

EMISSIONS REDUCTION PLAN

JUNE 2024

Harbour
Trust



Australian Government
Sydney Harbour Federation Trust



ACKNOWLEDGMENT OF COUNTRY

The Harbour Trust acknowledges the Traditional Custodians and Owners of the lands, waters and sky of Sydney Harbour and of the extraordinary places under our stewardship: the Borogegal, Birrabirragal, Cammeraygal, Gadigal, Garamagal, Wallumedegal and Wangal peoples.

CONTENTS

Acknowledgement of Country	2
Declaration and sign off	3
Glossary	4
Emissions reduction plan	6
- Introduction	6
- Purpose	6
- Net zero greenhouse gas emissions	6
- Scope	7
- Governance	7
- Harbour Trust operational context	7
- Baseline emissions	8
- Engagement	9
- Emissions reduction targets	10
- Priorities and actions	11
- Emissions outcome	22
- Involved participants	22
Appendices	
- Appendix 1: scopes 1, 2 and 3 emissions explained	23
- Appendix 2: Harbour Trust net zero actions	25
- Appendix 3: aps net zero in government operations strategy roadmap	29
List of figures	
- Figure 1 – Baseline emissions profile	9
- Figure 2 – Scope emissions overview (Source: Greenhouse Gas Protocol)	23
List of tables	
- Table 1 – Baseline emissions for the Sydney Harbour Federation Trust	8
- Table 2 – Action summary table	25

DECLARATION AND SIGN OFF

Introduction

Climate change will continue to have significant effects on the environment, society and economy, with impacts felt across government operations. The Sydney Harbour Federation Trust (Harbour Trust) acknowledges that human behaviours, pollution and consumption patterns have both immediate and future impacts on climate and environment and that as a Commonwealth entity it is part of our role to mitigate and manage these impacts on our community.

This declaration establishes our position and commitments to reduce emissions. The Harbour Trust 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 Harbour Trust is committed to achieving net zero emissions by 2030.

The Harbour Trust 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 Australian Government's *Net Zero in Government Operations Strategy* to reduce our operational emissions.

This *Emissions Reduction Plan* was approved by the Members of the Harbour Trust on 13 June 2024.



Janet Carding
Executive Director
Harbour Trust



GLOSSARY

APS	Australian public service.
BAU	Business as usual.
Carbon footprint	The total amount of greenhouse gases emitted by an individual, organisation, event or product.
CO₂-e	Carbon dioxide equivalent. A standard unit for measuring carbon footprints, considering the impact of different greenhouse gases.
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DHW	Domestic hot water.
e-charging	Electric charging specifically for fleet vehicles.
emissions	The release of greenhouse gases into the atmosphere.
energy efficiency	Using less energy to provide the same service or achieve the same outcome.
energy management plan	A strategic plan to manage and reduce energy consumption.
Energy Star	A program and certification for energy-efficient appliances.
GreenPower	A government accreditation program that enables energy providers to purchase renewable energy on behalf of households and businesses.
greenhouse gas (GHG)	Gases in the atmosphere that trap heat, contributing to the greenhouse effect and climate change.
HVAC	Heating, ventilation and air conditioning.
ISO 14064.1-2006	International organisation for standardisation specification for quantifying and reporting greenhouse gas emissions and removals.
kWh	Kilowatt-hour. A measure of electrical energy equivalent to a power consumption of 1,000 watts for 1 hour.
LED	Light emitting diode. A highly energy-efficient lighting technology.
lifecycle assessment	The assessment of the environmental impact of a product or service throughout its entire lifecycle.
NABERS	National Australian Built Environment Rating System. A performance-based rating system for buildings.
NDC	Nationally determined contribution.
net zero	Achieving a balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere.
NGA	National Greenhouse Accounts Factors provide emission factors and methods that help companies and individuals estimate greenhouse gas emissions – revised factors are published by DCCEEW every year.

GLOSSARY

OPEX	Operating expense.
photovoltaic (PV)	Pertaining to the conversion of light into electricity using semiconductor materials.
renewable energy	Energy from sources that are naturally replenishing, such as solar, wind and hydro power.
scope 1 emissions	Direct greenhouse gas emissions from sources that are owned or controlled by the organisation. Refer to Appendix 1 for more information.
scope 2 emissions	Indirect greenhouse gas emissions from the consumption of purchased electricity, steam, or other energy sources. Refer to Appendix 1 for more information.
scope 3 emissions	Indirect greenhouse gas emissions that occur in the value chain of the reporting company, including both upstream and downstream emissions. Refer to Appendix 1 for more information.
solar PV	Solar photovoltaic; technology that converts sunlight directly into electricity.
sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs.
tCO₂-e	Tonnes of carbon dioxide equivalent.
the plan	The Sydney Harbour Federation Trust Emissions Reduction Plan, which aligns with the <i>Net Zero in Government Operations Strategy</i> . The plan outlines how the Harbour Trust will manage and implement emission reduction initiatives to achieve net zero greenhouse gas emissions in its operations against its base case profile. The plan is a live document and will be updated on an ongoing basis, together with the Harbour Trust's annual emissions report.
the strategy	The <i>Net Zero in Government Operations Strategy</i> developed by the Department of Finance to reduce emissions through initiatives aimed at meeting the net zero by 2030 target set by the Australian Government. The strategy outlines the Australian Government's approach to achieving net zero greenhouse gas emissions in its operations and reinstating public emissions reporting.
Harbour Trust	The shortened reference to the Sydney Harbour Federation Trust.
TfNSW	Transport for New South Wales.
WoAG	Whole of Australian Government.

EMISSIONS REDUCTION PLAN

Introduction

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 emission 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.

For the Harbour Trust, projected changes to our climate between now and 2030 include:

- Further increase in temperatures, with more extremely hot days and fewer extremely cool days.
- More heat waves that will be longer and hotter.
- More frequent, extensive, intensive and longer-lasting marine heatwaves.
- Ongoing sea level rise.
- Further warming and acidification of the oceans.
- More intense heavy rainfall throughout Australia, particularly for short-duration extreme rainfall events (storms).
- An increase in the number of high fire weather danger days and a longer fire season for southern and eastern Australia.
- Through a combination of any of these impacts, changes to biodiversity including increased species extinction.

Purpose

The Harbour Trust has an essential role in managing and implementing emission reductions initiatives set by the Australia Government's *Net Zero in Government Operations Strategy* ('the strategy') developed by the Department of Finance. The strategy is the first of many steps in the Australian Government's approach to achieving net zero greenhouse gas emissions in its operations and reinstatement of public emissions reporting.

The Harbour Trust engaged sustainability consultants from Ineco, who set the baseline emissions for the Harbour Trust and developed this comprehensive plan on our behalf.

This plan sets out the steps that the Harbour Trust will take to achieve net zero by 2030. This plan encompasses new and existing initiatives within the Harbour Trust to reduce emissions and contribute to the net zero target for the Australian Public Service (APS) by 2030.

