2024

Emissions Reduction Plan

Royal Australian Mint

Emissions Reduction Plan

Royal Australian Mint

Ngunnawal Trade
Lynnice Letty Church Ngunnawal, Wiradjuri and Kamilaroi

Acknowledgement of Country

The Royal Australian Mint acknowledges the Traditional Custodians of Country throughout Australia and their continuing connection to land, sea, and community. We pay respects to them, their cultures and to their Elders past and present.

Declaration & Sign Off

Introduction

Climate change will continue to have significant effects on the environment, society, and economy, with impacts felt across the Government's operations. The Royal Australian Mint acknowledges that human behaviours, pollution, and consumption patterns have both immediate and future impacts on the climate and environment, and that as a Commonwealth entity it is part of our role to mitigate and manage these impacts on our communities.

This declaration establishes our position and commitment to reduce emissions.

The Royal Australian Mint supports the environmental, social, and economic benefits of addressing climate change immediately. We see an opportunity to demonstrate leadership in emissions reduction.

Commitment to Achieving Net Zero

The Royal Australian Mint is committed to achieving net zero emissions by 2030.

The Royal Australian Mint recognises that climate change is occurring, and that climate change will continue to have a significant effect on the Australian environment, society, and economy.

We acknowledge the central role of Government in driving a successful climate response. Hence, we declare that we are committed to reducing operational emissions, through the implementation of mitigation and adaptation strategies.

Our overall objectives align with the Net Zero in Government Operations Strategy to reduce our operational emissions.

Document Control

Document approval

Revision	Custodian	Position	Approver	Position	Date
1.0	Jeffrey Milekovic	Director, Engineering and Facilities Services	Leigh Gordon	Chief Executive Officer	24/08/2024

Document review

Revision	Reviewer	Position	Date of review	Comments/changes made

Abbreviations & Definitions

Abbreviation	Description
ACCU	Australian Carbon Credit Units
BMS	Building Management System
CAIGO	Climate Action in Government Operations
DESNZ	Department for Energy Security and Net Zero
EEGO	Energy Efficiency in Government Operations Policy
EV	Electric Vehicle
FTE	Full Time Equivalent
FY	Financial Year
GHG	Greenhouse Gas
HVAC	Heating, Ventilation and Air Conditioning
HVACaaS	Heating, Ventilation and Air Conditioning as a Service
LaaS	Lighting as a Service
LEV	Low Emission Vehicle
Mint	Royal Australian Mint
MJ	Mega Joule
NA	Not Applicable
NABERS	National Australian Built Environment Rating Scheme
NDC	Australia's Nationally Determined Contribution
NLA	Net Lettable Area
Plan	Emissions Reduction Plan
PSP	Property Service Provider
SDG	Sustainable Development Goal
Strategy	Net Zero in Government Operations Strategy
t CO_2-e	Tonnes Carbon Dioxide Emissions
WoAG	Whole of Australian Government

Definition	Description
Metro sites	Metro is defined as located on or east of the dividing range in NSW, including Canberra and Queanbeyan, Melbourne, Brisbane, Adelaide, or Perth.
Regional sites	Regional (non-metro) are other locations outside the metro site locations.
Allocated parking	Parking that is allocated to a facility's lease agreement and available for staff use.

Executive Summary

In response to the Net Zero in Government Operations Strategy (Strategy), the Royal Australian Mint (Mint) has developed a comprehensive Emissions Reduction Plan aimed at mitigating environmental impact, whilst fostering sustainable practices within its operations.

The Plan, in alignment with the Strategy, encompasses electricity consumption, gas consumption, vehicle fuel usage and domestic air travel across the Mint's operations, establishing Financial Year (FY) 2022–23 as the baseline by which to reduce carbon emissions. This plan takes a multifaceted approach, addressing key areas of emissions reduction, energy efficiency, and sustainability.

The baseline carbon emissions for the Mint is 2,327.2 t CO_2-e, with 1,842 t CO_2-e from electricity consumption, 468 t CO_2-e from gas consumption, 0.2 t CO_2-e from the fleet vehicle and 17 t CO_2-e from domestic air travel. Through collaboration with stakeholders, applying both traditional methodologies and technological advancements, the Mint aims to achieve significant reductions in its carbon baseline while maintaining operational efficiency and effectiveness.

Key components of the Plan include:

- **Energy efficiency initiatives:** participate in the Whole of Australian Government (WoAG) electricity arrangement that ensures all power supplied is from renewable sources
- **Transportation strategies:** reviewing current air travel requirements, implementing strategies to reduce unnecessary air travel and consider the procurement of green travel offsets
- **Support electric vehicles:** maintain EV charging infrastructure to support public charging and community engagement, consider transition of the Mint light commercial vehicle to electric when the current leasing arrangement expires
- **Participate in the Government Energy Action Response (GEAR) program:** support the Australian Government's commitment to reduce energy demand when required
- **Carbon offsetting and sequestration:** where carbon emissions cannot be avoided these may be offset through the purchase of Australian Carbon Credit Units in 2030
- **Employee engagement and education:** develop and implement education and communication programs that enables employees to support the Mint's net zero journey
- **Monitoring and reporting:** participate in the Government's annual reporting requirements, measuring and celebrating successes.

By implementing these initiatives and working collaboratively with all stakeholders, the Mint predicts that it will reduce its carbon emissions by 79% by 2030, with natural gas and domestic flights forming the remaining emissions balance. With the purchase of offsets, the Mint will achieve true net zero emissions.

1.0 — The Mint Purpose

Operating since 1965, the Mint is responsible for the manufacture and sale of Australian and foreign circulating coinage, as well as collectible and investment coins, medals and medallions, and other minted products. Outside of its manufacturing responsibilities, the Mint maintains and curates the National Coin Collection, promoting the role of the Mint in the decimalisation of Australia's currency, and the history of currency in Australia.

1.1 — Operating Context

The Mint is responsible for the manufacture and sale of Australian and international currency.

Its work is critical to the economic sustainability and social wellbeing of the nation, as it seeks to:

- Optimise return on the manufacture and sale of coins and minted products
- Ensure the sustainable growth of investment and collectible business streams
- Enhance the Mint's identity as a national institution
- Improve understanding of future financial systems and become established as a custodian of value.

The Mint is required to manage and report on current and non-current assets in accordance with the guidelines set out in the Accountable Authority Instructions and Australian Accounting Standards.

The Mint manages five types of fixed asset classes, including:

- Buildings
- Leasehold improvements
- Property, plant, and equipment
- Heritage and cultural, including the National Coin Collection
- Intangibles.

The Emissions Reduction Plan will maintain a focus on buildings and associated plant, noting that the manufacturing operations of the Mint is exempt from the requirements of the Strategy.

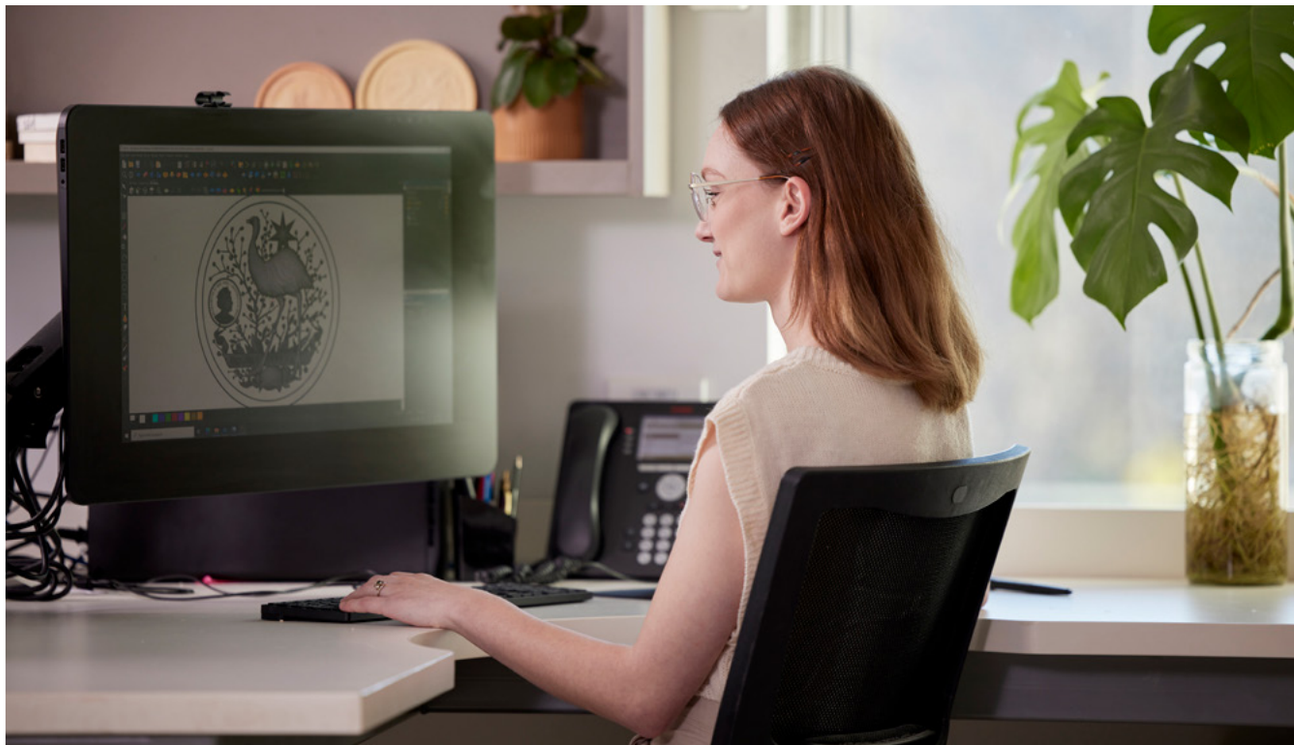
To ensure the continuity of services across the portfolio, the Mint needs to understand the impacts of climate change and mitigation methodologies that can be applied within the Mint's operational context.

