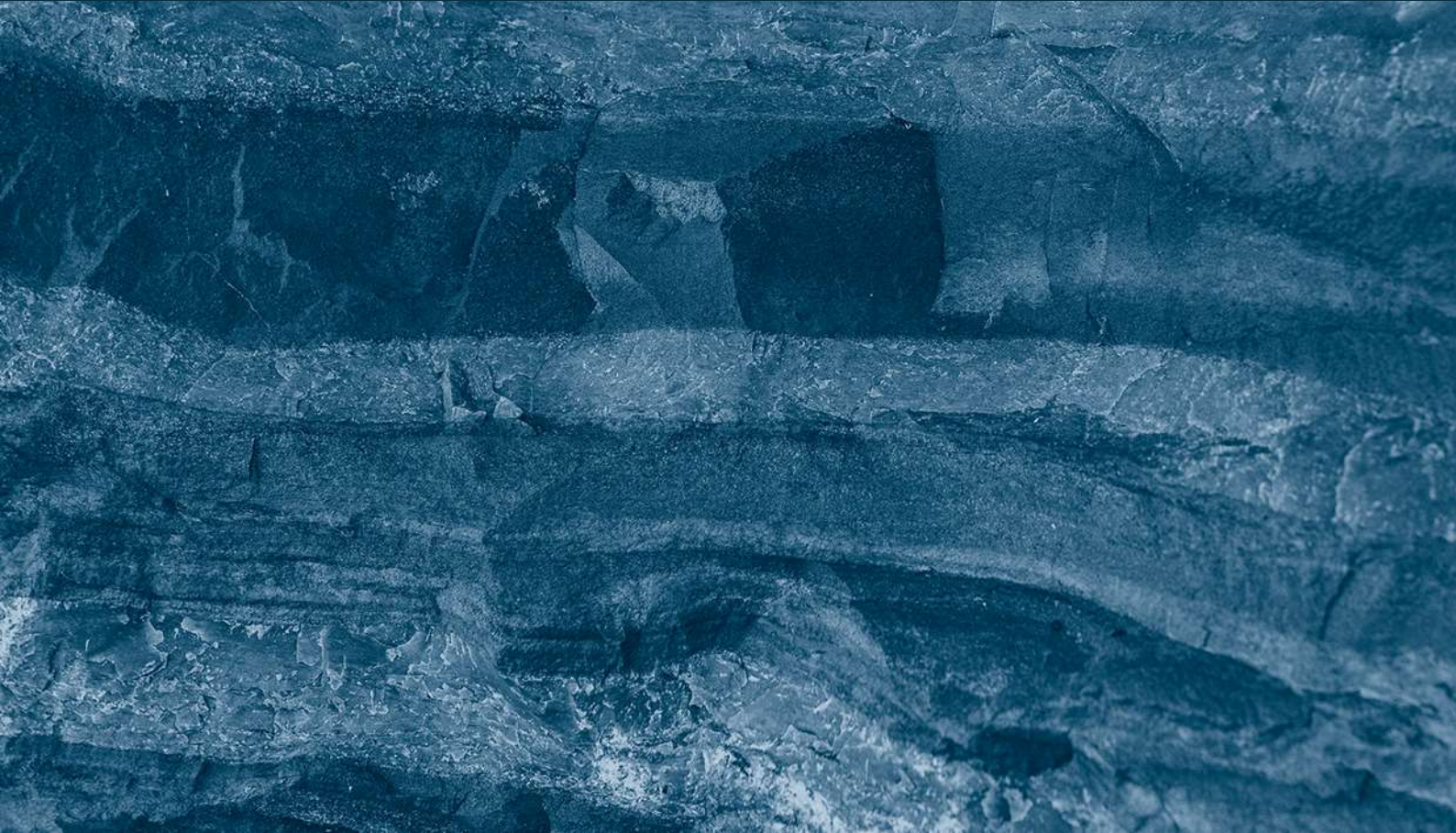




Australian Government
Geoscience Australia

Geoscience Australia

Emissions Reduction Plan 2024



Department of Industry, Science and Resources

Minister for Resources and Minister for Northern Australia: the Hon Madeleine King MP
Secretary: Meghan Quinn, PSM

Geoscience Australia

Chief Executive Officer: Dr James Johnson

Geoscience Australia acknowledges the traditional owners and custodians of Country throughout Australia and acknowledges their continuing connection to land, waters and community. We pay our respects to the people, the cultures and the elders past and present.