The goal of this plan is to provide a pathway for the Harbour Trust to meet net zero emissions targets through emissions reduction activities aligned with the strategy.

Net zero greenhouse gas emissions

APS Net Zero 2030 is the target set by the Australian Government to achieve net zero greenhouse gas emissions from government operations by 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. From an organisational perspective, this means minimising the greenhouse gas emissions that are within our control.

EMISSIONS REDUCTION PLAN

Scope

Inclusions

Emissions reduction activities align with the strategy, with the initial focus on scopes 1 and 2 greenhouse gas emissions. Future reviews will consider additional inclusions to align with the strategy and organisational activities, including the consideration for scope 3. For more details on scopes 1, 2 and 3 emissions, refer to Appendix 1.

Exclusions

Activities by Commonwealth entities that take place outside Australia or its territories, including international air and marine travel, are not included in Australia's Nationally Determined Contribution (NDC) and are not included in the APS Net Zero 2030 target or subject to the strategy. These activities are not subject to the strategy. Entities that undertake these activities will 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 its climate diplomacy objectives.

Governance

This plan will be updated annually, with a summary to be incorporated into our annual report. Progress against actions identified within the Emissions Reduction Plan is also to be included in our annual reports. This, combined with annual emissions reporting, will be used as a measure of the Harbour Trust's progress towards reducing emissions.

As part of the *Net Zero in Government Operations Annual Progress Report*, the Department of Finance will aggregate these measures to provide the whole-of-Australian Government (WoAG) aggregated 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 branch within the Department of Finance.

Harbour Trust operational context

The Harbour Trust operates within the Sydney Harbour area, including locations at Headland Park (encompassing Chowder Bay / Gooree, Georges Heights and Middle Head / Gubbuh Gubbuh precincts), Cockatoo Island / Wareamah, Macquarie Lightstation, the Former Marine Biological Station at Camp Cove, North Head Sanctuary, Sub Base Platypus, and Woolwich Dock and Parklands.

Our facilities include office spaces, tenanted buildings, short-stay accommodation, volunteer areas, public domain and visitor centres. Our visitor destinations feature heritage-listed structures and other remnants from Australia's first nations, colonial and military history as well as managed natural areas and parklands. The Harbour Trust believes in the importance of First Nations peoples, places, cultures, in our Australian identity. We acknowledge the long history of custodianship exercised by First Nations peoples and their continued connection to Country.

Rather than receive an annual appropriation the Harbour Trust relies on revenue generated from its operations to carry out its regular activities and meet its heritage and environmental responsibilities. We receive no further operational appropriation from the government. Our sites also include buildings leased to private tenants for commercial and residential purposes. Additionally, some sites serve as occasional venues for various events, ranging from private weddings to ticketed concerts organised by third-party vendors.

The Harbour Trust has its main office at Headland Park and satellite offices at Sub Base Platypus, North Head Sanctuary and Cockatoo Island / Wareamah. As of April 2024, we have 85 staff working across our sites, comprising 56 full-time staff, 14 part-time staff and 15 casual employees. Operationally, the fleet of vehicles comprises, two cars with 4x4 capabilities (petrol), two sedan cars (petrol), nine buggies (electric/petrol), one forklift and four boats.

EMISSIONS REDUCTION PLAN

The Harbour Trust has already commenced its net zero emissions pathway in line with the direction set in the strategy. This includes the following key activities:

- Engagement of sustainability consultants to set up reporting and procurement frameworks to enhance transparency and reporting capabilities.
- Carbon modelling.
- Commencing sustainable procurement practices.
- Solar photovoltaic (PV) panels installed at Cockatoo Island, North Head and Sub-Base Platypus with expansion planned.
- Two dual electric vehicle charging stations at Sub Base Platypus powered by solar PV panels on the carpark roof.
- Switching petrol buggies to electric buggies.

Baseline emissions

Baseline emissions are a record of greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. The baseline emissions are the reference point against which emissions reduction can be measured.

At this stage, the APS Net Zero 2030 target includes scopes 1 and 2 emissions. Decisions on scope 3 will be made in the future as further data becomes available. The baseline emissions for this plan will focus on those emissions.

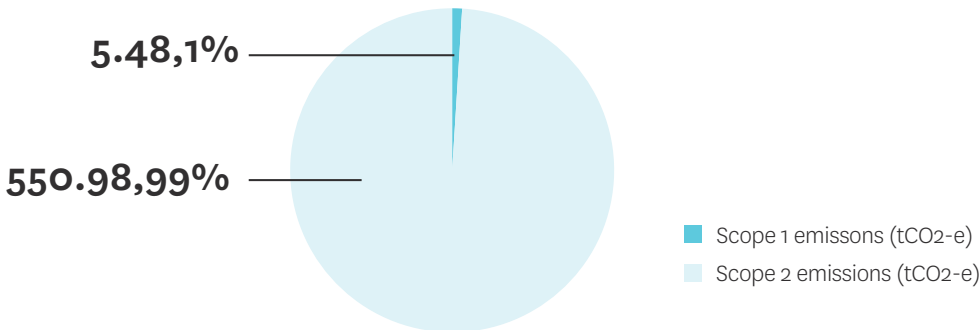
This Emissions Reduction Plan covers scopes 1 and 2 greenhouse gas emissions from the Harbour Trust’s operations including fuel combustion from a gas-fuelled domestic hot water heater, the vehicle fleet and energy use across various facilities operated by the Harbour Trust. These facilities encompass the main office, satellite offices, ranger offices, visitor centres and public domains, including street lighting. At this stage the Harbour Trust’s Emissions Reduction Plan does not include scope 3 emissions, such as from buildings leased to private tenants for commercial and residential purposes, or emissions from venue hire for events organised by third-party vendors. The Harbour Trust baseline emissions are seen in the table below and the breakdown is visualised in Figure 1 on the next page.

TABLE 1 - Baseline emissions for the Sydney Harbour Federation Trust

Baseline year	Calendar year 2023
Scope 1 emissions	5.48 tCO ₂ -e
Scope 2 emissions	550.98 tCO ₂ -e
Total emissions	556.40 tCO₂-e

EMISSIONS REDUCTION PLAN

FIGURE 1 - Baseline emissions profile



The baseline for the Harbour Trust was established using data for the calendar year 2023. This period was selected because it provided the most available and accurate data from standard operations, unaffected by the COVID-19 pandemic. The baseline was set using the ISO 14064.1-2006 standard, which provides guidance for quantifying, monitoring, reporting and verifying greenhouse gas inventories. Due to metering and reporting gaps, also indirect measurement was used for electricity, for which the Harbour Trust is responsible. Ongoing reporting will transition to financial years within the required monitoring and reporting framework.

Time series show historical emissions trends and track the effects of these strategies. Efforts will be made to calculate the time series using the same methods and data sources in all years. However, as emissions measurements, data collection methods, methodological refinements and reporting requirements are expected to be continually added and improved upon, strategies to ensure time-series consistency are being implemented from the outset. Key to ensuring confidence in time-series consistency will be the diligent documentation of approaches to estimated emissions, including methodologies and data sources, in the Net Zero in Government Operations Annual Progress Reports.