1.1 — Net Zero in Government Operations Strategy

The Mint enterprise plays a role in the Federal Government's greenhouse gas emissions reduction targets of 43% by 2030 and net zero by 2050. Additionally, the Mint's office-based operations must also meet the requirements of the Strategy with a target date of 2030 to which this Plan will be directed.

The Strategy describes the approach for implementing the Australian Government's commitment to achieve net zero in government operations by 2030 as agreed under the Paris Agreement, and supersedes the Energy Efficiency in Government Operations Policy, 2007.

The Mint has already implemented a range of measures to reduce its impact on the environment. These have been detailed in section 4 of this Plan.



2.0 — Climate Change & Guiding Principles

International scientific consensus is that climate change is occurring and that it is driven by anthropogenic causes, with human activities having a profound impact on the concentration of greenhouse gas emissions since the start of the industrial revolution. Ultimately these activities, such as the burning of fossil fuels, land clearing and agriculture, have increased greenhouse gas concentrations in the atmosphere, leading to changes in the climate system.

In June 2022, the Federal Government formally updated Australia's commitment under the Paris Agreement to reduce greenhouse gas emissions by 43% below 2005 levels by 2030, putting Australia on track to achieve net zero emissions by 2050.

The Mint recognises that extreme fluctuations in weather in Australia and around the world will continue to affect Australian communities and the Australian economy. Increasingly unpredictable and extreme weather events lead to environmental damage and disruption to communities that affect supply chains and a wide range of industries and individual wellbeing.

As stated in the Mint Annual Report, 2022–23, lowering greenhouse gas emissions is key to limiting the impact of future climate change, harnessing rapidly evolving green technologies that support Australia's economic recovery and climate resilience. The Mint is acting to realise emerging technologies and opportunities to ensure it is positioned to adapt and mitigate climate change impacts and meet public expectations.

Drawing on the Mint's remit and operational scope, the results of climate change and the transition to net zero may impact the Mint In the following ways:

- Operational process changes may need to be implemented to support lowering resource consumption by implementing energy efficient technologies
- Given the nature of the Mint's operations and Australia's commitment to achieving net zero emissions, the Mint may need to invest in offset programs to reduce emissions from future operations
- As a prominent government entity, the Mint may face increased public scrutiny of its environmental practices. Embracing sustainability initiatives and demonstrating a commitment to reducing emissions could enhance the reputation of the Mint with the public.

2.1 — Global Goals to Mitigate Climate Change

Figure 1:
United Nations Sustainable Development Goals

Climate Change Protocols

The Kyoto Protocol operationalises the United Nations Framework Convention on Climate Change by committing industrialised countries and economies in transition to limit and reduce greenhouse gas (GHG) emissions in accordance with agreed individual targets. Australia is part of the Kyoto Protocol and released its National Greenhouse Response Strategy in November 1998, providing the framework for advancing Australia's domestic greenhouse response into the next century.

To strengthen the global response to the threat of climate change by keeping a global temperature rise under a certain level, the Paris Agreement was introduced in 2016.

The Paris Agreement is a legally binding international treaty on climate change. The goal of the Agreement is to limit global warming to well below 2°C, preferably to 1.5°C, which is a critical threshold for preventing the worst impacts of climate change. The Agreement was adopted by 196 countries and came into force on 4 November 2016.

Australia is an important party to the Paris Agreement and committed to reduce greenhouse emissions through the Climate Change Act (No. 37, 2022).

The Australian Government's landmark Climate Change Act was published and commenced on the Federal Register of Legislation on 14 September 2022, enshrining into law an emissions reduction target of 43 per cent from 2005 levels by 2030 and Net Zero emissions by 2050.

There is now a core responsibility for all levels of the Australian Government to lead by example, proactively working towards this achievable target and strive for greater outcomes.

United Nations Sustainability Development Goals

In 2015, the United Nations General Assembly defined 17 Sustainable Development Goals (SDGs). The SDGs, outlined in Figure 1, aim to address the world's most pressing global challenges, including poverty, inequality and climate change. They provide a blueprint for governments, businesses, communities and the general public to work together to build a better and more sustainable future for all.

Net Zero in Government Operations Strategy

Net Zero 2030 is the target set by the Australian Government to achieve net zero greenhouse gas emissions from Commonwealth government operations by the year 2030. Net zero is achieved when consumption of resources, such as electricity, is reduced as far as possible, and energy is supplied from renewable sources. Where unavoidable greenhouse gas emissions remain, they are balanced through carbon offsetting.

3.0 — Net Zero Emissions Reduction Plan

3.1 — Purpose

The Mint has a role to play in the management and implementation of emissions reduction initiatives, as outlined in the Strategy, developed by the Department of Finance. The Strategy in its current iteration sets out the first steps for the Australian Government's approach to achieving net zero greenhouse gas emissions in government operations, coupled with annual reporting requirements.

The Mint's Net Zero Emissions Reduction Plan sets out the steps that the Mint will take to achieve net zero emissions by 2030. This Plan encompasses new and existing initiatives to reduce emissions, contributing to the Net Zero 2030 target.

3.2 — Net Zero Greenhouse Gas Emissions

Net zero emissions refers to the balance between the amount of greenhouse gases produced, through resource consumption, and the amount removed from the atmosphere. Achieving net zero emissions means that the total emissions released into the atmosphere from the Mint's operations are offset through various means that remove or sequester an equivalent amount of carbon dioxide, this includes, but is not limited to, the implementation of emissions reduction initiatives, carbon capture, and carbon offsetting.

3.3 — Scope

Inclusions

Emissions reduction activities outlined in the Plan will align with the Strategy, with an initial focus on carbon emissions resulting from the consumption of fuels, natural gas, electricity, and air travel. Future reviews of the Strategy will consider additional inclusions to align with the Australian Government commitment to net zero and organisational activities, aligning to carbon emission reporting requirements.

The following property in the Mint's portfolio is included in the scope of this Plan:

ACT

- Deakin, 62–114 Denison St
  - Net Lettable Area (NLA): 10,550 m²
  - Lease expiry: March 2029

No other properties are held within the Mint's portfolio.

In alignment with the Strategy, released in late 2023, this Plan primarily considers emissions related to:

- Scope 1 emissions:
  - Natural gas, fleet fuel
- Scope 2 emissions:
  - Electricity
- Scope 3 emissions:
  - Domestic travel.

As further expansions of the Net Zero Reporting requirement are released, this Plan will be updated with these inclusions.

Exclusions

In alignment with the Strategy, this Plan does not consider the following emissions related activities:

- Activities that take place outside of Australia or its territories, including international air and marine travel as these are not included in Australia's Nationally Determined Contribution (NCD). The Strategy recommends Entities that undertake these activities act as appropriate to reduce their emissions in the relevant local context, as an aspirational goal for the Australian Government to demonstrate leadership and advance Australia's climate diplomacy objectives
- Activities undertaken by the Mint outside of its office-based operations
- Activities undertaken by the Mint outside of those noted in inclusions.

