Australian Government

Australian Government response to the Senate Economics References Committee report:

Residential electrification

MARCH 2026

Introduction

On 14 June 2023, the Senate referred an inquiry into Australia's residential electrification efforts to the Senate Economics References Committee (committee).i The terms of reference were to inquire into Australia's residential electrification efforts, with particular reference to:

a) the economic opportunities of household electrification, including but not limited to:
    i. long-term reduction of energy price inflation
    ii. long-term employment opportunities
    iii. the scaling up of domestic capacity
b) the macro-barriers to increasing the uptake of home electrification
c) the total upfront cost and longer-term benefits of household electrification and alternative models for funding and implementation
d) the marginal cost of abatement for household electrification compared to alternative sectors and options to decarbonise the economy
e) the optimal timeline for household electrification accounting for the likely timing of decarbonising electricity
f) the impacts and opportunities of household electrification for domestic energy security, household energy independence and for balance of international trade
g) the impacts of household electrification on reducing household energy spending and energy inflation as a component of the consumer price index
h) solutions to the economic barriers to electrification for low-income households
i) the effectiveness of existing Australian Federal, state and local government initiatives to promote and provide market incentives for household electrification
j) Australia's current standing against international standards, particularly with respect to the uptake of rooftop solar, batteries and electric household appliances
k) any other matters.

The committee published details of the inquiry and asked for submissions by 29 December 2023.ii The committee held 3 public hearings from 22 November 2023 to 22 March 2024 at Parliament House, Canberra. The inquiry report was tabled on 31 March 2025.iii

The Australian Government supports residential electrification through a suite of policy initiatives and investments so communities can take advantage of cheaper, cleaner energy to reduce energy bills and reduce emissions. Core recommendations of this inquiry are already underway, backed up by the Government's substantial progress towards 82% renewables in the electricity grid by 2030.

Response

Recommendation 1

The committee recommends that the Australian Government, in coordination with state and territory governments, should promote households to uptake consumer energy resources (CER), including rooftop solar, home batteries, bi-direction electric vehicle chargers and home energy management systems. In conjunction with those efforts, households should be promoted to participate with aggregators which can operate distributed assets in a coordinated fashion in response to grid and market conditions.

Response

Agreed.

The Australian Government promotes the uptake of consumer energy resources through the **Small-scale Renewable Energy Scheme** (SRES). The SRES provides a financial incentive for households, small businesses and community groups to install eligible small-scale renewable energy systems such as rooftop solar.

The Australian Government is expanding the SRES to provide incentives to households to install battery energy storage systems through the **Cheaper Home Batteries program**. The program offers a 30% discount on batteries for all households.

The Australian Government is providing a $1 billion equity injection to the Clean Energy Finance Corporation (CEFC) through the **Household Energy Upgrades Fund (HEUF)**.[iv] This provides concessional finance for household energy upgrades, including solar panels and solar batteries. The total investment to date has been more than $800 million, including a $417 million commitment from the Australian Government.[v] It is anticipated the program will finance upgrades for over 110,000 households.

In 2025, Energy and Climate Change Ministers (ECMC) updated the **Trajectory for Low Energy Buildings** and endorsed the **Trajectory Implementation Plan 2026-27**. The Trajectory Implementation Plan outlines collaborative work between state, territory, and commonwealth governments, including promoting efficient electrification as a priority. The Plan also identifies specific actions planned by some state and territory governments to support home electrification and the uptake of consumer energy resources.

The Australian Government is working with state and territory governments to unlock the full potential of CER through the **CER Roadmap** (the roadmap).[vi] The roadmap sets out an overarching vision and plan to unlock CER at scale across Australia. The roadmap will deliver equity in the transition and a coordinated vision for rooftop solar and batteries, virtual power plants and other forms of CER.

The roadmap outlines how governments will:

- work to enable CER's vast potential to lower bills
- improve reliability
- cut network costs by reducing the need for grid-scale investment.