Engagement

In the development of this plan the Harbour Trust has engaged with the following stakeholders:

- Department of Finance
- Climate Action in Government Operations – to ensure that this plan aligns with the *Net Zero in Government Operations Strategy* and the Commonwealth Climate Disclosure requirements.
- Department of Climate Change, Energy, the Environment and Water
- Community Advisory Group net zero workshop participants
- First Nations Advisory Group net zero workshop participants
- Onsite staff
- Harbour Trust Events team
- Harbour Trust Procurement team
- Harbour Trust Property Leasing and Accommodation Management team
- Harbour Trust rangers
- Harbour Trust Building and Site Services team
- Harbour Trust Planning team.

EMISSIONS REDUCTION PLAN

Emissions reduction targets

In order to achieve net zero by 2030, we have adopted the following emissions reduction targets. We have projected through carbon modelling of initiatives and measures that our emissions will decrease over the next 6 years from 556.46 tCO₂-e to 350 tCO₂-e by 2030. This is a reduction of 37% through the implementation of energy reduction initiatives and electrification actions outlined in the 'Priorities and actions' section below. The remainder of the emissions will be reduced through GreenPower purchasing by the WoAG purchase agreement, bringing the Harbour Trust to net zero with 0 tCO₂-e by 2030. This is a reduction of 100%.

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

A summary of the considerations made by the Harbour Trust for the development of the emissions targets is seen below:

- The metrics used to set the targets included accurate and available data from the calendar year 2023, which provided the most accurate reflection of standard operations unaffected by the COVID-19 pandemic to set the baseline emissions. Projections were made through carbon modelling of various initiatives and measures to estimate future emissions reductions. Data on energy consumption across different facilities, including office spaces, public areas and street lighting, were also considered. Additionally, emissions factors (National Greenhouse Accounts [NGA] 2023) were applied to quantify greenhouse gas emissions from energy use, fuel combustion and other activities.
- The targets apply to the direct operational scope of the Harbour Trust as identified in the section of this plan titled 'Harbour Trust operational context'. This scope includes emissions from energy use from the main office, satellite offices, ranger offices, visitor centres, public domain (including street lighting) and fleet vehicles.
- The targets are set for a period leading up to 2030, with specific milestones defined as short-term actions (one to two years), medium-term actions (three to five years) and long-term actions (six or more years).
- The nature of the targets is both quantitative and qualitative. The quantitative targets involve specific reductions in tonnes of CO₂-e, aiming to reduce emissions from 556.45 tCO₂-e to 350 tCO₂-e by 2030, which represents a 37% reduction through direct initiatives. The qualitative targets include measures such as increasing awareness and improving energy management practices, which support the overall emissions reduction strategy.
- The targets are informed by alignment with both international and jurisdictional commitments. They align with the Australian Government's APS *Net Zero in Government Operations Strategy*, which commits to achieving net zero greenhouse gas emissions by 2030. They adhere to the ISO 14064.1-2006 standard, an internationally recognised framework for quantifying and reporting greenhouse gas emissions. Additionally, the targets reflect Australia's commitments under international climate agreements, specifically the Nationally Determined Contribution (NDC).
- The targets cover a range of greenhouse gases, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphurhexafluoride (SF₆).
- Aligned with the strategy the targets address scopes 1 and 2 emissions. Scope 1 emissions cover direct greenhouse gas emissions from sources owned or controlled by the Harbour Trust, such as fuel combustion in vehicles and equipment. Scope 2 emissions include indirect emissions from the consumption of purchased electricity.

EMISSIONS REDUCTION PLAN

Priorities and actions

The Harbour Trust's current sustainability measures alone, as noted in the 'Operational context' section, are not sufficient for achieving the target of net zero by 2030. To achieve net zero, targeted action on additional new measures is required. These actions aim to reduce energy use, switch from fuel, manage expectations, raise awareness and educate. These actions are categorized as high priority (to be implemented within one to two years), medium priority (to be implemented within three to five years) and low priority (to be actioned in six or more years).

The prioritisation of these initiatives has been determined based on a combination of factors, including the cost of implementation, the expected benefit in terms of emissions reductions and the strategic alignment with the Harbour Trust's overall sustainability goals. High-priority initiatives are those with the greatest potential impact on reducing emissions and are considered critical for meeting short-term goals with high impact. Medium and low-priority initiatives are important for long-term sustainability and future-proofing measures. These can be addressed as resources and opportunities allow. Refer to Appendix 2 for detailed actions, emissions savings, statuses, target indicators and alignment with the *APS Net Zero in Government Operations Strategy*. A summary of the actions per priority is listed below:

High priority actions

- Nominate a Harbour Trust sustainability manager to promote the action plan and oversee its delivery.
- Implementing tracking system for energy use and performance.
- Set up review and reporting framework for energy use and emissions impact full LED indoor lighting planned upgrades.
- Full solar and light emitting diode (LED) streetlighting planned upgrades.
- Improvement of heating, ventilation and air conditioning (HVAC) systems to enhance efficiency and climate control indoors.
- Implementation of timers and/or sensors for lighting.
- Management of staff expectations regarding energy use and indoor climate control.
- Raising awareness among staff and visitors on energy efficiency and its impact.
- Transitioning remaining buggies to low-emission vehicles.
- Implementing sustainable procurement framework and sustainable contract management.
- Improving building standards for future development and renovation.
- Energy-efficient appliances: replace, when failed, all appliances with energy-efficient models certified by Energy Star or equivalent.
- Lifecycle assessment: conduct lifecycle assessments for products and services to identify and reduce carbon emissions across the entire lifecycle and investigating the use of ratings pathways (NABERS, Green Star).

EMISSIONS REDUCTION PLAN

Medium priority actions

- Procuring renewable electricity.
- Investigating possibilities for procuring renewable fuel for boats.
- Implementing an energy management plan for offices.
- Provide educational signage on sites regarding net zero and climate action.
- Transitioning fleet vehicles to low-emission vehicles.
- Provide educational signage on the historic climate of the sites to inform climate change knowledge solutions and set expectations.
- Expanding solar PV installations or upgrades.
- Expanding e-charging stations for electric fleet vehicles.
- Investigating battery systems to be added to e-charging stations.
- Engage with Transport for New South Wales to improve effective public transport to sites for visitors and tenants.
- Set up volunteer program to restore Harbour Trust assets such as boats.

Low priority actions

- Improving climate control within buildings in the Harbour Trust portfolio through insulation and the use of efficient heat pumps.
- Improve window glazing to reduce heat loss and solar gain.
- Review overhang and shading improvements for office buildings and public buildings.
- Investigate opportunities for future EV charging stations for boats.
- Investigating options for small residential/commercial wind turbines.
- Add shading options for visitors to public domain.