3.4 — Governance

This Plan will be updated annually.

The Mint will, as required under the Strategy, report annually:

- progress against actions identified in the Plan,
- a summary of amendments to the Plan, and
- annual emissions reporting, noting further potential expansions to current reporting requirements.

As part of the Net Zero in Government Operations Annual Progress Report, the Department of Finance will aggregate these measures to provide the WoAG aggregated list of emissions reductions activities.

Future iterations of this Plan will align with the Offset Strategy and Commonwealth Climate Disclosure requirements that are currently under development by the Climate Action in Government Operations (CAIGO) team within Department of Finance.

4.0 — Achievements

The Mint has implemented a range of measures to reduce its impact on the environment. The Plan builds on these key achievements and provides a more holistic approach to achieve sustainability and net zero carbon emissions across all areas and functions of the Mint, including facilities and operations.

Highlights

- The Mint's Heating, Ventilation and Air Conditioning (HVAC) systems are regularly serviced and optimised to minimise energy waste
- Where appropriate, working from home is facilitated
- Environmental targets and objectives to improve the building's National Australian Built Environment Rating System (NABERS) are being established
- A building-wide upgrade to replace fluorescent lighting with LED lighting was completed
- An electric vehicle charging station was installed in the Mint's visitor carpark
- A 360 kW rooftop solar photovoltaic system was installed, providing 21% of the facility's energy needs.

5.0 — Baseline Emissions

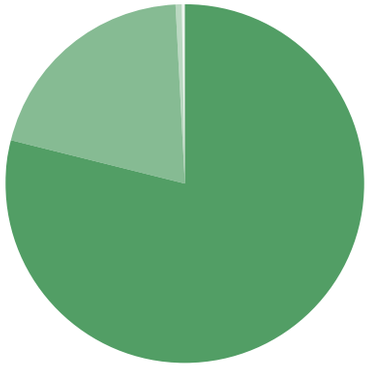


Figure 2:
Baseline Emissions t CO_2-e, FY 2022–23

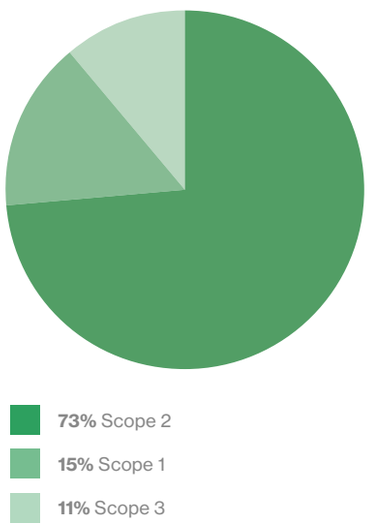


Figure 3:
Percentage of overall t CO_2-e, FY 2022–23

Baseline emissions are a record of greenhouse gas emissions that have been produced at a set point in time. For the purposes of this Plan, the FY 2022–23 has been established as the Mint's baseline and will be a reference point against which emissions reductions can be measured.

In FY 2022–23, the Department of Finance's CAIGO team required entities to report their emissions pertaining to the following data sources, to establish an emissions baseline from which to develop a long-term emissions reduction strategy:

- Electricity
- Natural gas
- Domestic business flights
- Fleet fuel.

The Mint's baseline emissions are displayed in Figure 2 and Figure 3. Scope 1 emissions are primarily a result of natural gas, Scope 2 emissions relate to electricity consumption and Scope 3 emissions to the Mint's domestic air travel, indirect electricity, and natural gas emissions.

The Mint operates one commercial light diesel vehicle; however, emissions are minimal when compared to the other sources.

In the development of this Plan, Emissions Factors have been sourced from the National Greenhouse Accounts (NGA) 2023 and Department for Energy Security and Net Zero (DESNZ).

Time series data is a crucial tool for tracking emissions trends and evaluating the effectiveness of emission reduction strategies. To ensure accuracy and consistency, the Mint will endeavour to use the same methodologies and data sources for calculating these trends over time. The Mint recognises that improvements in emissions measurement, data collection and reporting requirements will continue to evolve, and is committed to adapting its strategies accordingly.

To maintain transparency and ensure confidence in the consistency of the time series data, the Mint will document its approach to emission estimation, including methodologies and data sources, in the NZGO Annual Progress Reports.

6.0 — Emissions Reduction Target

To achieve net zero by 2030, the Mint has adopted the following carbon reduction targets.

We project that carbon emissions will decrease over the next 6 years from 2,327.2 to 481.5 t CO_2-e by 2030. This is a reduction of 79%.

This Emissions Reduction Plan has been completed in accordance with the Strategy, associated guidance and reporting standards for annual emissions reporting.

The Mint's emissions targets have been developed using the following considerations:

- Emissions data for FY 2022—23, as per the Net Zero Expansion One and Two reporting requirement
- Estimations based on expected emissions reductions through the implementation of programs of works
- Estimation based on the whole portfolio sourcing electricity from the WoAG electricity arrangement, managed by the Department of Finance.

7.0 — Operations & Performance

7.1 — Buildings

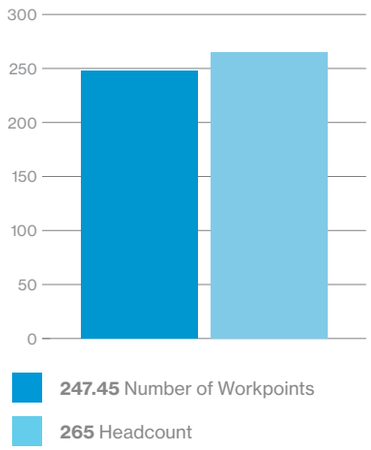


Figure 4:
Workpoint count and workpoint occupancy rate, FY 2022–23

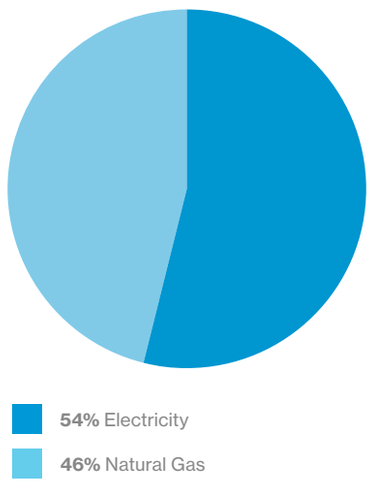


Figure 5:
Percentage energy consumption, FY 2022–23

Currently, the Mint operates at one property in Deakin, ACT. Its built facility, managed by a Property Service Provider (PSP), is a Commonwealth Heritage facility utilised for the production of coin and is a major tourist attraction, with a total Net Lettable Area (NLA) of 10,550 m².
The facility includes areas of dedicated offices that are within the scope of the Strategy. At the time of developing this Plan; not all office spaces are separately metered; therefore, cannot be adequately quantified in terms of emissions reduction targets. All targets and baseline values are based on the complete operations of the facility.

Figure 4 represents the Mint's total workpoints against its Full Time Equivalent (FTE) staffing. For 2022–23 the Mint had a workforce FTE of 247.45 and a total headcount of 265 personnel, with a 135% occupancy rate at the Mint's only facility at Dension St, Deakin. This equates to 1:1.3 workpoint to headcount ratio, which is close to best practice office operations at a ratio of 1.5 employees per desk. However, a number of employees operate the manufacturing plant or are in tourism spaces, eliminating the need for a desk.

At present, most desks for Mint employees are based on the use of a portable device. However, there are several dedicated desks with desktop computers required to be able to host a range of specific software applications.

The Mint has one diesel fleet vehicle, which has an estimated baseline emission of 0.2 t CO_2-e, consuming 57 L in FY 2022–23. It is a light commercial van that is used for the purposes of transporting machinery, plant and equipment as required. The emissions associated with fleet fuel consumption is negligible (less than 0.01%) when compared to the total emissions performance of the Mint.

Natural gas is consumed at the Mint contributing 468 t CO_2-e (7,239 GJ) for the FY 2022–23. 46% of the Mint's energy usage is attributed to gas, with the remaining 54% attributed to electricity (Figure 5).

To assist the development of the Plan, the Mint's operational performance has been analysed in the following sections.