State and territory governments, and industry, are conducting programs involving virtual power plants (VPP) and implementing the Cheaper Home Batteries Program. For example:[vii]

- the South Australian government, in partnership with Tesla, is developing South Australia's Virtual Power Plant, a network of potentially 50,000 solar and Tesla Powerwall home battery systems statewide
- the Western Australian government has released a Statement on the Interoperability of Distributed Energy Resources, detailing how distributed energy resource communication and installation will be harmonised in the South West Interconnected System.

In addition, the Australian Renewable Energy Agency (ARENA) and RACE for 2030 released the **National Roadmap for Bidirectional EV Charging** which directly contributes to the roadmap.[viii] It includes a number of recommendations involving industry and Australian, state and territory governments working together to integrate bidirectional EV charging into the roadmap.

Recommendation 2

The committee recommends that the Australian Government, in coordination with state and territory governments, should prioritise investment in technologies that extend and improve the system value of rooftop solar, such as home batteries and home energy management systems.

Response

Agreed.

As noted in Recommendation 1, the Australian Government is working with state and territory governments to unlock the full potential of CER through the roadmap. The Australian Government is working collaboratively with jurisdictions to deliver these reforms.

The Australian Government also notes the other programs included in recommendation 1 such as the National Roadmap for Bidirectional EV Charging and Cheaper Home Batteries Program.

Recommendation 3

The committee recommends that the Australian Government, in coordination with state and territory governments, should prioritise how community batteries can spread the benefits of rooftop solar to consumers who are unable to install their own systems, such as renters, apartment dwellers or low-income earners.

Response

Agreed.

Australia's rapid uptake of rooftop solar is reshaping daytime electricity demand and creating new opportunities to make better use of abundant renewable generation. The Solar Sharer Offer (SSO) builds on these opportunities by providing a regulated daily free power period—

up to 24 kWh—for residential customers with smart meters. This incentive rewards households for shifting their electricity use into periods of high solar output.

By enabling more Australians to benefit from plentiful daytime renewable energy, the SSO aims to improve affordability, support a fairer distribution of solar benefits, and contribute to long term system efficiency. It forms part of the government's broader package of measures designed to give households more ways to reduce their electricity bills.

The Australian Government currently has two community energy programs that are providing the benefits of community batteries and solar energy to a range of consumers. These programs are:[ix]

- **Community Batteries for Household Solar program**—the Commonwealth is investing $200 million to deploy 400 batteries across Australia. This program will put downward pressure on household electricity costs, contribute towards lowering emissions, provide a benefit to the electricity network by relieving network constraints, store solar energy for later use, and support new solar installations.
- **Community Solar Banks program**—the Commonwealth is funding programs administered by the States and Territories to support community-scale solar, rooftop solar and clean energy technology projects. The programs aim to share the benefits of solar with renters, apartments residents and those that cannot afford solar or are locked out of installing their own.

Recommendation 4

The committee recommends that the Australian Government and state and territory governments consider cost-effective local tuition for apprentices, such as electrical apprentices.

Response

Agreed.

The Australian Government, in partnership with states and territories, is delivering $1.5 billion in joint funding for over 500,000 Fee-Free TAFE and vocational education and training (VET) places across Australia from 2023 to 2026. This includes Fee-Free Construction, with courses related to electrotechnology available in many jurisdictions. Eligibility for Fee-Free TAFE for apprentices varies between jurisdictions. For most apprenticeship arrangements, employers are responsible for the training related costs, either paid directly by the employer or through a reimbursement to the apprentice.

The Australian Government has also made Free TAFE an enduring feature of the national VET system. This includes investing an additional $1.6 billion to 2034–35 to support at least 100,000 places annually from 2027, underpinned by the Free TAFE Act 2025.Free TAFE will be developed and delivered in partnership with states and territories, with eligibility requirements and courses subject to negotiations.