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Accountable Authority Sign Off

The Australian Government released the Net Zero in Government Operations Strategy in November 2023, setting out the overall approach and action required by Commonwealth entities to achieve the APS Net Zero 2030 target.

The Net Zero in Government Operations Strategy represents a strong commitment by the Australian Government to lead by example on emissions reduction and contribute to the decarbonisation of Australia's economy.

Geoscience Australia is committed to the achievement of the Government's APS Net Zero 2030 target. Geoscience Australia is following the APS Net Zero 2030 target as per the Net Zero in Government Operations Strategy.

This Emissions Reduction Plan describes the priorities and actions Geoscience Australia is taking to reduce our operational emissions and contribute to the APS Net Zero 2030 target.

A handwritten signature in black ink, appearing to read 'Johnson', with a stylized flourish at the end.

Dr James Johnson FTSE

Chief Executive Officer

1 November 2024

Emissions Reduction Plan

Purpose

Geoscience Australia is responsible for managing and implementing emissions reduction initiatives set by the Australian Government's [Net Zero in Government Operations Strategy](#) (the Strategy) developed by Department of Finance. The Strategy sets out the Australian Government's approach to achieving net zero greenhouse gas emissions from its operations by 2030 and the reinstatement of public emissions reporting.

The goal of this Emissions Reduction Plan is to provide a pathway for Geoscience Australia to contribute to the achievement of the APS Net Zero 2030 target through emissions reduction activities. This plan encompasses existing and new priorities and actions within Geoscience Australia to reduce emissions.

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

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 the year 2030. It includes scope 1 and scope 2 emissions from activities in Australia and its territories, as described in the Strategy.

The APS Net Zero 2030 target applies at the aggregate level to non-corporate Commonwealth entities and generally covers the entirety of the entity's organisation. From an organisational perspective, this means minimising the greenhouse gas emissions that are within our control.

Governance and reporting

Progress against actions identified within this Emissions Reduction Plan, and any additional measures adopted, will be included in our annual reports. This, combined with annual emissions reporting, will be used as a measure of Geoscience Australia's progress towards reducing its emissions.

As part of the Net Zero in Government Operations Annual Progress Report, the Department of Finance will aggregate these measures to provide whole-of-Australian Government emissions reporting.

Operational context

Geoscience Australia is the nation's trusted source of information on Australia's Earth sciences. Geoscience Australia provides evidence-based advice and services to empower decision making by government, communities and industry.

Geoscience Australia works across all Australian states and territories, with approximately 700 personnel including Australian Public Service staff and contractors. Geoscience Australia operates a range of high-tech facilities that are critical for the collection, analysis, integration, and communication of geoscientific information sourced from space, ground-based stations, and field surveys.

Geoscience Australia's principal place of business is in Symonston, Canberra, ACT. The Symonston building has an approximate office space of 29,580 sqm. Facilities at Symonston include office space, data storage space; a support building with warehouse facilities, workshops and laboratory; and public spaces including a library, education centre and a café.

Geoscience Australia also has remote technical locations which can incur extreme temperatures. These sites are minimally staffed and/or semi-staffed throughout the year and have minimal office space, under 1,000 sqm. These

locations include Mount Stromlo Satellite Laser Ranging Observatory ACT, Yarragadee Geodetic Observatory, WA; Alice Springs Ground Station, NT; Canberra Geophysical Observatory, NSW; and other smaller equipment-based locations across Australia and internationally.

Baseline emissions

Baseline emissions are a record of historic greenhouse gases. The baseline emissions from financial year 2022-23 are the reference point against which emissions reduction actions can be measured.

