ADG to ensure hazards, near misses and incidents are reported, recorded and investigated, and learnings can be implemented to prevent reoccurrences and reduce safety risks. This included:

- installation of the HSE Notice App on all company phones to facilitate a straightforward and easy to use reporting system for staff
- introducing an Executive Safety Walk with executive staff and the health and safety manager once a month to encourage transparency and accountability within the business
- implementing the Take 5 risk assessment prior to conducting high-risk work.

These initiatives ensure safety is front of mind for all staff and contractors so safety incidents can be prevented wherever possible.

Proactive data

- 204 Safety, Environment, Security Observations (SESO) inspections undertaken, identifying a total of 464 safety observations.
- 218 safety shares recorded (including 19 near misses).
- 750 hazards (including maintenance requests) identified and acted upon to prevent potential future events.
- 1,984 Take 5 assessments undertaken by staff and contractors, identifying a total of 3,444 hazards.

Energy usage and greenhouse gas emissions

Energy usage

ADG manages an embedded electrical network that provides electricity to all airport users and tenants. Tenants that are metered, both within the terminals and across the airport estate, consumed 15.8 Gigawatt hours (GWh) during 2023-24 and are excluded from ADG's energy consumption as they are outside our operational control.

The energy sources used by ADG in 2023-24 were:

- solar PV arrays
- electricity purchased from the grid
- standby diesel generation sets
- unleaded petrol or diesel for vehicles and machinery.

In 2023-24, a total of 16.2 GWh was consumed by ADG, with a breakdown of 14 GWh for DIA (including the Darwin Airport Resorts), 2.2 GWh for ASA and 0.04 GWh for TCA. This includes the airport terminals, maintenance sheds, management offices and other airport infrastructure such as roadside lighting.

ADG's significant investment in solar energy has seen another year of substantial renewable energy generation from rooftop and ground-based solar farms across all three airports. In 2023-24, our solar panels generated 8.8 GWh at DIA and 1.3 GWh at ASA, with total renewable energy generation from solar totalling over 10.1 GWh across the three airports, which is equivalent to approximately 1,188 NT households.

Large generation certificates (LGCs) created by our solar farms are sold to more energy intensive businesses to reduce their carbon footprints.

A breakdown of the total energy generated and used across the three airports is shown in Figure 4.