The successful implementation of this plan and other sustainability initiatives will be enabled by in-house champions to promote the action plan across the organisation. The Harbour Trust will nominate a sustainability manager supported by a group of sustainability champions from across the organisation. This group will be responsible for promoting this plan and other sustainability actions across the organisation.

It is important to note that this is a living document. The priorities and timing of these initiatives are subject to change as the Harbour Trust progresses with its sustainability efforts, as new technologies become available and as funding and resources are secured. Continuous evaluation is key and aligned adjustment with the strategy will ensure that this plan remains effective and incorporates best practice.

The APS *Net Zero in Government Operations Strategy* provides guidance on the identified key areas where emissions reduction actions can be achieved in government operations through specific measures and set targets, see Appendix 3 for the strategy roadmap. Below, an overview of these key areas from the strategy is provided, focusing on those applicable to the Harbour Trust. The priority actions listed above are categorised under the strategy areas of buildings, energy, electrifications, fleet, EV charging, procurement, and people, culture and capability. Details on the objective to achieve emissions reduction within each key area, the expected impact, actions identified to be taken to achieve objective and the responsible parties are shown below.

EMISSIONS REDUCTION PLAN

Emissions reduction action for buildings

OBJECTIVE

The Harbour Trust is committed to improving the energy efficiency and climate control of its buildings. This initiative focuses on upgrading insulation, adding window efficient glazing and enhancing shading for both office and public buildings while respecting the heritage values of the buildings and sites. These measures will significantly reduce energy consumption, lower greenhouse gas emissions and enhance occupant comfort.

Current buildings within the Harbour Trust portfolio for this plan include office spaces, short-stay accommodation, volunteer areas, public domain and visitor centres. These facilities are spread across various locations and serve a diverse range of functions. Improving building insulation standards is crucial to reducing operational emissions and demonstrating leadership in sustainability.

EMISSIONS REDUCTION BENEFITS

- Enhanced insulation will reduce the need for heating and cooling, leading to lower energy consumption and emissions and improving circumstances in cases of extreme weather temperatures.
- Improve glazing to minimise heat loss in winter and reduce heat gain in summer, decreasing the reliance on HVAC systems and improving circumstances in cases of extreme weather temperatures.
- Improved shading will reduce solar heat gain, particularly during peak sunlight hours, thus lowering the cooling load.

ACTIONS

Improving climate control

Steps: Based on metered data identify opportunities to upgrade insulation. Potentially doing lifecycle assessments on material or doing ratings such as NABERS and GreenStar for planned renovation of buildings to ensure upgrades for example, insulation in walls, roofs and floors reflect a sustainable leadership approach as per the strategy. Adding energy efficient glazing and insulation will have a positive impact on energy reduction for climate control and improve indoor comfort. These measures can be taken whilst respecting the significant heritage values of the buildings.

By whom: Building Services team, in collaboration with sustainability manager for ratings and external contractors specialising in insulation and glazing.

Review overhang and shading improvements

Steps: Evaluate existing shade structures. Design and implement overhangs and shading solutions for windows exposed to direct sunlight within heritage and planning constraints. Install automated shading devices where feasible.

By whom: Building Services team, with input from external consultants. Review by Harbour Trust Planning and Heritage teams.

EMISSIONS REDUCTION PLAN

Emissions reduction action for energy and electrification

OBJECTIVE

The Harbour Trust is dedicated to enhancing energy efficiency across its operations. This initiative focuses on comprehensive upgrades to indoor and street lighting; improving HVAC systems; implementing smart controls for lighting; expanding PV installation; raising awareness about energy efficiency among staff and visitors and procuring renewable energy. Additionally, an energy management plan will be developed and implemented for all sites, detailing the strategy on how energy is used to meet the objectives, as well as ensuring standardisation of policies and regulations around energy use, promoting efficient use.

The Harbour Trust's facilities, under this plan's scope include office spaces, short-stay accommodation, public areas and streetlighting, which consume significant amounts of energy. Current lighting systems and HVAC units on selected sites are outdated and inefficient, leading to high energy consumption and greenhouse gas emissions. By upgrading these systems, expanding solar PV installations, procuring the remainder of energy from renewable sources and promoting energy-efficient practices, the Harbour Trust aims to reduce its carbon footprint and operational costs.

EMISSIONS REDUCTION BENEFITS

- Implementing a system for tracking and reporting building energy performance.
- Regular review of energy performance data and report.
- Transitioning to LED lighting indoors will substantially reduce electricity consumption due to the higher efficiency of LEDs compared to traditional lighting.
- Transitioning to additional solar powered LED streetlighting will reduce the energy consumption during peak time hours significantly reducing operational cost significantly.
- Enhancing HVAC/heat pump systems will optimise energy use for heating, ventilation and air conditioning, reducing overall energy consumption and improving indoor climate control.
- Procuring renewable energy will ensure that the electricity consumed by the Harbour Trust is generated from sustainable sources, further reducing scope 2 emissions.
- Increasing the use of solar PV systems will provide renewable energy, reducing reliance on grid electricity and lowering scope 2 emissions.
- Implementing smart lighting controls such as timers and sensors will ensure lights are used only, when necessary, further cutting down on energy waste.
- Educating staff and visitors on energy efficiency and lowering expectation on climate comfort during moderate temperature days, will encourage behavioural changes that contribute to energy savings.
- A structured energy management plan will help monitor, manage and continuously improve energy use across all facilities setting standards and expectations for all staff to minimise energy waste.

EMISSIONS REDUCTION PLAN

Emissions reduction action for energy and electrification

ACTIONS

Implementing a system for tracking and reporting building energy performance

Steps: Install energy monitoring systems in all buildings to capture real-time data on energy consumption. Develop a centralised database to store and analyse energy performance data. Establish key performance indicators (KPIs) to measure energy efficiency and identify targets for improvement.

By whom: Sustainability manager, Building and Site Services team, with support from IT.

Regular review of energy performance data and report

Steps: Conduct regular reviews of energy consumption data to track progress against KPIs. Identify patterns and anomalies in energy use to pinpoint areas for improvement. Implement corrective actions based on data insights to optimise energy efficiency. Prepare annual reports summarising energy performance, improvements made and achievements in reducing energy consumption and emissions. Share reports with internal stakeholders, including management and staff, to foster transparency and accountability. Publish a summary of energy performance achievements in the Harbour Trust's annual sustainability report to communicate progress to external stakeholders.

By whom: Sustainability manager in collaboration with the Building and Site Services team.

Full LED indoor lighting and planned upgrades

Steps: Conduct an audit of current lighting systems. Replace all existing lighting with LED fixtures. Plan future upgrades based on technological advancements.

By whom: Building and Site Services team, in collaboration with electrical contractors.

Full solar and LED streetlighting and planned upgrades

Steps: Install solar powered LED streetlighting poles. Plan upgrades for areas not currently covered.

By whom: Building and Site Services team, in collaboration with electrical contractors.

