



Australian Government
**Australian Centre for
International Agricultural Research**

ACIAR Emissions Reduction Plan 2024



Acknowledgement of Country

The Australian Centre for International Agricultural Research acknowledges the Traditional Owners and custodians of the of the lands on which we work, and we pay our respects to their Elders past, present and emerging.

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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.

The Australian Centre for International Agricultural Research (ACIAR) is committed to the achievement of the Government's APS Net Zero 2030 target. ACIAR is following the APS Net Zero 2030 target in full, as per the Net Zero in Government Operations Strategy.

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



Prof Wendy Umberger

Chief Executive Officer

Australian Centre for International Agricultural Research

Date 30/08/2024

Emissions Reduction Plan

Purpose

The Australian Centre for International Agricultural Research (ACIAR) 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 ACIAR 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 ACIAR 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 ACIAR 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.

ACIAR operational context

ACIAR is the Australian Government specialist agricultural research-for-development agency within the Foreign Affairs and Trade portfolio. We are a small Australian government agency with 90 personnel (full and part-time), led by a Chief Executive Officer.

- 65 people are located at our office in Canberra, Australia
- 25 people are locally engaged staff at Australian government diplomatic missions, throughout the Indo-Pacific region. In alignment with the Strategy, these locally engaged staff and locations do not form part of the emissions profile for ACIAR.

Our Canberra facility comprises one commercially leased office space with a total net lettable area (NLA) of approximately 1,485 m², including one ICT server room. This facility is solely occupied by ACIAR.

ACIAR does not operate any leased fleet vehicles.

ACIAR has implemented a range of emissions reduction measures prior to this plan:

- ACIAR House is fully electrified, with no gas or other fuel sources used to energise the building
- Installation of a 100 kW solar photovoltaic (PV) system on the roof
- Installation of energy-efficient lighting and lighting controls in some rooms, to ensure that lights are only activated when those rooms are occupied.

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 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 ACIAR are presented in our [2022-23 annual report](#).

ACIAR's site is fully electrified and there is no vehicle fleet. As such, ACIAR does not have Scope 1 emissions.

Baseline year	Financial year 2022-23
Scope 1 emissions	N/A
Scope 2 emissions	156 tCO ₂ e
Total emissions	156 tCO ₂ e

Engagement

In the development of this plan ACIAR has been working with Ventia Sustainability to develop a comprehensive Emissions Reduction Plan and a Type-2 Energy Audit (May 2024) for the purpose of identifying energy efficient programs that ACIAR could undertake to support this plan and achieve savings through the reduction of energy consumption.

Emissions reduction targets

ACIAR is following the APS Net Zero 2030 target in full, as per the Net Zero in Government Operations Strategy. The target covers the entirety of our entity's operations within Australia and its territories for scope 1 and scope 2 emissions, as described in the Strategy.

Priorities and actions

For ACIAR 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:

- Procuring renewable electricity
- Improving building standards
- Reducing building electricity consumption
- Sustainable procurement

Buildings

The highest source of carbon emissions identified in the baseline of ACIAR's operations is associated with building electricity consumption. Reducing these emissions by improving energy efficiency will significantly reduce carbon emissions. To assist this approach, ACIAR will use the National Australian Built Environment Rating Scheme (NABERS) outlined in the Strategy to understand and reduce property-related emissions.

Based on the NABERS reverse calculation tool, Ventia has calculated that ACIAR House operates below a 3-Star NABERS rating. To meet the requirements of a 5.5-Star NABERS rating by 2030 ACIAR House would reduce its electricity consumption by 57% to 91,208 kWh p.a.

A Type-2 Energy Audit was completed for ACIAR in May 2024 for the purposes of identifying energy efficiency programs of works that ACIAR could undertake to support the implementation of this plan and achievement of net zero. Implementing the recommended measures outlined in the audit report will reduce emissions by 8.93 tCO₂-e, which equates to over 5.7% reduction in the overall emissions for the site.