7.2 — Electricity

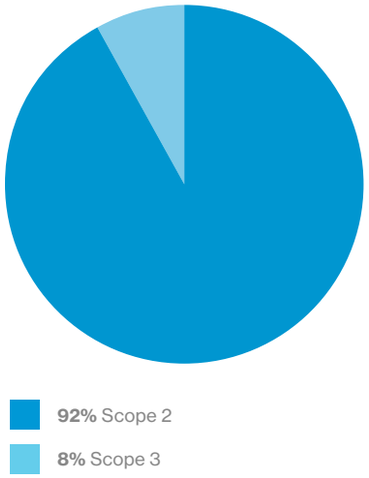


Figure 6:
Percentage emissions, CO_2-e (t), FY 2022–23

Figure 6 demonstrates the percentage of Scope 2 and 3 emissions associated with the Mint facility's electricity consumption. Scope 2 emissions are a result of direct consumption of electricity and Scope 3 are a result of distribution losses.

In Figure 7, the Mint facility consumed a total 2,331,691 kWh of electricity, generating 1,842 t CO_2-e for FY 2022–23. An additional 439,659 kWh was generated by solar onsite, offsetting approximately 21% of the total energy requirement.

The Mint is a significant electricity consumer due to the operational requirements of minting coins, aged infrastructure, and considerable loads on HVAC systems due to the size and construction of the facility. Further adding to this, minting services typically operate from 7 am into the evenings during the week and on occasion on weekends.

Energy Intensity – Facility

The facility has an energy intensity of 263 kWh/m² and sets the baseline target for the Mint to measure change.

Energy Intensity – Headcount

The Mint has a performance of 37,649 MJ/headcount. This equates 6.95 t CO_2-e/headcount and sets the baseline target for the Mint to measure change.

The Mint's baseline measures are associated with the whole facility and not just the office operations to which the Strategy applies.

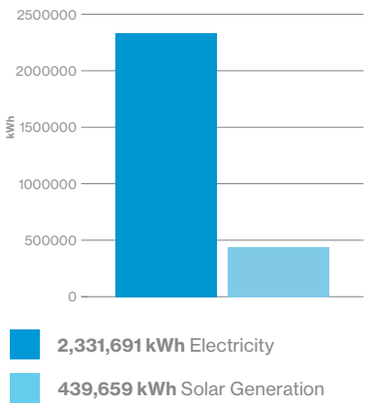


Figure 7:
Electricity consumption vs. Solar generation, kWh, FY 2022–23

7.3 — Fuel

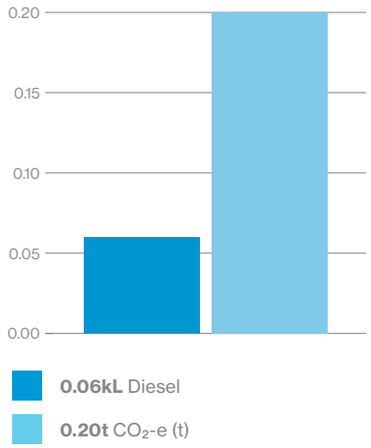


Figure 8:
Volume of transport fuel and associated CO_2-e (t), FY 2022–23

Figure 8 demonstrates that 0.06 kilolitres of diesel was consumed, generating 0.20 t CO_2-e for FY 2022–23. The Mint's latest fleet vehicle contract started in April 2023, and therefore has minimal fuel consumption for FY 2022–23.

Figure 9 displays the total percentage of CO_2-e by scope for FY 2022–23. 0.16 t CO_2-e were Scope 1 emissions and 0.04 t CO_2-e were Scope 3 emissions. Scope 3 emissions are associated with well-to-tank losses in the fuel supply market.

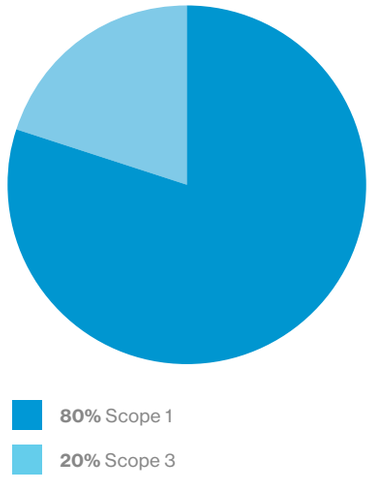


Figure 9:
Percentage of CO_2-e (t) by scope, FY 2022–23

7.4 — Travel

International air travel does not form a part of the emissions profile for the Mint; however, international travel will be analysed in this section given its material value.

Figure 10 demonstrate the number of flights taken in FY 2022–23 and the associated emissions (in units of t CO_2-e) for domestic and international air travel. The total number of flights (in units of air tickets) taken by the Mint in FY 2022–23 was 385. The number of domestic flights was 318 and international flights was 67.

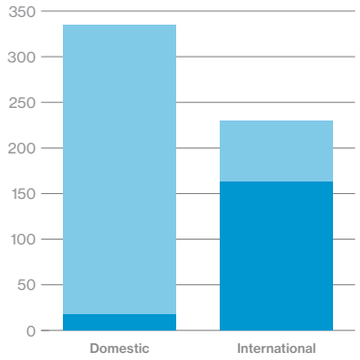


Figure 10:
Emissions and flights taken, FY 2022–23

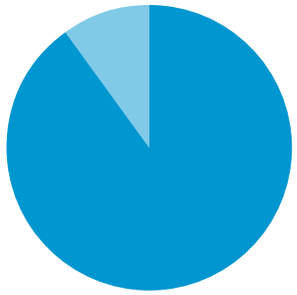


Figure 11:
Flight type CO_2-e (t), FY 2022–23

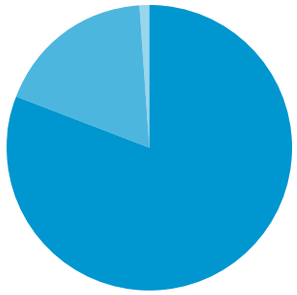


Figure 12:
Percentage cabin class booked, FY 2022–23

Figure 11 shows international flights contributed to 90% (163 t CO_2-e, 437,261 km) of total air travel emissions, despite equating to only 17% of total flights booked. Domestic flights contributed to 10% (17 t CO_2-e, 122,240 km) of total air travel emissions, while equated to 83% of total flights booked. The total kilometres travelled for the Mint portfolio was 559,501 km, producing a total 180 t CO_2-e in FY 2022–23.

The Mint's international and domestic travel (Figure 12) shows 81% of all flights were booked utilising economy class, 18% business class and less than 1% first class.

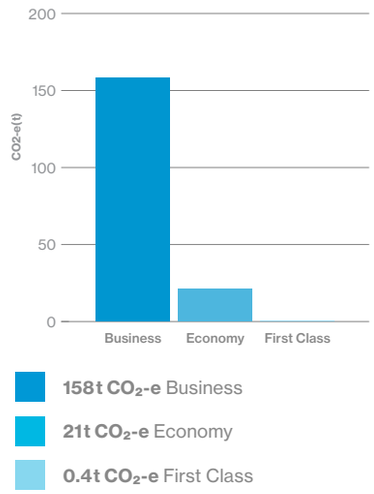


Figure 13:
CO_2-e (t) per cabin class, FY 2022–23

Figure 13 represents the total carbon emissions for each cabin class in FY 2022–23, with business flights contributing to the majority of emissions (158 t CO_2-e). Economy class contributed a further 21 t CO_2-e and first class contributed 0.4 t CO_2-e.

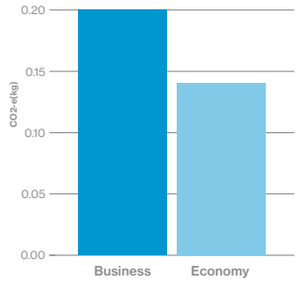


Figure 14:
CO_2-e (kg)/km per cabin class trip taken, FY 2022–23

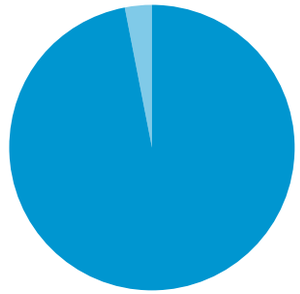


Figure 15:
Domestic flights by cabin class, FY 2022–23

Carbon Intensity – Domestic Travel

As per the Strategy's position on NDC, only domestic travel has been included in the Mint's baseline carbon emissions, FY 2022–23.

Figure 14 demonstrates the carbon emissions per kilometre travelled by cabin class in FY 2022–23.

The carbon intensity of domestic air travel by cabin class is detailed below and provides a baseline for the Mint to measure future impact:

- Business class – 0.20 CO_2-e kg/km
- Economy class – 0.14 CO_2-e kg/km

Figure 15 shows 97% of all domestic flights booked were economy class and 3% business class. 96% of emissions were attributed to economy class (17 t CO_2-e) and 4% were attributed to business class (1 t CO_2-e).