Improvement of HVAC systems

Steps: Evaluate existing HVAC systems. Those reaching end of life, to be replaced with high-efficiency units. Implement regular maintenance schedules to ensure optimal performance.

By whom: Building and Site Services team, in partnership with HVAC specialists.

Implementation of Smart controls Timers and/or Sensors for Lighting

Steps: Identify areas where lighting can be automated including all hallways bathrooms and highly sensitive sensors in longer term occupied areas such as office spaces. Install timers and sensors to control lighting based on occupancy and daylight availability.

By whom: Building and Site Services Team, with assistance from automation experts.

EMISSIONS REDUCTION PLAN

Emissions reduction action for energy and electrification

ACTIONS

Management of staff expectations regarding energy use and indoor climate control

Steps: Workshop staff on developed guidelines for energy use and indoor climate control. Communicate these guidelines to staff and upkeep it with training sessions and informational materials.

By whom: Sustainability manager

Raising awareness among staff and visitors on energy efficiency and its impact

Steps: Provide workshops and seminars on energy efficiency. Create informational campaigns using posters, digital displays and social media.

By whom: Sustainability manager, in collaboration with the Marketing and Communications team.

Implementing an energy management plan for each site

Steps: Develop a comprehensive energy management plan. Include targets, strategies and monitoring mechanisms applicable for the site and its specific operational context. Regularly review and update the plan based on performance data.

By whom: Sustainability manager, with input from all relevant departments.

Expanding solar PV installations or upgrades

Steps: Conduct a feasibility study to identify potential sites for new solar PV installations. Secure funding and permissions. Install solar PV systems on identified sites, ensuring integration with existing energy systems.

By whom: Building and Site Services team, in collaboration with solar energy contractors and sustainability consultants.

Procuring renewable energy

Steps: Consult with the Department of Finance to ensure participation in WoAG GreenPower electricity procurement as per the strategy and replace all electrical contracts with renewable electricity. Transition existing electricity contracts to renewable energy sources. Monitor and verify the origin of the procured renewable energy to ensure compliance with sustainability goals.

By whom: Procurement team, with oversight from the sustainability manager.

EMISSIONS REDUCTION PLAN

Emissions reduction action for fleet and EV charging

OBJECTIVE

The Harbour Trust is committed to reducing its transportation-related emissions by transitioning its vehicle fleet to low-emission alternatives and exploring renewable fuel options for its boats. This initiative focuses on replacing conventional vehicles with electric or hybrid models, expanding e-charging infrastructure and investigating renewable fuel sources for maritime operations.

The Harbour Trust operates a diverse fleet that includes cars, buggies, forklifts and boats, which are essential for its daily operations. Currently, these vehicles contribute significantly to scope 1 emissions due to their reliance on fossil fuels. By adopting low-emission technologies and renewable fuels, the Harbour Trust can significantly reduce its carbon footprint and demonstrate leadership in sustainable transportation.

EMISSIONS REDUCTION BENEFITS

- Transitioning to electric or hybrid vehicles will decrease direct emissions from fuel combustion, contributing to significant reductions in scope 1 emissions.
- Electrifying all buggies.
- Increasing the number of charging stations will support the efficient operation of electric vehicles, reducing reliance on conventional fuels for the Harbour Trust and its visitors.
- Using renewable fuels will reduce the carbon footprint of maritime operations, lowering overall emissions.

ACTIONS

Transitioning to low-emission Vehicles

Steps: Assess the current fleet and identify vehicles for replacement. Procure electric or hybrid vehicles that meet the operational needs of the Harbour Trust. Provide training for staff on the use and maintenance of new vehicle technologies.

By whom: Fleet Management team, with support from the sustainability manager and Procurement team.

Expanding e-charging stations

Steps: Identify strategic locations for new e-charging stations across Harbour Trust properties. Secure funding and install the charging infrastructure. Ensure that the charging stations are powered by renewable energy sources where possible.

By whom: Building and Site Services team, in partnership with sustainability manager, electrical contractors and renewable energy suppliers.

Procuring renewable fuel for boats

Steps: Investigate available renewable fuel options for marine vessels appropriate for current Harbour Trust fleet. Pilot the use of renewable fuels in selected boats to assess performance and feasibility. Expand the use of renewable fuels across the entire fleet based on pilot results.

By whom: Fleet Management team, with input from marine fuel suppliers and sustainability manager.

EMISSIONS REDUCTION PLAN

Emissions reduction action for fleet and EV charging

ACTIONS

Monitoring and reporting fleet emissions

Steps: Implement a system for tracking and reporting fleet emissions. Regularly review emissions data to identify areas for further improvement. Report progress and achievements in reducing fleet emissions in the annual sustainability report.

By whom: Sustainability manager, in collaboration with the Fleet Management team.

Promoting sustainable transportation practices

Steps: Encourage staff to adopt sustainable transportation practices, such as carpooling and using public transport. Provide incentives for staff who use low-emission or zero-emission vehicles.

By whom: People and Culture team, sustainability manager.

EMISSIONS REDUCTION PLAN

Emissions reduction action for procurement

OBJECTIVE

The Harbour Trust aims to integrate sustainability into its procurement processes by prioritising environmentally friendly products and services, promoting the use of renewable resources and ensuring that suppliers adhere to sustainable practices.

EMISSIONS REDUCTION BENEFITS

- Reduced environmental footprint from procured goods and services.
- Encouragement of sustainable practices across the supply chain.
- Alignment with broader sustainability goals and compliance with environmental regulations.

ACTIONS

Sustainable procurement policy

Steps: Develop and implement a sustainable procurement policy that includes criteria for selecting environmentally friendly products and services. Ensure the policy promotes the use of renewable resources and recycled materials.

By whom: Procurement team, Sustainability manager.

Supplier engagement and evaluation

Steps: Engage with suppliers to understand their sustainability practices through requesting evaluation information on sustainability, policies and implementation. Encourage improvements. Implement a supplier selection evaluation system that include financial and sustainability criteria.

By whom: Procurement team, in collaboration with the sustainability office.

Training and awareness programs

Steps: Conduct training sessions for procurement staff to raise awareness of sustainable procurement practices and the benefits of selecting green products. Develop educational materials and workshops for suppliers to promote sustainable practices.

By whom: People and Culture team, sustainability manager.

Lifecycle assessment

Steps: Conduct lifecycle assessments for major procurement categories to identify and reduce carbon emissions across the entire lifecycle of products and services. Use the findings to inform procurement decisions and improve sustainability outcomes.

By whom: Sustainability office, with support from external consultants as needed.

EMISSIONS REDUCTION PLAN

Emissions reduction action for procurement

ACTIONS

Sustainable contract management

Steps: Integrate sustainability clauses into contracts to ensure compliance with environmental standards. Ensure sub-contractors report on use of fuel and materials if applicable for scope of works. Monitor and enforce these clauses throughout the contract period.

By whom: Legal team, Procurement team.