The Australian Government is investing up to $12.6 billion over 5 years to 2028 under the **National Skills Agreement**. The agreement will expand and transform access to the vocational education and training (VET) sector, support training providers to deliver quality education and training, and implement reforms to address critical skills needs. This investment is $3.7 billion above what was available under previous funding arrangements.

It includes up to $11.3 billion in flexible funding to states and territories to support the delivery of VET and to address agreed national priorities, including *supporting the net zero transformation* and *delivering housing supply*. States and territories can use this funding for a range of purposes, including VET programs that support employers to engage with VET by training their workforce and/or employing an apprentice or trainee.

The Australian Government has several financial and non-financial programs in place that are available to support apprentices and employers training in high-priority occupations, such as clean energy and housing.

The **Key Apprenticeship Program (KAP)** commenced on 1 July 2025 and builds on the success of the New Energy Apprenticeships Program which commenced on 1 January 2023. The KAP aims to encourage the growth of the housing construction and clean energy workforce by expanding the pipeline of workers training towards critical occupations in these sectors.

The KAP contains two streams:

- New Energy Apprenticeship (NEA) stream; and
- Housing Construction Apprenticeship (HCA) stream.

Eligible Australian Apprentices can claim up to $10,000 for a full-time apprenticeship and up to $5,000 for a part-time apprenticeship over the life of the Australian Apprenticeship journey.

From 1 January 2026 eligible employers can claim up to $5,000 for a full-time apprenticeship and up to $2,500 for a part-time apprenticeship in the first year of an apprenticeship.

Response to Senator Pocock Recommendations

Recommendation 1

Australian Government establish clear national targets for household electrification, including an initial goal of electrifying at least 5 million homes by 2035, aligned with Australia's commitment to reach 82% renewable energy by 2030.

Response

Noted.

The Australian Government is committed to working constructively with states and territories – a number of which already have household electrification targets in place – to support the transition of our energy systems, while maintaining reliable and affordable energy for Australian households.

The Government has a range of programs that provide voluntary incentives for households who choose to electrify, as set out in response to Recommendation 2, below. The Government addresses the broader role of electrification in decarbonising the Australian economy in its Net Zero Plan and sector plans, released in 2025.

Recommendation 2

Australian Government invest in an ambitious program of household electrification and energy efficiency upgrades consisting of $5 billion investment immediately and $50 billion over the coming 10 years.

Response

Noted.

The Australian Government has a range of programs that improve choice for household electrification and energy efficiency upgrades.

The Australian Government is expanding the SRES to provide incentives to households to install battery energy storage systems through the **Cheaper Home Batteries program**. The program offers a 30% discount on batteries for all households.

The **Household Energy Upgrades Fund (HEUF)** is a $1 billion equity injection to the Clean Energy Finance Corporation (CEFC). The fund provides concessional finance for household energy upgrades.[x] The Australian Government has committed $417 million under the HEUF to date.[xi] Co-financiers have contributed up to $428 million bringing total investment to more than $800 million to date. It is anticipated the program will finance upgrades for over 110,000 households.

The **Social Housing Energy Performance Initiative (SHEPI),** is providing $1.1 billion (including $800 million from the Australian Government) to reduce energy costs and consumption and improve thermal comfort for social housing tenants.[xii]

The Australian Government is working in partnership with state and territory governments to deliver SHEPI., Energy performance upgrades being delivered include thermal shell

upgrades, energy efficient appliances and solar systems.[xiii] The SHEPI is now expected to reach more than 100,000 social housing properties.

The **Nationwide House Energy Rating Scheme (NatHERS)** provides energy ratings for homes. The Scheme is administered by the Australian Government on behalf of state and territory governments. It is used in over 90% of new homes to demonstrate compliance with the National Construction Code. The Australian Government has expanded NatHERS to offer home energy ratings for existing homes, with the rollout commencing in July 2025.[xiv]

These ratings will:

- Allow Australian households to better understand their home's energy performance and help identify the most cost effective upgrades, including electrification.
- Underpin home energy rating disclosure schemes at point of sale or lease (which are being considered by state and territory governments) and enable other standards that state and territory governments may adopt, such as minimum rental standards.