7.5 — Measuring Success

To assist in driving outcomes, the current operations of the Mint were measured against each of the targets outlined in the Strategy and will assist to drive priorities and actions that reduce emissions as well as providing an understanding of the Mint's current position.

7.5.1 — Net Zero Buildings

Target	Target Date	Measure	Baseline 2023–24	Note
Office space leased for greater than 4 years, with an NLA > 1,000 m² achieve 5.5-star NABERS Energy rating (metro only) or 4.5-star rating in all other areas.	1 Jul 2025	Percentage leased office space that meets this target	NA	As the Mint is a commercially operational facility, its production areas are exempt from the requirement of NABERS ratings. A NABERS Energy Rating Report (Rating number OFEN32336) was completed on 24 Jun 2024, which states that the Mint's facility's NABERS Energy Rating is 1.5-stars. This rating is low due to the inability to separate some of the office energy from the main coin hall energy. This is currently being resolved (in calendar year 2024) so that the next rating has this separation and a major reduction in electricity usage.
Refurbished office space with an NLA over 1,000 m² achieves a 5.5-star NABERS Energy rating.	1 Jul 2026	Percentage of leased office space that meets the target	NA	The Mint has undergone a major construction program for its public open spaces in 2024 and does not have any planned office refurbishments.
Office space for purchase or construction, with a contract value of over $15M will achieve a 4-star Green Star certification and maintain a 6-star NABERS Energy rating.	1 Jul 2026	Percentage of applicable office space that meets the target	NA	Due to the heritage and cultural value of the facility, the Mint will not be undertaking any facility purchases or constructions.
All new leases should prefer fully electric buildings, and where buildings have gas should have a long-term asset replacement program to electrify this excludes back-up generation.	1 Jul 2024	Percentage of office space that meets the target	0%	The Mint operates gas boilers as a part of its base building operations. These are the responsibility of the Finance Owned Estate (FOE) and will be upgraded at end of life, as identified in FOE's Preventive Maintenance and Asset Management Plans.
Office space leased for greater than four years, with an NLA of > 1,000 m² contain a Green Lease Schedule (GLS).	1 Jul 2025	Percentage of office space that meets the target	100%	A GLS is in place between the Mint and FOE.
New office space > 1,000 m², purchased, leased, constructed, or refurbished to be separately metered (where practical), or install separate digital revenue metering where the Commonwealth occupies over 50% of the total building.	1 Jul 2025	Percentage of office space that meets the target	NA	The Mint will maintain its operations within the facility due to the cultural and heritage significance of the facility.
Develop an Electric Vehicle Plan for all offices that have allocated parking or fleet.	1 Jul 2024	Electric Vehicle Plan developed	100%	An EV Plan has been developed and delivered to the CAIGO team.
All office spaces with allocated parking or fleet have EV charging facilities.	1 Jul 2025	Percentage of office space that meets the target	100%	Six EV charging stations have been installed at the facility, providing charging facilities for customers. These will be used by the Mint when suitable light commercial EV vehicles are made available on the market.

7.5.2 — Net Zero Energy

Target	Target Date	Measure	Baseline 2023–24	Note
80% of electricity procured by the Mint, that is generated offsite, from renewable sources (where available).	1 Jul 2028	Percentage of electricity purchased from renewable sources	0%	The current WoAG electricity contract does not offer green power purchase options.
100% of electricity procured by the Mint, that is generated offsite, from renewable sources (where available)	1 Jul 2030	Percentage of electricity purchased from renewable sources	NA until target date	
The Mint will participate in the WoAG electricity agreement as it becomes available.	As per agreement rollout	Percentage of office space that is participating in the agreement	NA until arrangement is released	
The Mint may consider behind the meter energy solutions, including solar installations or Power Purchase Agreements with solar contractors.	NA	Percentage of sites with behind the meter energy solutions	100%	The Mint installed a 360 kWh system over the building's entire roof, meeting approx. 21% of the Mint's total energy demand.
The Mint to develop a long-term asset replacement program for all non-essential gas or LPG assets.	NA	Percentage of gas or LPG assets with a long-term asset replacement program in place	100%	The Mint's base building is managed by FOE's annual Preventative Asset and Maintenance Plans.

7.5.3 — Net Zero Fleet & Travel

Target	Target Date	Measure	Baseline 2023–24	Note
50% of new passenger fleet orders to be low emissions vehicles (LEVs).	1 Jul 2024	Percentage of new passenger vehicles that are LEVs	Nil fleet on order	The Mint has one light industrial vehicle used for transport of operational parts and equipment.
75% of new passenger fleet orders to be LEVs.	1 Jul 2025	Percentage of new passenger vehicles that are LEVs	NA until target date	
Increase uptake and usage of the NABERS Energy tool within accommodation provider.	NA	Number of providers within the travel booking system that disclose a NABERS Energy rating	Nil data available	

8.0 — Priorities & Actions

The Mint's current sustainability measures are not sufficient to achieve net zero by 2030. To achieve net zero, targeted action on existing measures and the introduction of further or new measures is required.

To support a pathway to net zero, the Plan has divided emissions related activities into the following three categories:

- Net Zero Buildings
- Net Zero Energy
- Net Zero Fleet and Travel.

Emissions reduction activities related to each of these categories and in alignment with the Strategy will be identified in the following sections, with further detail in section 9.

8.1 — Net Zero Buildings

The highest source of carbon emissions identified in the baseline of the Mint's operations is associated with building electricity consumption (73% of total emissions). Gas consumption forms an additional 15% of total emissions in the Mint's operations. Reducing these emissions by improving electrification and energy efficiency represents the most achievable and cost-effective approach for the Mint.

To assist this approach, the Strategy identifies rating systems as an effective means to understand and reduce property-related emissions. To support this, entities are required to rate their office-based properties over 1,000 m² using the National Australian Built Environment Rating Scheme (NABERS), achieving set target rating based on either metropolitan or regional locations.

To further support ongoing reporting and emissions reduction targets, the Mint will ensure all projects and programs of works support a transition to low emissions assets and infrastructure and where appropriate transition to a fully electric facility.

Actions over the next five years:

1. Undertake required NABERS rating assessments as a means of benchmarking and improving energy performance.
2. Drive improved energy efficiency across the asset portfolio through improved data gathering and building analytics, in line with the Strategy.
3. Encourage emissions reductions actions in the Mint's facilities by providing information and education to guide the behaviour or staff and contractors.
4. Drive sustainable, low emissions projects and programs of works across the Mint portfolio, reducing or eliminating associated operational emissions.

8.2 — Net Zero Energy

Reducing energy consumption through energy management strategies and improving energy efficiency is recognised as the most effective way for the Mint to reduce its emissions.

The Strategy has set a renewable electricity target of 80% of electricity procured is from renewable sources (where available) by 2028 and 100% by 2030. To achieve this target, the Department of Finance will establish a WoAG arrangement for electricity procurement for use by entities. The Mint commits to participate in this arrangement as it is rolled out nationally.

Actions over the next five years:

1. Participate in the WoAG electricity supply arrangement as it becomes available across the various States and Territories of Australia.
2. Utilise NABERS ratings and data to pursue energy efficiency projects.

8.3 — Net Zero Fleet & Travel

The Australian Government has committed to reducing emissions by setting a target of 75% of new passenger vehicle purchases and leases to be low emissions vehicles by 2025. The Mint is committed to supporting this target in the transition of its fleet.

The Mint operates one fleet vehicle, with emissions associated with the vehicle immaterial by comparison to the operation of the built environment. This vehicle is a light commercial vehicle used for the purposes of transporting plant and equipment.

Air travel undertaken by the Mint makes up 11% of baseline emissions and represents the second highest source of emissions for the Mint based on FY 2022–23, presenting an opportunity to reduce Scope 3 emissions.

Actions over the next five years:

1. Report transport fuel use in accordance with the Strategy.
2. Maintain a view over light commercial LEVs coming to market that are appropriate for the Mint to transition.
3. Increase utilisation of NABERS Energy rating disclosed by accommodation providers.
4. Further embed air travel rationalisation across the business.

8.4 — Implementation Plan

The following section identifies 29 actions and delivery timeframe for the Emissions Reduction Plan to 2030. The implementation of the Emissions Reduction Plan will be subject to future annual budget and service priorities.