Collaboration with other agencies

Steps: Collaborate with other government agencies to share best practices and resources for sustainable procurement. Participate in joint initiatives and programs to leverage collective buying power and drive market demand for sustainable products.

By whom: Procurement team, sustainability manager.

Regular monitoring and reporting

Steps: Develop a system for tracking and reporting on the sustainability performance of procurement activities. Regularly review progress and identify areas for improvement. Include procurement sustainability metrics in the Harbour Trust's annual sustainability report.

By whom: Procurement team, sustainability manager.

EMISSIONS REDUCTION PLAN

Emissions reduction action for people, culture and capability

OBJECTIVE

To foster a culture of sustainability, enhance the capability of staff and stakeholders and create supportive environments that encourage sustainable practices. This includes awareness, education and behavioural change programs aimed at reducing emissions and promoting energy efficiency.

EMISSIONS REDUCTION BENEFITS

- Nominate Harbour Trust sustainability manager and champions.
- Increased awareness and engagement in sustainability efforts among staff and visitors.
- Improved energy efficiency through behavioural changes and better management practices.
- Enhanced capability to implement and support emissions reduction initiatives.

ACTIONS

Nominate Harbour Trust sustainability manager and champions

Steps: For successful implementation of the net zero plan and other sustainability initiatives in-house champions will be nominated to promote the action plan across the organisation.

By whom: Harbour Trust, Executive team.

Awareness and education for staff

Steps: Develop and deliver training programs on the impact of human behaviour on emissions. Create educational materials and workshops to raise awareness about energy efficiency and sustainability.

By whom: People and Culture team, sustainability manager.

Behavioural change programs

Steps: Implement programs to encourage sustainable practices at work and home. Use tools like newsletters, workshops and incentive programs to promote energy-saving behaviours.

By whom: People and Culture team, sustainability manager.

Managing expectations regarding indoor climate control

Steps: Educate staff on the benefits of maintaining moderate indoor temperatures and minimising the use of HVAC systems. Provide guidelines and resources to support these practices.

By whom: Building and Site Services team, sustainability office.

Providing educational signage on sites

Steps: Install signs that educate visitors about the historic climate of the sites and current climate action initiatives. Use these signs to inform and engage the public on the importance of sustainability.

By whom: Building and Site Services team, Marketing and Communications team, sustainability manager.

EMISSIONS REDUCTION PLAN

Emissions outcome

The Harbour Trust’s Emissions Reduction Plan outlines the comprehensive approach to achieving net zero emissions by 2030 aligned with the strategy. Appendix 2 provides an overview of all actions discussed, categorised by priority and key area, including projected emissions impact. This appendix serves as a comprehensive reference for understanding the scope and impact of the initiatives outlined in this plan.

The Harbour Trust is committed to transparent and accountable reporting on the development and execution of this plan. Regular updates on the progress of initiatives, achievements in emissions reductions and any adjustments to the strategy will be communicated to stakeholders. By maintaining diligent documentation and reporting practices, the Harbour Trust will ensure continuous improvement and demonstrate its commitment to achieving net zero emissions by 2030.

Involved participants

The following have been involved in the development of this plan:

Division/Branch	Title	Name
Ineco (external) Sustainability	Consultant	Roxy Diephuis
Planning	Director	Daniel Sealey
Planning	Senior Planner	Liz Coad
Building and Site Services	Manager	Paul Akhurst

APPENDIX 1: SCOPES 1, 2 AND 3 EMISSIONS EXPLAINED

This appendix provides detailed information on the scopes 1, 2 and 3 greenhouse gas emissions discussed in this plan. Understanding these categories is essential for effective emissions tracking, reporting and reduction efforts.

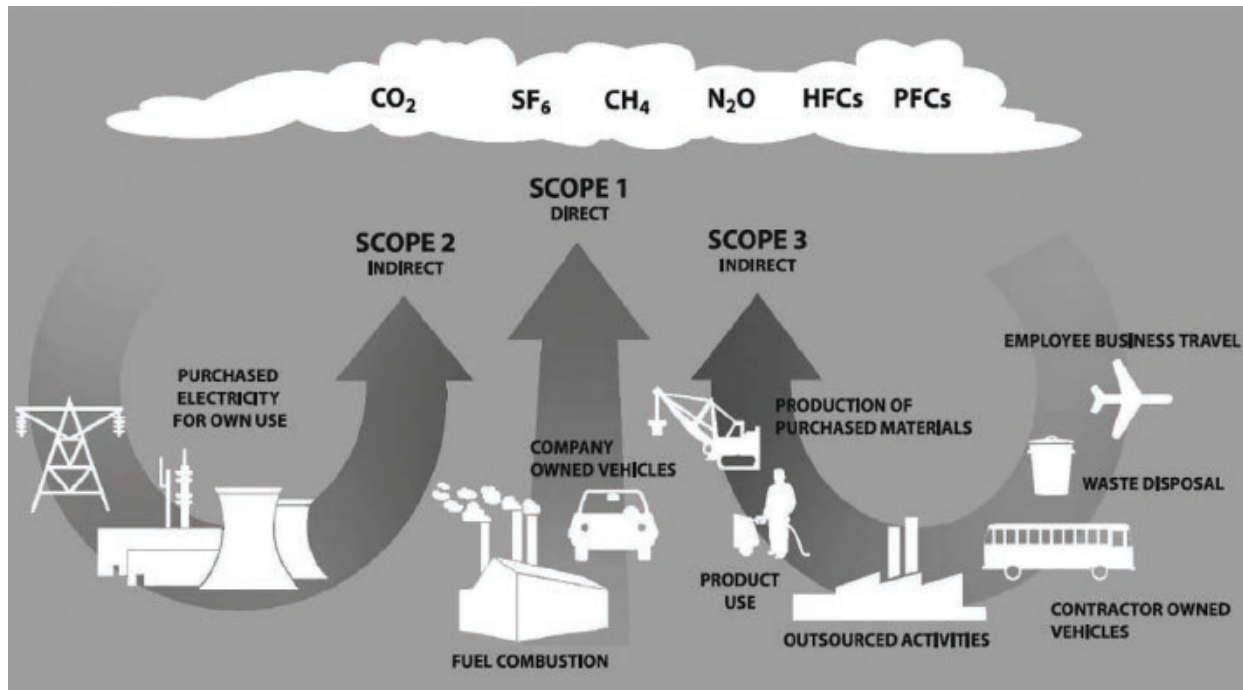


FIGURE 2 - Scope emissions overview (Source: Greenhouse Gas Protocol)

The above diagram illustrates the different categories of greenhouse gas emissions, divided into scope 1 (direct), scope 2 (indirect from purchased electricity) and scope 3 (all other indirect emissions). The three scopes consist of the following greenhouse gases:

- carbon dioxide (CO₂)
- sulphurhexafluoride (SF₆)
- methane (CH₄)
- nitrous Oxide (N₂O)
- hydrofluorocarbons (HFCs)
- perfluorocarbons (PFCs)