The baseline emissions for this plan focus on scope 1 and scope 2 emissions, consistent with the APS Net Zero 2030 target. Electricity-related emissions were calculated using the location-based method. The complete 2022-23 greenhouse gas emissions inventory tables for Geoscience Australia are presented in our [2022-23 annual report](#).

Table 1 Geoscience Australia emissions (2022-23) (location-based)

Baseline year	
Scope 1 emissions	502.97 tCO ₂ e
Scope 2 emissions	
Total emissions	3,773.40 tCO₂e

Engagement

In the development of this plan Geoscience Australia has been working with:

- Geoscience Australia Facilities Services
- Geoscience Australia Travel and Fleet Services
- Geoscience Australia Procurement and Commercial Services
- Property Service Provider, Evolve FM Pty Ltd.

Emissions reduction targets

Geoscience Australia is committed to achieving the APS Net Zero 2030 target in alignment with the Net Zero in Government Operations Strategy. This target encompasses all operations within Australia and its territories, addressing both Scope 1 and Scope 2 emissions as outlined in the Strategy.

The baseline emissions inventory established through last year's APS Net Zero reporting provides a solid foundation for our analysis. The emissions data reveals that approximately 72% of the total emissions for FY 2022-23 are attributable to Scope 2 - energy usage. A single site, Symonston, accounts for nearly 90% of the total energy consumption. This information is pivotal for directing our emissions reduction efforts effectively.

Priorities and actions

For Geoscience Australia to contribute to the achievement of the APS Net Zero 2030 target, targeted action on existing emissions reduction measures and the introduction of further or new measures is required. These actions are summarised in the following points, with further detail provided below:

- Improving building standards and increasing energy efficiency in line with the relevant National Australian Built Environment Rating Scheme (NABERS) rates as required by Strategy.
- Procuring renewable electricity through the whole of Australian Government electricity arrangement
- Consolidate office space where applicable to Geoscience Australia's operations.
- Alignment with government procurement, environment and sustainability policies
- Internal capability uplift.









Implementation Plan




The following section identifies 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 Geoscience Australia and will focus on achievable 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 Geoscience Australia's carbon emissions or influences other action.

Buildings




ACTION #	ACTION DETAIL	ACTION TYPE	INVOLVED PARTICIPANTS	2024	2025	2026	2027	2028	2029
1.1	<p>Ensure all future lease arrangements with an office space of >1000m² and leased for a minimum four years will achieve 5.5-star NABERS Energy rating.</p> <p>or</p> <p>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.</p> <p>As of 2024 there are no planned office refurbishment/purchase programs of works scheduled with Geoscience Australia's service provider, Evolve FM. Evolve FM will ensure all future programs of works meet this requirement.</p> <p>Commencement year and ongoing: 1 July 2025</p>	<p>Impact</p> 	<p>Geoscience Australia Facilities team</p> <p>PSP WoAG FM</p>						
1.2	<p>Undertake a Type 2 Energy Audit at our Canberra site (to assess energy efficiency opportunities).</p> <p>A Type 2 audit involves a thorough analysis of energy performance to identify and quantify potential improvements. This audit provides an in-depth review of equipment, systems, and operational characteristics across the site, resulting in actionable recommendations for energy savings.</p> <p>This may include the implementation of energy submetering for detailed analysis.</p>	<p>Influence</p> 	<p>Geoscience Australia Facilities team</p> <p>PSP WoAG FM</p>						
1.3	<p>Implement office consolidation and optimisation planning to reduce redundant, unused office facilities and equipment across Geoscience Australia's Symonston site.</p>	<p>Influence</p> 	<p>Geoscience Australia</p>						
1.4	<p>Upgrade lighting to high efficiency LED, coupled with lighting control sensors such as daylight sensors and occupancy sensors (where applicable) at our Symonston site.</p> <p><i>Note: most of our Symonston site has already been upgraded to LED lighting. Further lighting upgrades will include replacement of, emergency lighting, foyer area lights, our support building, link corridors and high-wattage carpark lighting.</i></p>	<p>Innovate</p> 	<p>Geoscience Australia Facilities team</p> <p>PSP WoAG FM</p>						