This is the inaugural Emissions Reduction Plan for the Mint and will focus on actions with the highest emissions reduction impact to assist in meeting the 2030 target date.

In the implementation plan, each action has been categorised as to whether it directly reduces the Mint's carbon emissions, influences other action, or innovates by enabling the integration of new or emerging technologies.

Impact
An actions that directly results in reduction of the Mint's carbon emissions.

Influence
An action that seeks to influence or encourage emissions reduction of contractors, suppliers, staff or subsidiary business.

Innovate
An action that enables the use or implementation of technologies that drive net zero outcomes.

8.4.1 — Priority Area 1: Net Zero Buildings

Action #	Action Detail	Action Type	Involved Participants	2024 2025 2026 2027 2028 2029
1.1	Establish a Net Zero Working Group with Mint key stakeholders, leased property managers and leased property owners to establish strategies and boundaries for initiatives that can be undertaken by the Mint and garner support from landlords to support and implement net zero initiatives that improve the facility's emissions performance. Commencement year and ongoing: 2025. Working group schedule: Biannually at a minimum.	Influence	Mint Facilities FOE	→
1.2	Review the existing GLS to ensure they align to the Strategy and net zero 2030 target. Commencement year and ongoing: 2024. Refer Section 9.1 for further information.	Influence	Mint Facilities FOE	→
1.3	Create an asset replacement program to transition gas plant and equipment to all electric systems at end-of-life. This will be supported through annual Preventive Asset Management Plans developed in collaboration with FOE and undertaking a comprehensive Type-2 Energy audit. Commencement year and ongoing: 1 Jul 2024.	Impact	Mint Facilities FOE PSP WoAG FM team	→
1.4	Separately meter the Mint's office-based operations to assist in the development of targeted net zero initiatives that align to the Strategy. Separate metering will establish a new baseline for the Mint and provide a means of measurement for future initiatives and successes. Completion year: 2024.	Influence	Mint Facilities FOE	→
1.5	After 12-months of separate electricity metering, undertake annual NABERS Energy ratings for the office spaces only, achieving a minimum 5.5-star rating for metropolitan sites. Commencement year and ongoing annually: 2025. Refer Section 9.2 for further information.	Impact	Mint Facilities PSP Sustainability team	→
1.6	Undertake a Type-2 Energy Audit to identify energy efficiency solutions for implementation. Findings of the audit will be used to further enhance this Plan and demonstrate the Mint's commitment to net zero. Refer Section 9.3 for further information.	Influence	Mint Facilities PSP Sustainability team	→
1.7	Upgrade all remaining lighting to high efficiency LED, coupled with lighting control sensors such as daylight sensors and occupancy sensors (where applicable). Energy savings, emissions reductions and return on investment will be determined through the Type-2 Energy audit. Commencement year and ongoing: 2024. Refer to Section 9.4 for potential funding opportunities that can be used to support these works.	Innovate	Mint Facilities FOE PSP Sustainability team PSP Project Management team	→

Action #	Action Detail	Action Type	Involved Participants	2024	2025	2026	2027	2028	2029
1.8	Investigate, where appropriate, Lighting as a Service or HVAC as a Service options to reduce capital expenditure. See Section 9.5 and 9.6 for further details. Commencement year: Consideration from 2025. Refer to Section 9.5 and 9.6 for further information.	Innovate	Mint Facilities FOE		→				
1.9	Investigate options to further insulate the facility and improve building thermal efficiency. Commencement year: 2025.	Influence	Mint Facilities FOE PSP Sustainability team		→				
1.10	Investigate high efficiency compressor units for base building upgrades. Commencement year: 2026 or when project is approved for approach to market.	Influence	Mint Facilities FOE PSP Sustainability team PSP Project Management team			→			
1.11	Replace low efficiency kitchen appliances with high efficiency appliances– supporting reuse, recycle and donation schemes to keep items from being sent to landfill. Commencement year: as required and in accordance with asset replacement policy. Refer to Section 9.4 for potential funding opportunities that can be used to support these works.	Impact	Mint Facilities		→				
1.12	Where appropriate, implement hot desk systems with a staff to workpoint ratio of 1:1.5. Commencement year: as required. Refer Section 9.7 for further information	Influence	Mint Facilities Mint IT						
1.13	Retire old ICT equipment and replace with new high efficiency systems at end of life. Investigate the option to transition dual monitors to more efficient products and/or to single curved monitors with an ultra-wide aspect ratio to reduce energy consumption. Commencement year: as required and in accordance with ICT policy.	Impact	Mint Facilities Mint IT		→				
1.14	Where applicable, transition to cloud-based servers to reduce energy consumption associated with server rooms. Commencement year: as required and in accordance with ICT and privacy policies.	Impact	Mint Facilities Mint IT		→				
1.15	Incrementally increase temperature set points of server rooms to 27 °C. This should be done in accordance with the Mint's ICT requirements, and a qualified technician is engaged to undertake this program of works. Commencement year: 2025.	Impact	Mint Facilities Mint IT			→			
1.16	Maintain existing end of journey facilities for cyclists and investigate opportunities to improve end of journey facilities to support low/no emissions staff commute. Note: guidelines should be implemented in accordance with building insurance requirements to mitigate any fire risks associated with E-bikes or E-scooters. Commencement year and ongoing: 2024.	Influence	Mint Facilities PSP WoAG FM team		→	→	→	→	→
1.17	Integrate sustainability education programs for all Mint employees through a range of mediums. Embedding sustainability KPIs into performance plans will also be investigated to further support the achievement of net zero for the Mint. Commencement year and ongoing: 2025. Refer Section 9.8 for further information.	Influence	Mint Systems and Quality		→	→	→	→	→
1.18	Depending on production requirements, participate in Earth Hour to show the Mint's support for net zero and climate action. Commencement year and ongoing: 2025 (March) and ongoing.	Influence	Mint Systems and Quality Mint Facilities Mint Operations PSP WoAG FM team		→	→	→	→	→
1.19	Investigate new and emerging technologies that support the Mint's transition to net zero buildings, as they become available and viable. Commencement 2025 and ongoing: 2026.	Innovate	Mint Systems and Quality Mint Facilities PSP Projects team PSP Sustainability team		→	→	→	→	→
1.20	Seek funding to support net zero programs of works across the Mint's property portfolio when made available through the Department of Finance. Commencement year: as released by the Department of Finance.	Influence	Mint Facilities Department of Finance						

8.4.2 — Priority Area 2: Net Zero Energy

Action #	Action Detail	Action Type	Involved Participants	2024	2025	2026	2027	2028	2029
2.1	Participate in the WoAG electricity agreement as available based on the below timeframe: • 1 Jul 2025 – New South Wales, Australian Capital Territory and Victoria. The Mint will participate in this Green Power purchase scheme to ensure all electricity consumed is from renewable sources. Emissions reduction: 1,842 t CO_2-e p.a. by 2030. Commencement year: as detailed above and released by the Department of Finance. Refer to Section 9.9 further information.	Impact	Mint Facilities PSP Sustainability team		→				
2.2	Participate in the Australian Government Energy Action Response (GEAR) protocol. The Mint recognises its material draw on the energy market and will commit to reducing its consumption when alerted to do so during periods of crisis demand. The Mint's response will be in accordance with the GEAR Protocol. Commencement year and ongoing (as requested) 2024.	Influence	Mint Facilities	→					

Other actions considered:

- **Behind the meter energy generation –**
  The Mint has installed a 360 kW solar photovoltaic system, with no available space to further expand on the building's rooftop.