APPENDIX 1: SCOPES 1, 2 AND 3 EMISSIONS EXPLAINED

SCOPE 1 EMISSIONS	SCOPE 2 EMISSIONS	SCOPE 3 EMISSIONS
<p>Scope 1 emissions are direct greenhouse gas emissions from sources that are owned or controlled by the organisation.</p> <p>These include:</p> <ul style="list-style-type: none"> • Fuel combustion: Emissions from burning fuel in vehicles and equipment owned or operated by the organisation (for example, cars, buggies and boats). • Stationary combustion: Emissions from on-site fuel combustion in facilities, such as boilers, furnaces and generators. • Refrigerant leakage: Emissions from the use and leakage of refrigerants in air conditioning and refrigeration equipment. 	<p>Scope 2 emissions are indirect greenhouse gas emissions from the consumption of purchased electricity, steam or other energy sources generated off-site but used by the organisation.</p> <p>These include:</p> <ul style="list-style-type: none"> • Purchased electricity: Emissions associated with the electricity consumed in the facilities (for example, office spaces, public domains and streetlighting). • Purchased heat and steam: Emissions from the use of heat or steam generated off-site and used in the operations. 	<p>Scope 3 emissions are all other indirect emissions that occur in the value chain of the reporting company, including both upstream and downstream emissions.</p> <p>These can be more challenging to measure and include:</p> <ul style="list-style-type: none"> • Business travel: Emissions from the transportation of employees for business-related activities (for example, air travel, train travel and car rentals). • Leased assets: Emissions from buildings and other assets leased to private tenants for commercial and residential purposes. • Event operations: Emissions from the use of sites for events organised by third-party vendors. • Purchased goods and services: Emissions from the production and transportation of goods and services purchased by the organisation. • Waste generation: Emissions from the disposal and treatment of waste generated by operations.

Emissions reduction activities

These are actions and strategies designed to decrease the amount of greenhouse gases released into the atmosphere. These activities aim to mitigate climate change by reducing the carbon footprint of individuals, organisations and governments.

APPENDIX 2: HARBOUR TRUST NET ZERO ACTIONS

This appendix outlines the detailed actions, emissions savings, status, target indicators and alignment with the APS *Net Zero in Government Operations Strategy* areas for the initiatives within the Harbour Trust Emissions Reduction Strategy outlined in the 'Priorities and actions' section of this plan. The initiatives are categorised based on their priorities, which indicate the strategic importance of each action.

These priorities are defined as high (to be actioned within one to two years), medium (to be actioned within three to five years) and low (to be actioned in 6 or more years). The prioritisation of these initiatives has been determined based on a combination of factors, including the cost of implementation, the expected benefit in terms of emissions reductions and the strategic alignment with the Harbour Trust's overall sustainability goals. The high-priority initiatives are those with the greatest potential impact on reducing emissions and are considered critical for meeting short-term goals. Medium and low-priority initiatives are important for long-term sustainability and future proof measures, these can be addressed as resources and opportunities allow.

It is important to note that this is a living document. The priorities and timing of these initiatives are subject to change as the Harbour Trust progresses with its sustainability efforts, as new technologies become available and as funding and resources are secured. Continuous evaluation is key and aligned adjustment with the strategy will ensure that this plan remains effective and incorporates best practice.

The initiatives included have been selected based on the completed carbon model of the Harbour Trust's emissions profile. Action selection is based on thorough analysis of their cost-effectiveness and their potential to significantly reduce greenhouse gas emissions. Each action has been evaluated for its feasibility, the timeline required for implementation and its alignment with the Harbour Trust's broader environmental objectives.

TABLE 2 - Action summary table emissions savings

Action	Emissions savings	Status	Target indicator	APS Net Zero Strategy area
High priority to be actioned within one to two years				
Nominate Harbour Trust sustainability champion(s) to promote the action plan and oversee its delivery	n/a	In progress	Plan executions	People, culture and capability
LED indoor lighting upgrade replacement program	149,456.81k Wh/year = 101.63 tonnes CO ₂ -e year	In progress	Emissions reduced	Energy
Street light replacement program LED/ solar light poles	84,464.47 kWh/year = 58.65 tonnes CO ₂ -e year	In progress	Emissions reduced	Energy
Installing submetering systems for all Harbour Trust sites	n/a	In progress	Data capture/measuring impact/energy management	Energy/buildings
Upgrading HVAC systems as required when reaching end of life	51,641.64 kWh/year = 39.87 tonnes CO ₂ -e year	In progress	Emissions reduced	Energy
Upgrading fridges and vending machines as required when reaching end of life	11,868.93 kWh/year = 8.07 tonnes CO ₂ -e year	In progress	Emissions reduced	Energy
Electrification of remaining buggies	Removing 2.82 tonnes CO ₂ -e year	In progress	Eliminating fossil fuel dependency	Fleet

APPENDIX 2: HARBOUR TRUST NET ZERO ACTIONS

Action	Emissions savings	Status	Target indicator	APS Net Zero Strategy area
High priority to be actioned within one to two years				
Awareness and education for staff and visitors on impacts of human behaviour on emissions	n/a	In progress	Education	People, culture and capability
Sustainable procurement framework implementation	n/a	In progress	Supply chain	Procurement
Implementing monitoring and reporting framework	n/a	Completed	Data capture/measuring impact/energy management	Energy
Regularly audit the organisation's environmental footprint, implement findings and publish to staff	n/a	Ongoing	Data capture/measuring impact/energy management	People, culture and capability
Improving building standards and insulation for new developments and renovations	n/a	To be confirmed	Emissions reduced	Buildings
Implementation of timers and sensors lighting	n/a	In progress	Energy reduction	Energy
Behavioural change programs: Develop programs to educate and engage employees in sustainable practices at work and home	n/a	In progress	Energy management	People, culture and capability
Managing expectation regarding indoor climate control	n/a	In progress	Education/energy management	People, Culture and Capability
Energy management plans for all sites	n/a	In progress	Measuring impact/energy management	Energy
Removing gas from the operational energy mix by replacing DHW unit at Headland Park	Removing 0.012 tonnes CO2-e year	In progress	Eliminating fossil fuel dependency	Buildings (Electrification)
Provide educational signage on the historic climate of the sites to inform climate change knowledge solutions and set expectations	n/a	To be confirmed	Educational	People, culture and capability
Expanding solar PV system at Cockatoo Island	n/a	In progress	Emissions reduced	Renewable energy
Investigating the use of mock ratings pathways (NABERS, Green Star) for building refurbishments or performing life cycle assessment	n/a	To be confirmed	Emissions reduced	Buildings
Energy-efficient appliances: Replace failed appliances with energy-efficient models certified by Energy Star or equivalent	n/a	Ongoing	Emissions reduced	Energy