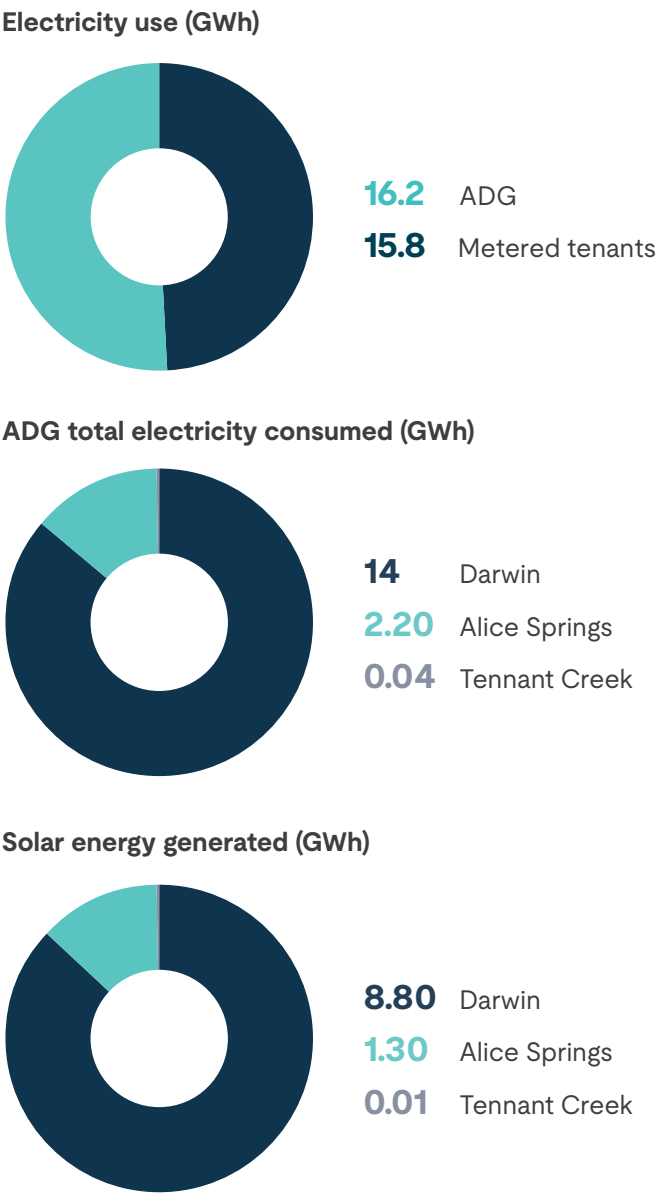


Figure 4. ADG 2023-24 energy generation and use breakdown. Electricity consumption for DIA includes the Darwin Airport Resorts.



Greenhouse gas emissions

This year ADG undertook a greenhouse gas (GHG) assessment in line with the Level 1 Airport Carbon Accreditation (ACA) program, administered by the Airports Council International (ACI).

In 2023-24, ADG's total greenhouse gas emissions (Scope 1 and 2) were 9,586 tonnes of carbon dioxide equivalent (tCO₂e).

A summary of the emissions profile illustrated in Table 2 below shows:

- Scope 1 emissions formed 4.8% of ADG's total emissions, or 460 tCO₂e. ADG's scope 1 emissions predominantly arise from the use of diesel to power vehicles and generators, refrigerants in our terminal air conditioning and LPG for cooking and hot water within the hotels.
- Scope 2 emissions (carbon dioxide emissions from the purchase of electricity) contributed 95.2% of total emissions, or 9,126 tCO₂e.

Table 2: Summary of emissions profile.

Airport	Scope 1 emissions (tCO ₂ e)	Scope 2 emissions (tCO ₂ e)	Total Scope 1 & 2 emissions (tCO ₂ e)**	Emissions savings from renewables (tCO ₂ e)***
Darwin International Airport	220	6,076	6,296	4,924
Darwin Airport Resort	173	1,784	1,957	0
Alice Springs Airport	55	1,245	1,300	727
Tennant Creek Airport	12	21	33	6
ADG	460	9,126	9,586	5,657

**Emissions factor applied is in alignment with ACA guidelines for GHG accounting Level 1 – Mapping.

*** Not deducted as sold as large generation certificates as part of the Australian Government's Renewable Energy Target scheme.



Through the Australian Government's Renewable Energy Target scheme, ADG sells large generation certificates (LGCs) to more energy-intensive organisations to purchase and utilise as carbon offsets. As a result, ADG is not able to include the 5,657 tonnes of CO₂e savings from solar energy generation within its GHG reporting figures.

To reach our target of net zero emissions (Scope 1 and 2) by 2030, ADG will start retiring LGCs from FY25 onwards.

The focus areas for reducing emissions across ADG's operations include:

- continuing to invest in renewable energy generation
- energy efficiency projects
- electrifying operational plant and equipment (from fossil fuel) utilising generated renewable energy
- implementing sustainable building design principles

Sustainable building design principles support our emissions reduction strategy. The emphasis of the sustainable design principles applied to new buildings includes undertaking rooftop solar feasibility studies and installing rooftop solar panels, where design permits, across the maximum area available.

Additional initiatives being investigated by ADG include:

- adopting passive design features, including building orientation, to mitigate climate impacts.
- undertaking embedded energy analysis of construction materials and products.
- Installation of energy storage capacity



Climate change

This year, climate change adaptation efforts focused on resource use and energy efficiency. At ADG, we understand the importance of balancing development with maintaining and enhancing environmental values. Adopting sustainable design, construction, and operational principles is crucial for responding to future growth while effectively managing climate change risks.

Eastern Chillers Project

The Eastern Chillers Project involved constructing a state-of-the-art cooling tower system at the eastern end of the DIA terminal, replacing the aging infrastructure. This \$7.5 million investment introduces a new water-cooled system that is significantly quieter and over 40% more energy-efficient than the previous setup. The anticipated energy savings from this new facility are expected to reduce ADG's annual carbon emissions by approximately 950 tonnes.