In addition, the Australian Government is continuing to work with state and territory governments to support a nationally consistent approach to disclosure of home energy ratings through implementation of the **Home Energy Ratings Disclosure Framework**.

The Framework (version 2) was released by the Energy and Climate Change Ministerial Council on 6 December 2024.[xv] Home energy ratings disclosure enables prospective buyers or renters to make more informed decisions when purchasing or leasing a property and makes energy efficiency features more visible and valued in the market, helping to drive retrofit of the existing housing stock over time.

Recommendation 3

That the investment in Recommendation 2 financial incentives, including rebates and low-interest financing, to reduce upfront costs associated with household electrification technologies

Response

Noted.

See response to Recommendation 2.

Recommendation 4

Australian Government develops policies to ensure that rental properties, multi-dwelling structures and low-income households have equal access to household electrification.

Response

Noted.

See response to Recommendation 2.

Recommendation 5

Expand the SRES to include home battery systems, significantly reducing their installation cost and promoting widespread adoption

Response

Agreed.

As noted in response to the Inquiry Report's recommendation 1, the Australian Government has announced the **Cheaper Home Batteries Program**. This includes purchasing of SRES battery certificates to ensure no cost pass through to energy consumers.

This will help Australian homes and small businesses invest in batteries to promote more widespread adoption.

Recommendation 6

Establish a workforce development program and enhance domestic supply chains for key electrification technologies

Response

Agreed.

As noted in response to the Inquiry Report's recommendation 4, the Australian Government has a number of initiatives in place to develop a workforce for electrification.

The **National Renewable Energy Supply Chain Action Plan** sets out the Government's approach to identifying and reducing risks in Australia's renewable energy supply chains, to help meet the 2030 renewables target.

The Australian Government is investing to enhance Australian manufacturing of key electrification technologies including through the $1 billion Solar Sunshot program to boost solar PV manufacturing in Australia by supporting innovation and scaling up domestic production of solar panels and their components, and through the $500 million Battery Breakthrough Initiative to enhance Australian battery manufacturing capabilities.

The Australian Government continues to develop work that supports increased transparency of future domestic componentry needs for critical renewable energy technologies.

Additionally, the Commonwealth also has strategies in place to support the VET workforce specifically:

- Under the National Skills Agreement, the Australian Government is investing up to $100 million for initiatives to support the VET workforce, including responses to the VET Workforce Blueprint agreed by all Skills Ministers in 2024. This includes $70 million for state and territory initiatives, with matched funding from states and territories, and $30 million for national action.
- To support the release of the Blueprint, a suite of Commonwealth-led national actions are being progressed to support a greater understanding of the VET workforce, and to inform further responses to grow and support this workforce. This includes occupational mapping of the VET workforce, a VET workforce data strategy, an ongoing research program for VET workforce issues, and mapping and analysing compliance and administrative burden for the VET workforce. The Commonwealth is

working closely with Jobs and Skills Australia and states and territories on these actions.
- The Australian Government is also taking further action to progress shared national priorities through targeting initiatives to support the First Nations VET workforce, and to boost the VET workforce in critical industries including construction and electrical, noting the importance these sectors play in driving Australia's productivity.

Australian Government funding to build and support the VET workforce is also being provided, with $12 million for Jobs and Skills Councils industry-led initiatives that respond to VET workforce challenges faced by their industries. In addition, $30 million is being provided to turbocharge the teacher, trainer and assessor workforce for clean energy, manufacturing and construction. The latter measure will support an increase to the pipeline of teachers, trainers and assessors to deliver qualifications for these critical industries. The Australian Government is investing up to $325 million over five years under the NSA, with matched funding from states and territories, to establish nationally networked TAFE Centres of Excellence. These Centres will help provide nationally consistent, world-class teaching and learning, targeting critical and emerging industries, including the transformation to a net zero economy.