8.4.3 — Priority Area 3: Net Zero Fleet & Travel

Action #	Action Detail	Action Type	Involved Participants	2024	2025	2026	2027	2028	2029
3.1	Set a target of 75% of all new passenger fleet vehicles procured by 1 Jul 2025 to be low emissions vehicles. Detail of the Mint's transition can be considered upon expiry of current lease arrangement. Commencement year: 2026.	Influence	Mint Facilities			→			
3.2	Promote the benefits of public transport, walking, and cycling to new staff during induction programs and familiarise them with end of journey facilities at their workplace. Use internal communications to program active and public transport for business related travel. Commencement 2024 and ongoing: 2025.	Influence	Mint Facilities Mint Communications Mint HR	→					

Action #	Action Detail	Action Type	Involved Participants	2024	2025	2026	2027	2028	2029
3.3	Ensure a continued transition of all the Mint fleet to low/zero emissions fleet as they are retired. Monitor emerging technologies and vehicles that are suitable to the Mint's operational requirements. Commencement 2026 and ongoing: 2027.	Impact	Mint Facilities			→	→	→	→
3.4	Review annual fleet and fuel data reporting in line with the Net Zero Reporting requirement, monitoring fleet performance, vehicle utilisation, fuel consumption and emissions to identify opportunities for fleet optimisation/reduction of fleet. Commencement 2026 and ongoing: 2027.	Influence	Mint Facilities			→	→	→	→
3.5	Develop a Sustainable Travel Policy that prioritises sustainable travel and low emissions travel. Sustainable travel and low emissions travel may include rail, shared ride services, electing low emissions travel options and purchase of travel offsets. The travel policy will support the reduction of domestic travel by 5% year-on-year as noted in action item 3.6. Commencement year: 2026 for ongoing implementation.	Influence	Mint Finance			→	→	→	→
3.6	Air travel rationalisation and guidelines to support reduced travel needs, utilising online meeting platforms where possible. Where air travel is unavoidable, purchase offsets at the point of ticket purchase or utilise Australian Carbon Credit Units (ACCUs) to reduce the Mint's travel emissions profile to meet net zero in 2030. Pricing has been detailed below: **Qantas offset price 1.8c/km[1] / ACCU offset price $34.25/t CO_2-e[2]** Domestic: $2,200 / $592 International: $7,870 / $5,548 The Mint will aim to reduce air travel by 5% year-on-year to 2030. Estimated emissions reduction: 7.3 t CO_2-e (domestic air). Commencement year: by consideration. Refer Section 9.10 for further information.	Impact	Mint Finance Mint Employees			→	→	→	→

[1] Qantas has a published price of 1.8c/km price for all flights, irrespective of cabin class, which was used to form the basis of this calculation.

[2] Spot price as of June 2024 and subject to market fluctuations

8.4.4 — Net Zero Carbon Abatements

The Mint recognises that some business operation activities are unavoidable and cannot be reduced through means identified in the previous three tables. As such abatements will need to be purchased on an ongoing annual basis. As these costs apply annually, this highlights the importance the focus on reducing emissions across all of the Mint's operations and property portfolio.

The abatements are managed through the Australian Carbon Credit Unit (ACCU), operating on a market spot price, which was positioned at $34.25 on 18 June 2024 and used to calculate the below estimated abatement costs. Further detail can be referenced in Section 9.11 of this Plan.

Action #	Action Detail	Action Type	Involved Participants	2030
4.1	Abatements for Net Zero buildings will apply to all data sources that are reported in the Net Zero Carbon Reporting Tool and will only apply after from 2030. Commencement year and ongoing: 2030. Estimated total emissions abatement: 481.7 t CO_2-e. Estimated total abatement cost: $16,498 p.a.	Impact CO_2	Mint Property Mint Finance	→

Emissions Source	Current Emissions (t CO_2-e)	Current Emissions 2030 (t CO_2-e)	Cost ($)	Note
Gas	468	468	$16,029	This value will be dependent on end-of-life retirement of gas plant and may extend beyond 2030 where plant has an extensive operational life remaining.
Electricity	1,842	0	$0	Zero emissions will result from the Mint signing to the WoAG electricity agreement.
Transport Fuel	0.2	0.2	$7	Will be influenced by vehicle replacement program and transition to LEVs.
Flights (Domestic only)	17	13.5	$462	Figure based on 5% year-on-year reduction, domestic air travel only.

9.0 — Further Information

9.1 — Green Lease Schedules

Green Lease Schedules (GLSs) were introduced by the Energy Efficiency in Government Operations (EEGO) policy as a means of establishing mutual obligations for tenants and owners to achieve efficiency targets.

Each GLS will vary according to the size and nature of the lease, with more comprehensive requirements for larger tenancies due to the emissions value associated with these facilities.

The GLS should establish a mechanism that is functional and capable of delivering positive environmental outcomes. To assist these outcomes, the following five elements should be included:

- Targeted environmental performance standards
- Metering and data reporting requirements
- Sustainable management plan
- Building management committee
- Remedial action/dispute resolution regime.

Further information is available here: https://www.energy.gov.au/sites/default/files/tenants-guide-to-green-leases-2012.pdf

9.2 — NABERS Energy Star Ratings

NABERS Energy ratings are a requirement under the Strategy and apply to all buildings with an NLA of 1,000 m² or greater. These ratings are one of the most efficient means for entities to benchmark and reduce property-related emissions. The ratings create a consistent and transparent building performance standard to compare outcomes and provide a structured framework for improving energy efficiency and transition toward net zero buildings.

The NABERS is an accepted industry standard that will be used to compare an entity's property portfolio and identify opportunities to improve energy efficiency and performance.

The NABERS Energy measures the efficiency of an office building, comparing the energy consumption of a facility against a set of benchmarks that have been developed using actual data.

The Mint currently meets the new NABERS threshold for sites over 1,000 m², as highlighted by the Strategy. However, until separate metering is installed between the office and manufacturing space, an accurate NABERS rating cannot be achieved. Once metering has been installed, the Mint will prioritise this NABERS assessment in accordance with the Strategy.

To further drive savings, the PSP is able to conduct NABERS Water ratings alongside the energy rating. Similarly, to the energy rating, these identify high level water efficiency opportunities.

9.3 — Type-2 Energy Audits

A Type-2 Energy audit is a comprehensive assessment of a building's energy use and potential areas for improvement, conducted by a certified energy auditor and are a recommended first step to improving a facility's energy efficiency.

Type-2 Energy audits include:

- Data analysis of facility energy bills and consumption data over a three-year period
- Investigation of building envelop, including walls, windows, doors, and insulation
- Examination of HVAC systems, lighting, and other energy consuming equipment to assess efficiency and condition
- Complete energy modelling to evaluate potential energy saving measure and their impact on energy consumption
- Identification of energy efficiency measures, inclusive of the estimation of cost and return on investment.

Once completed, a detailed report will be provided to the Mint outlining the findings, recommendations and return on investment for all energy initiatives.

Type-2 Energy audits can assist in developing strategic asset replacement programs for large plant and equipment, allowing sufficient time to investigate emerging low energy/low emissions technologies.

Examples of recommendations can include (but not limited to):

- **HVAC system optimisation –** HVAC systems typically account for a significant portion of energy use in office buildings. The audit may recommend a full or partial upgrade to energy-efficient HVAC systems or optimisation of heating and cooling controls and operating parameters
- **Lighting upgrade –** replace all inefficient lighting fixtures with energy efficient LEDs. Implement occupancy sensors, daylight harvesting controls, and timers to reduce unnecessary energy consumption
- **Building envelope improvements –** improvement of the building envelope by sealing air leaks, adding insulation, upgrade windows to reduce heating and cooling loads
- **Building Management System (BMS) –** optimisation of BMS controls to reduce overall building energy consumption.

9.4 — Grants & Funding

Research was completed to identify funding options that would assist in the capital investment of the proposed initiatives in this Plan. The table below explores the various funding mechanisms available to Commonwealth entities to support emissions reduction initiatives in Australia. By strategically leveraging grants, subsidies, rebates, and partnerships, Government entities can drive innovation, incentivise sustainable practices and propel meaningful progress.