ACIAR has a lease end date of 31 July 2025 for ACIAR House, with consideration to terminate the lease. To further support ongoing reporting and emissions reduction targets ACIAR will ensure all projects and programs of works support a transition to low emissions assets and infrastructure. This includes any future leased office locations. Due to the relatively small FTE base, ACIAR will not undertake any property purchases.

#	Action	Responsibility
1	Undertake annual NABERS Energy ratings from 2025, for leased property with an NLA of >1000 m ² , achieving a minimum 5.5-star rating.	Corporate Branch
2	Establish a Net Zero Working Group with key stakeholders, leased property managers and leased property owners to foster strategies and support for net zero initiatives.	Corporate Branch

3	Implement Green Lease Schedules (GLS) for all leased properties with an NLA of >1000 m ² and minimum 4-year lease term, currently ACIAR House (lease end 31 July 2025).	Corporate Branch
4	Maintain an all-electric building portfolio, with all new leases required to be fully electric.	Corporate Branch
5	Upgrade all down lighting to high efficiency LED at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch
6	Upgrade globe bulbs to LED at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch
7	Integrate timer function on the Billi boiling/chilled water unit at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch
8	Review ICT server room temperature to reduce energy load from constant cooling requirements at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch
9	Where applicable, transition to cloud-based servers to reduce energy consumption associated with server rooms.	Corporate Branch
11	Retire old ICT equipment and replace with high efficiency systems, including the option to transition dual monitors to single curved monitors with an ultra-wide aspect ratio to reduce energy consumption.	Corporate Branch
13	Reduce air leakage to improve building thermal efficiency at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch
14	Replace low efficiency kitchen appliances with high efficiency appliances, supporting reuse, recycling, and donation schemes to keep items from being sent to landfill.	Corporate Branch
15	Investigate new and emerging technologies that support ACIAR's transition to net zero buildings, as they become available and viable.	Corporate Branch
17	Maintain existing end of journey facilities for cyclists and investigate opportunities to improve end of journey facilities to support low/no emissions staff commute.	Corporate Branch
18	Integrate sustainability education programs for all ACIAR employees through a range of mediums including training and internal communications. Embedding sustainability KPIs into performance plans will also be investigated.	Corporate Branch
19	Participate in Earth Hour to show ACIAR's support for net zero and climate action.	Corporate Branch

Electricity

Renewable electricity

Reducing energy consumption through energy management strategies and improving energy efficiency is recognised as the most effective way for ACIAR to reduce its emissions. ACIAR commits to participate in the Department of Finance whole-of-Australian-Government arrangement for electricity procurement as it is rolled out nationally, to achieve a renewable electricity target of 80% by 2028 and 100% by 2030.

In addition, ACIAR commits to pursue energy efficiency projects that optimise a sites energy performance (see 'Buildings' above). ACIAR's property portfolio is fully electric, and all future leases or builds will meet this requirement.

#	Action	Responsibility
1	Consult with the Department of Finance to ensure participation in WoAG electricity procurement as per the Strategy and replace all electricity contracts with renewable electricity.	Corporate Branch

Solar PV installation / upgrade

ACIAR House has an existing solar photovoltaic (PV) system installed on the roof, consisting of 48 panels. During the Type-2 Energy Audit completed for ACIAR in May 2024, the total energy generation was recorded as 79,900 kilowatt-hours (kWh) over a 7.5-year period, or approximately 10,500 kWh/year. Overall, this renewable integration would equate to approximately 5% of the annual electrical demand of the site, mitigating over 7.7 tCO₂-e per annum.

The audit report noted that the PV system has been performing poorly and recommended that regular maintenance is carried out on the system to optimise this renewable energy resource.

#	Action	Responsibility
1	Optimise the existing solar PV system, including a detailed inspection, clean and necessary trimming of surrounding vegetation at ACIAR House, if lease extended beyond 31 July 2025.	Corporate Branch

Fleet

ACIAR does not operate any leased fleet vehicles.

Document history

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