APPENDIX 2: HARBOUR TRUST NET ZERO ACTIONS

Action	Emissions savings	Status	Target indicator	APS Net Zero Strategy area
Medium priority to be actioned within three to five years				
Procuring GreenPower*	Forecast 505,597 kWh/year = 350 tonnes CO ₂ -e year	In progress	Emissions reduced	Renewable energy
Transitioning to low emission vehicles with 4x4 capabilities	Removing 1.83 tonnes CO ₂ -e year	In progress	Eliminating fossil fuel dependency	Fleet
Provide educational signage on sites regarding net zero and climate action	n/a	To be confirmed	Education	People, culture and capability
Transitioning to low- emission passenger vehicles	Removing 0.81 tonnes CO ₂ -e year	In progress	Eliminating fossil fuel dependency	Fleet
Transitioning boat outboards to use low-emission engine fuels	Removing 2.77 tonnes CO ₂ -e year	In progress	Eliminating fossil fuel dependency	Fleet
Expanding solar PV system at Headland Park	n/a	To be confirmed	Emissions reduced	Renewable energy
Expanding solar PV system at North Head Sanctuary	n/a	To be confirmed	Emissions reduced	Renewable energy
Expanding solar PV system at Sub Base Platypus	n/a	To be confirmed	Emissions reduced	Renewable energy
Investigating pairing battery storage with e-charging stations	n/a	To be confirmed	Emissions reduced	Fleet
Set up volunteer program to restore Harbour Trust assets such as boats	n/a	To be confirmed	Supply chain	Procurement
Engage with TfNSW to improve public transport to sites	n/a	To be confirmed	Connectivity	Energy

*As APS Strategy WoAG purchase agreement with suggested energy reduction measures implemented

APPENDIX 2: HARBOUR TRUST NET ZERO ACTIONS

Action	Emissions savings	Status	Target indicator	APS Net Zero Strategy area
Low priority to be actioned in six or more years				
Expanding solar PV at Woolwich Dock and Parklands	n/a	To be confirmed	Emissions reduced	Renewable energy
Expanding e-charging station	n/a	To be confirmed	Emissions reduced	Fleet
Improving climate control within Harbour Trust buildings by insulation	n/a	To be confirmed	Emissions reduced	Buildings
Improving window glazing within Harbour Trust buildings to reduce heat loss and solar gain	n/a	To be confirmed	Emissions reduced	Buildings
Review overhang and shading optimisation Harbour Trust buildings for passive heating and cooling	n/a	To be confirmed	Emissions reduced	Buildings
Investigate EV charging station for boats	n/a	To be confirmed	Emissions reduced	Fleet
Investigate small commercial wind turbines	n/a	To be confirmed	Emissions reduced	Renewable energy

APPENDIX 3: APS NET ZERO IN GOVERNMENT OPERATIONS STRATEGY ROADMAP



Our path to NET ZERO

This Roadmap lays out the Australian Government's pathway to achieve net zero greenhouse gas emissions from its operations by 2030, through implementation of the Net Zero in Government Operations Strategy.



Climate Action in Government Operations

The Australian Government is committed to climate action in government operations. Taking action within its own operations is a strong demonstration of how the Australian Government is leading by example.

APS Net Zero 2030

APS Net Zero 2030 is the target set by the Australian Government to achieve net zero greenhouse gas emissions from government operations by 2030.

Transparency and Reporting

Commonwealth entities have commenced public reporting on the emissions from their operations in 2022-23 annual reports. By 30 June 2024, entities will develop long term emission reduction plans and report annually on progress towards 2030 targets. The Department of Finance will publish an annual consolidated whole-of-Australian-Government report commencing the end of 2023.

Commonwealth Climate Disclosure

Commonwealth Climate Disclosure is the Government's policy for Commonwealth entities and Commonwealth companies to report on their exposure to climate risks and opportunities, as well as their actions to manage them.

2026-27 Mid-term Review

A review of progress against the Net Zero in Government Operations Strategy will be undertaken in 2026-27.

Energy



1 July 2024

Whole-of-Australian- Government electricity procurements begin. Entities must procure electricity through these arrangements when in place in their jurisdiction.

1 January 2028

80% of the Commonwealth's electricity consumption, that is generated off-site and purchased by entities must be renewable.

1 January 2030

100% of Commonwealth electricity is renewable.

Buildings



1 July 2025

Where a lease is entered into for four or more years over an office space of 1000 square metres or more of net lettable area, the office space and the building in which it is located must have and maintain 5.5 star or higher base building and tenancy NABERS energy ratings.

1 July 2026

Where a contract is entered by or for the Commonwealth for the purchase or construction of office space with a value greater than \$15 million, the office space must have and maintain a 6 star NABERS energy rating and GBCA 4 star Green Star rating (minimum) which includes complying with the Climate Positive pathway.

Buildings (Electrification)



1 July 2024

Where a lease is to be entered into for office space, entities should prefer all-electric buildings, particularly if the Commonwealth is directly responsible for base building services costs.

1 July 2026

Where a contract is entered for the purchase or construction of office space for the Commonwealth, the office space must be all-electric. This includes building heating, cooling and water heating but excludes backup generation, subject to the 2026-27 review.

1 January 2040

Entities should only lease or own office space that is all-electric.

ICT



1 July 2025

New data centre facilities that are sourced outside the whole-of-Australian-Government panel arrangement, whether owned or leased by the Commonwealth, are required to achieve and maintain 5 stars NABERS Energy for Data Centres or equivalent environmental rating such as a Power Usage Effectiveness of 1.4 or less.

Buildings (EV Charging)



1 July 2024

All office space with allocated parking must have an electric vehicle charging plan where possible.

1 January 2025

Office space with allocated parking should have facilities to support electric vehicle charging where possible, if an entity has electric fleet vehicles on site.

Fleet



1 July 2023

Target of 25% of new passenger vehicle orders to be low emission vehicles, with a preference for zero emission vehicles.

1 July 2024

Target of 50% of new passenger vehicle orders to be low emission vehicles, with a preference for zero emission vehicles.

1 July 2025

Target of 75% of new passenger vehicle orders to be low emission vehicles, with a preference for zero emission vehicles.

Procurement



1 January 2025

Develop and publish the Environmentally Sustainable Procurement Policy.

1 July 2025

Develop the scope 3 cost modelled assessment and work with agencies in its development.

1 January 2026

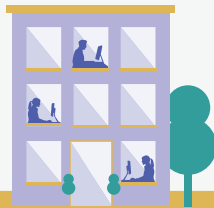
Capability uplift will be delivered for decision-makers to evaluate climate information from suppliers and enhance assessment under the Commonwealth Procurement Rules.

People, Culture and Capability



Entities are encouraged to identify a Chief Sustainability Officer role within their organisation at an appropriate level and delegation to champion the Net Zero in Government Operations Strategy and related initiatives that support climate action in government operations.

The Department of Finance will support capability uplift across entities, including through advice, guidance, tools, case studies and training programs via the APS Academy. The Climate Action in Government Operations website and GovTeams community will include general information and guidance.



This Roadmap summarises the key actions and activities included in the Strategy. For more information, please see the [Net Zero in Government Operations Strategy](#).