State	Funding Program	Overview	Further Information
National	**Advancing Renewables Program**	Financed by the Australian Renewable Energy Agency, this program aims to facilitate the progress of transition to renewable energy. The available funding covers advanced renewable energy projects and relevant desktop studies/analysis.	https://arena.gov.au/funding/advancing-renewables-program/
Victoria	**Energy Services Agreement**	An Energy Services Agreement (ESA) entails an arrangement where an energy services company (ESCO) oversees the deployment of energy-efficient equipment for a business. In certain instances, the ESCO can pledge savings resulting from the implemented equipment.	https://www.sustainability.vic.gov.au/energy-efficiency-and-reducing-emissions/in-a-business/finance-energy-upgrades-in-you-business/energy-services-agreement-for-business
Victoria	**Victorian Energy Upgrades**	Victorian Energy Upgrades represents a government-led initiative focused on enhancing energy efficiency. Through this program, households and businesses are eligible for rebates or discounts on energy-saving products, fostering reductions in electricity expenses and greenhouse gas emissions.	https://www.energy.vic.gov.au/households/victorian-energy-upgrades-for-households/about-the-veu-program#:~:text=Every%20upgrade%20allows%20businesses%20under,these%20certificates%20to%20energy%20retailers
Queensland	**Energex and PeakSmart Air Conditioning Rewards Program**	The PeakSmart program is a solution designed by Energex, to help manage peak demand on the electricity network. Cashback can be claimed when installing a PeakSmart air conditioner or converting an existing air conditioner to a PeakSmart.	https://www.energex.com.au/manage-your-energy/cashback-rewards-program/peaksmart-air-conditioning
South Australia	**REPS – Retailer Energy Productivity Scheme**	The REPS, a scheme initiated by the South Australian Government, aims to enhance energy productivity by offering incentives to households and businesses in South Australia for energy conservation efforts. The administration of the REPS is mandated by the Electricity (General) Regulations 2012 and the Gas Regulations 2012, designating the Essential Services Commission (the Commission) as its administrator.	https://www.escosa.sa.gov.au/industry/reps/faqs/reps-faqsa
New South Wales	**Net Zero Manufacturing Fund**	Renewable Manufacturing Fund (NSW only). Administered by the Department of Environment and Heritage NSW, this fund focuses on developing components for the renewable energy and electric vehicle sectors. Projects eligible for this fund include components for renewable energy (i.e. wind towers, solar, batteries), electrification equipment to support switching from fossil fuels to electricity, electric vehicle components and assembly as well as hydrogen electrolysers.	https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/net-zero-manufacturing

9.5 — Lighting as a Service

To reduce the initial cost of retrofitting LED lighting in offices and commercial spaces, Lighting as a Service (LaaS) is an emerging industry in Australia. Lighting is installed by a third-party provider who also provides ongoing maintenance, with payments made in regular installments that are typically offset by savings in electricity consumption. This results in immediate improvements in energy efficiency at the facility, with effectively zero capital expenditure. At the end of the agreement there is typically an option to purchase the lighting from the LaaS provider, or to renew the agreement with either existing or upgraded lighting. Providers of this service, as well as additional information is readily available online.

9.6 — HVAC as a Service

HVAC systems account for close to 40% of energy usage in most commercial buildings and offices. As such, upgrading HVAC systems to more energy efficient systems can have dramatic improvements to the sustainability of the building. However, HVAC often requires significant expenditure to maintain and upgrade.

HVAC as a Service (HVACaaS) providers lease out their HVAC equipment to customers and provide preventive maintenance and servicing as part of the agreement. As the customer only pays for the use of the equipment, there is no upfront purchase or installation cost, and customers can use more energy efficient equipment that may otherwise be too expensive to purchase outright, reducing their energy consumption while still meeting operational needs.

More information on this service model, along with service providers can be obtained online.

9.7 — Hot Desk & Office Optimisation

A hot desk is a flexible workspace concept where desks or workstations are not assigned to specific individuals. In a hot desking environment, employees can choose any available desk, typically supported through an online booking system.

Hot desking is fast becoming the new normal in office-based environments where employers support a high level of mobility or remote work arrangements. This allows entities to optimise the use of their office space by accommodating a larger number of employees with fewer desks.

A hot desk should include essential items such as power outlets, internet connectivity, docking station, monitor, keyboard, mouse and disinfection wipes. To maintain connectivity of teams, zones or ecosystems can be allocated to specific teams within the organisation. Adequate lockers should also be made available to all employees for the storage of personal items.

The benefit to hot desking includes increased flexibility for employees, reduced real estate costs for employers, and opportunities for greater collaboration and interaction among team members.

Given the nature of work conducted at the Mint, hot desking is not seen as a concept that can be widely implemented for the employees. However, the concept will remain under consideration.

9.8 — Education & Training

Designing a net zero training package for employees involves creating a comprehensive program that educates and empowers participants to understand, support, and implement sustainable practices within their respective roles. The following is an outline of what such a training package could include:

- Introduction to net zero concepts
- Government's role in achieving net zero
- Overview of the Strategy and findings from the two reporting periods
- Energy conservation measures undertaken by the Mint and practical tips for reducing energy waste and optimising office environments
- Travel optimisation and practical tips on choosing green alternatives
- Waste reduction and recycling and strategies to reduce waste generation, promoting recycling within the office environment
- Strategies that foster a culture of sustainability and environmental stewardship, including events in which the Mint may participate, such as Earth Hour or Clean Up Australia Day
- Establish forums, workshops, and online platforms for sharing best practices, successes and lessons learned.

9.9 — Whole of Australian Government Electricity Agreement

In accordance with the Federal Government commitment to Net Zero by 2030, the Department of Finance, Procurement division has agreed to enter a competitive tender process for the WoAG Electricity Agreement. This Agreement is an expansion of the current contract for the Department of Defence, mandating that all non-corporate Commonwealth entities are signed to the Agreement. Corporate Commonwealth entities, Government business enterprise and the High Court may choose to elect to participate in the Agreement.

This Agreement will source electricity from renewable energy sources, including, but not exclusively, solar, wind, hydropower. This approach provides entities with contract consistency, it reduces entity procurement and contract management requirements, achieves best value for money, and is the single most significant action to assist entities to reduce their greenhouse gas emissions.

The approach the Department of Finance is proposing is to:

- Go to market in each state
- Each state procurement (with the exception of Tasmania, Northern Territory, and Western Australia) will have both a small market and large market contract
- Large market contracts will initially purchase and surrender large-scale generation certificates (LGCs), ensuring energy is procured from renewable sources.

This provides entities with assurance that all power purchased and consumed is from renewable sources or offset using LGCs.

The proposed timeline for each State or Territory electricity contracts to be in place are as follows:

• Northern Territory	1 September 2024
• Western Australia	1 December 2024
• Tasmania	1 January 2025
• New South Wales	1 July 2025
• Victoria	1 July 2025
• Australian Capital Territory	1 July 2025
• South Australia	1 October 2026
• Queensland	1 January 2029

Note this Agreement does not extend to properties where the Federal Government is not responsible for electricity (i.e. leased facilities).

Cost

There is the cost of energy consumption and other utility provider costs associated with the WoAG Electricity Arrangement that may be passed onto consumer entities. However, it is expected that due to significant buying power, the Department of Finance will deliver highly competitive rates.

Emissions reduction by 2030

By signing up to the WoAG Electricity Agreement, the Mint is assured that all electricity supplied will be via renewable sources such as wind, solar and hydro power, offsetting all electricity related emissions.

9.10 — Air Travel Rationalisation

Domestic air travel forms approximately 1% of the Mint's total emissions profile, and a minor opportunity to reduce emissions.

The Mint can reduce these emissions through a rationalisation of needs to travel and review of the travel policy. To create a holistic approach to sustainable travel, the Mint should consider the following:

- **Limit travel –** support essential trips that are days long
- **Travel less –** provide guidance on how to replace short trips with virtual meetings
- **Travel better –** include 'stay or go' guidelines/decision tree for sustainable options in the decision-making process
- **Use sustainable suppliers –** integrate sustainability messaging in your employee communication strategy.

9.11 — Australian Carbon Credit Unit

The Australian Carbon Credit Unit (ACCU) scheme was established in 2011 as an effort to incentivise projects that remove carbon from the atmosphere. The current ACCU spot price reflects the ongoing efforts of Australian organisations to mitigate carbon emissions and transition towards a more sustainable future. As of 18 June 2024, the ACCU spot price stands at $34.25 per tonne of carbon sequestered, influenced by factors such as market demand, government policy, and global environmental trends.

Historically, the ACCU spot price has seen steady overall growth with the largest market fluctuation occurring in 2022 after the Australian Clean Energy Regulator changed requirements for holders of Emission Reductions Fund contracts. This change introduced many ACCUs into the market, increasing supply and reducing the spot price. Despite this change, as more businesses and industries have begun to prioritise sustainability, demand for ACCUs continues to rise. This upward trend underscores the growing recognition of the importance of carbon offsetting in combating climate change.

Looking ahead, as Australian organisations intensify their efforts to achieve net zero emissions by 2030, the ACCU spot price is likely to continue its upward momentum. As of April 2023, the Safeguard Mechanism Amendment Act is requiring Australia's largest emitting facilities to reduce their emissions. This act is just one of many that the Australian government has set in place to achieve their ambitious targets for carbon neutrality, incentivising carbon offset projects and driving up the demand for ACCUs.

Q1 of 2023 saw a new record of ACCU trading, up 61% compared to the same period of the year prior. On top of government policy, an increased awareness of climate-related risks and the growing influence of environmental, social, and governance factors in investment decisions will likely drive demand for ACCUs in the coming years.