This strategic investment not only enhances the terminal's current operations but also future-proofs it for increased demand. The new system is designed with a lifespan of 25 years, compared to just 10 years for the old system, and includes the capacity to add an additional chiller if needed. Furthermore, the new building is designed and rated to Importance Level 3 (IL-3), ensuring robust protection against natural disasters such as earthquakes and cyclones.

By aiming to improve energy efficiency and reduce carbon emissions, the Eastern Chillers Project supports our commitment to environmental stewardship and resilience in the face of climate change. This project aligns with our sustainability goals, helping to mitigate climate change impacts and ensuring that our infrastructure can adapt to future challenges.

Apron LED upgrades

Over half a million dollars was invested to install energy efficient LED lighting along the general aviation (GA) aprons and regular passenger transport (RPT) apron. This included:

- 13 RPT bays switched from sodium lamps to LEDs, reducing energy consumption and providing brighter, better-quality light for staff working on the apron
- six light poles changed over to LED on the GA apron
- shields installed on all new lights to direct light downwards towards the apron, reducing light pollution.

This project improved luminance on the aprons while reducing electricity usage and decreasing our carbon emissions.

Water usage

Water for our three airports is 100% supplied by Power and Water Corporation, sourced from surface water catchments in Darwin, and groundwater in both Alice Springs and Tennant Creek.

In 2023-24, our airports (including the Darwin Airport Resorts) collectively used 232 megalitres (ML) of water, equivalent to approximately 93 Olympic-sized swimming pools and equivalent to the annual water usage of approximately 1,300 Australian households.

A significant amount of water is used across our airports to support passengers, daily operations, construction activities and airport gardens. Water is also distributed to airport tenants under sub-metering arrangements.

There is currently no recycled water used across the airports' regular operation.



Waste management and resource recovery

ADG measures all terminal waste generated by passengers, tenants, and airside operators. Non-terminal waste from airport maintenance sheds, airport management centres, public areas and pre-cyclone clean ups for tenants is also accounted for across the Darwin lease area.

Waste types across the three airports can be identified as:

- general waste
- cardboard/paper for recycling
- co-mingled recycling (rigid plastics, paper, cardboard, aluminium, steel)
- hazardous waste (sharps/clinical waste)
- sanitary waste*
- secure document waste
- construction and demolition waste generated by contractor building and maintenance activities*
- liquid waste from the cleaning of wastewater devices*
- quarantine waste
- trade waste*
- stockpiled materials including soil, gravel, rock, and concrete*.

*not accounted for in our annual waste reporting.

In 2023-24, our airports including all terminal users (tenants and passengers), and other airport operations collectively generated 377 tonnes of waste. Of this, 47 tonnes, or 12.5%, was diverted from landfill and recycled.

Partnering with Jetstar to reduce waste to landfill

In September, DIA partnered with Jetstar to enhance recycling of onboard waste generated from domestic flights in Darwin. This initiative involves:

- **Waste separation:** waste is separated onboard into general and recyclable streams.
- **Efficient disposal:** ground handlers transport the separated waste to the waste transfer station, where it is disposed of into the appropriate bins.

This collaboration helps to divert waste from landfill, supports our sustainability objectives and reduces our scope 3 emissions from waste ending up in landfill.

ADG remains committed to working with stakeholders to continually improve our waste management and recycling rates.

Summary

At ADG, we are committed to balancing development and expansion with the preservation and enhancement of our natural environment.

Our vision is to be a leader across Northern Australia and within our industry.

In 2023-24, we achieved significant milestones in recycling, energy efficiency, and biosecurity management. We strengthened partnerships, particularly with the Larrakia Rangers, and hosted the Inter-Airports Environment and Sustainability Forum, fostering collaboration among environmental representatives from 17 airports.

Our efforts in vegetation management, PFAS remediation and waste reduction underscore our commitment to sustainability.

We also focused on enhancing our reporting culture and improving safety measures through initiatives like the HSE Notice App and Executive Safety Walks.

Our greenhouse gas emissions totalled 9,586 tCO₂e, and we are committed to reaching net zero emissions by 2030 through continued investments in renewable energy and sustainable practices.

By integrating sustainability into all aspects of our operations and enhancing local partnerships, we aim to set a standard for others to follow. Our recent achievements highlight our ongoing efforts to create a more sustainable future and demonstrate our commitment to being a corporate leader in sustainability.