- To date, 4 TAFE Centres of Excellence have been established in the renewable energy sector, with a focus on electricians and electrotechnology skills, including the:
- NSW Hunter Net Zero Manufacturing Centre of Excellence which is developing an associate degree in Electrotechnology and Renewable Technologies (higher apprenticeship).
- Queensland TAFE Centre of Excellence Clean Energy Batteries which is consulting on the development of higher-level apprenticeship and/or degree level apprenticeship pathways, including through the Certificate III Electrotechnology Electrician and the Bachelor of Engineering/Electrical Science.
- Tasmanian Clean Energy Centre of Excellence which is developing General and Electrical (technical) Engineering Paraprofessional pilots.
- ACT Electric Vehicle TAFE Centre of Excellence which is developing a dual-qualified automotive trade apprentices' program, including light and heavy EV technician and automotive electrician.

Recommendation 7

Commence a process to reform the design of the National Energy Market in accordance with my additional comments to the recent report from the Select Committee on Energy Planning and Regulation in Australia.

Response

Noted.

The Australian Government is considering its response on the December 2024 Senate Select Committee on Energy Planning and Regulation in Australia's report and will address this recommendation in that response.

In November 2024, the Australian Government announced a review of the National Electricity Market (NEM) wholesale market settings by an independent expert panel. The panel was supported by the Commonwealth Department of Climate Change, Energy, the Environment and Water, state and territory governments and market bodies

The NEM Review Final Report and supporting Implementation Roadmap were presented to Energy Ministers on 16 December 2025 and published. Energy Ministers, except for Queensland, agreed in-principle to the NEM Review's core recommendations. These include establishing an Electricity Services Entry Mechanism, a Market Making Obligation, and measures to improve the visibility of Price Responsive Resources. The Australian Government is working closely with states and territories, industry and market bodies to progress detailed design of the core recommendations of the review, to allow further consideration of the proposed reforms by the Energy and Climate Change Ministers throughout 2026.

[i] Senate Economic References Committee, Residential electrification, Report, 31 March 2025, accessed 7 April 2025.

[ii] Senate Economic References Committee, Residential electrification, Report, 31 March 2025, accessed 7 April 2025, p. 2.

[iii] Senate Economic References Committee, Residential electrification, Report, 31 March 2025, accessed 9 April 2025.

[iv] CEFC, Household Energy Upgrades Fund - Clean Energy Finance Corporation, Website, accessed 19 May.

[v] CEFC, Opening doors for sustainable Australian homes, Report, 11 February 2025, accessed 22 May 2025, p. 2.

[vi] DCCEEW, Energy Ministers agree to the National Consumer Energy Resources (CER) Roadmap, Website, 19 July 2024, accessed 19 May 2025.

[vii] DCCEEW, South Australia's Virtual Power Plant, Website, accessed 19 May 2025; and WA Government, Statement on Interoperability of Distributed Energy Resources, Announcement, 3 June 2025, accessed 6 June 2025 .

[viii] ARENA, National Roadmap for Bidirectional EV Charging in Australia, Website, 25 February 2025, accessed 19 May 2025.

[ix] DCCEEW, Community Batteries for Household Solar program, Website, accessed 19 May 2025; and DCCEEW, Community solar banks, Website, accessed 19 May 2025.

[x] CEFC, Household Energy Upgrades Fund - Clean Energy Finance Corporation, Website, accessed 19 May.

[xi] CEFC, Opening doors for sustainable Australian homes, Report, 11 February 2025, accessed 22 May 2025, p. 2.

[xii] DCCEEW, Social housing energy performance - DCCEEW, Website, accessed 20 May.

[xiv] NATHERS, Existing homes | Nationwide House Energy Rating Scheme (NatHERS), Website, accessed 19 May 2025.

[xv] DCCEEW, Home Energy Ratings Disclosure Framework – Version 2 | energy.gov.au, Website, accessed 19 May.