1.5	<p>Maintain existing end of journey facilities for cyclists and investigate opportunities to improve end of journey facilities in new builds to support low/no emissions staff commute.</p>	<p>Innovate</p> 	<p>Geoscience Australia Facilities team PSP WoAG FM</p>						
1.6	<p>Investigate the use of asset data to identify improvements to energy efficiency and extension of the useful life of assets through regular maintenance programs and strategic asset planning.</p> <p>Where replacement programs are identified, where practical, ensure that all new assets are:</p> <ul style="list-style-type: none"> • Resource efficient • Modular in design for ease of repair and end of life recycling • Have an identified asset steward (where applicable) 	<p>Influence</p> 	<p>Geoscience Australia PSP WoAG FM</p>						
1.7	<p>Investigate new and emerging technologies that support Geoscience Australia's transition to net zero buildings, as they become available and viable.</p>	<p>Innovate</p> 	<p>Geoscience Australia Facilities team PSP WoAG FM</p>						


Energy

ACTION #	ACTION DETAIL	ACTION TYPE	INVOLVED PARTICIPANTS	2024	2025	2026	2027	2028	2029
2.1	<p>Participate in the Whole-of-Australian-Government electricity agreement as it becomes available in relevant jurisdictions based on the below indicative timeframes:</p> <ul style="list-style-type: none"> 1 Jan 2025 – Tasmania 1 July 2025 – New South Wales, Australian Capital Territory, & Victoria 1 Oct 2026 – South Australia 1 Jan 2029 – Queensland <p>All Geoscience Australia properties (where possible) will participate in this Green Power purchase scheme to ensure all electricity consumed is from renewable sources.</p> <p><i>Note: Whilst Geoscience Australia does not have properties in all states listed above, the delivery timeline from the Department of Finance has been included to future-proof this document and future leasing requirements.</i></p>	<p>Impact</p> 	<p>Geoscience Australia Facilities team</p> <p>Department of Finance</p>						



Fleet

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. <i>Note: Geoscience Australia's current fleet includes only light commercial/commercial vehicles which are not in scope for the Strategy. The target has been included to future proof any passenger vehicles added to Geoscience Australia's fleet.</i>	Influence 	Geoscience Australia Fleet		→				
3.2	Apply fuel efficiency criteria to the purchase and lease of new vehicles where electric or hybrid options are not commercially or operationally viable.	Influence 	Geoscience Australia Fleet		→				
3.3	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.	Influence 	Geoscience Australia Fleet		→				


ICT

ACTION #	ACTION DETAIL	ACTION TYPE	INVOLVED PARTICIPANTS	2024	2025	2026	2027	2028	2029
4.1	Procure any new offsite data centre facility services under the Digital Transformation Agency (DTA) Data Centre panel arrangements. The Data Centre panel includes a strengthened range of measures for data centre providers to identify, manage and reduce their greenhouse gas emissions.	Influence 	Geoscience Australia Procurement and Commercial Team Geoscience Australia ICT Service Management		→				

Procurement

ACTION #	ACTION DETAIL	ACTION TYPE	INVOLVED PARTICIPANTS	2024	2025	2026	2027	2028	2029
5.1	<p>Alignment with the government procurement framework and sustainability policies, including the Environmentally Sustainable Procurement Policy.</p> <p>Adopt the policies and recommendations outlined within the government guidance and policy materials when they are released.</p> <p>Deliver information and training to officials and procurement decision-makers as guidance materials are published and made available by Department of Finance and the Department of Climate Change, Energy, the Environment and Water.</p>	<p>Influence</p> 	Geoscience Australia Procurement and Commercial Team						

People, Culture and Capability

ACTION #	ACTION DETAIL	ACTION TYPE	INVOLVED PARTICIPANTS	2024	2025	2026	2027	2028	2029
5.1	Appoint a Chief Sustainability Officer (CSO) to champion the Net Zero in Government Operations Strategy and related initiatives that support climate action in government operations.	<p>Influence</p> 	Geoscience Australia		