

Home Energy Saver loans
Finance provider guidelines

November 2026

Energy Security Corporation

Investing to accelerate **NSW's energy transformation**

Acknowledgment of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present, and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices, and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families and communities towards improved economic, social and cultural outcomes.



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NSW GOVERNMENT

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About Home Energy Saver

Purpose of this document

The Energy Security Corporation (ESC) is seeking to make non-exclusive investments with finance providers that have a proven ability to deliver consumer energy finance products.

The ESC will make investments where a finance provider can show that it will help accelerate the uptake of energy saving technologies and work in partnership with government and industry to support households in New South Wales (NSW) .

This document gives prospective finance providers an overview of the Home Energy Saver loan program and outlines the information the ESC needs to assess whether to enter into an investment partnership.

About the Energy Security Corporation

The ESC is a NSW Government-backed clean energy investor with a clear public mandate: to accelerate investment in large-scale storage, enabling infrastructure and consumer energy resources (CER) to support a reliable and secure electricity system for NSW.

Through targeted, catalytic investment, we are accelerating the delivery of critical energy projects and securing the electricity system NSW needs, now and into the future.

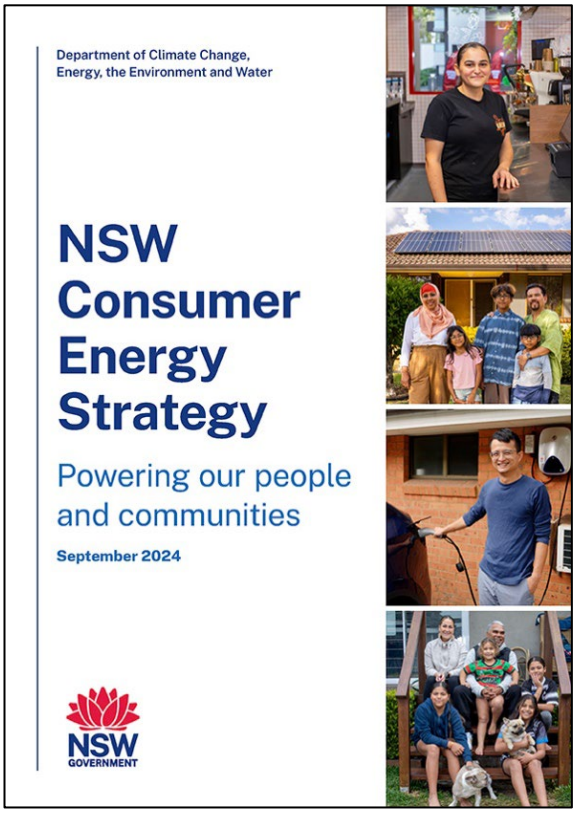
Our purpose is set out in the *Energy Security Corporation Act 2024*.

Our objectives are to:

- accelerate private sector investments in clean energy projects in NSW that improve the reliability, security and sustainability of electricity supply
- support NSW to achieve its emissions reduction targets under the *Climate Change (Net Zero Future) Act 2023*
- complement other Government initiatives relating to clean energy technologies and partner with the private sector to finance clean energy technologies
- achieve a government-mandated rate of return through a portfolio approach.

Introduction

Rising energy costs are putting pressure on NSW households, with around one-third reporting difficulty paying their energy bills in October 2025.[1] To help ease this pressure, the NSW Government has launched Home Energy Saver which will provide incentives to enable cheaper home energy saving upgrades.



Home Energy Saver is part of the NSW Consumer Energy Strategy, released in September 2024. The strategy helps households and small businesses access affordable, clean energy. Through Home Energy Saver, the NSW Government will invest $238.9 million to help eligible households install energy saving upgrades like solar panels and insulation.

[1] Energy Consumers Australia (2025), 'The Consumer Energy Report Card Household Research Report – Spring 2025', Energy Consumers Australia, accessed 6 February 2026.

Home Energy Saver overview

Purpose and aims

Home Energy Saver focuses on households that have not been able to afford energy saving upgrades. Without direct support, many households risk being left behind in the shift to cleaner energy and electrification.

Home Energy Saver aims to:

- help households cut energy bills
- help more households benefit from the energy transition
- improve households' thermal comfort, health and wellbeing
- reduce greenhouse gas emissions and help achieve net zero emissions
- improve electricity grid stability.

What is on offer

Home Energy Saver offers discounts and loans.

Funded by the NSW Government, Home Energy Saver combines discounts and zero-interest loans to make energy saving upgrades more accessible.

Eligible households can apply for a zero-interest loan, up to $15,000, to help with the upfront costs for approved energy saving upgrades. If eligible, they may also qualify for a discount of up to $4,000 on upgrades. If eligible for both, the discount must be applied for first before seeking a loan to cover the remaining upfront cost. For more information about Home Energy Saver discounts visits energy.nsw.gov.au/home-energy-saver.

The same energy saving upgrades are eligible for discounts and loans.



Discounts:
A discount up to a maximum value of $4,000.



Zero interest loans:
A zero-interest loan up to a maximum value of $15,000, repayable over up to 10 years.

Loan eligibility criteria

NSW households may be eligible for a loan if they meet the eligibility criteria below and none of the exclusions apply.

NSW dwellings: The dwelling must be in NSW, must be affixed to the land permanently and fit within one of the land tenure categories:

- Freehold (Torrens title)
- Strata title (Lot Owner)
- Community/Neighbourhood title
- Perpetual lease
- Leasehold title
- Crown lease
- Residential Land lease community
- Retirement village.

Borrower residency: The borrower must be an Australian citizen or permanent resident.

Household income limit: Borrowers must not have a combined household taxable income which exceeds $150,000.

Ownership: The borrower must own the property, either as an owner-occupier or landlord.

Eligible upgrades: The Home Energy Saver loan finances the upgrade by the borrower of an eligible technology which meets the eligible technologies requirements (Appendix 1).

Note: Home assessment: A NatHERS (Nationwide House Energy Rating Scheme) home assessment and certificate will be optional as part of the loan application process for obtaining a Home Energy Saver loan.

Exclusions

NSW households cannot receive a loan if the:

Property has already received upgrades using a Home Energy Saver loan.

Property is a social or community housing property or used for short-stay accommodation.



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Eligible energy saving upgrades

The loan can be used to help pay for the following approved energy saving upgrades:

- rooftop solar photovoltaic (PV) modules
- residential battery energy storage system
- heat pump water heater
- solar hot water heater (electric boosted)
- reverse cycle air conditioner
- ceiling insulation
- double-glazed windows or doors
- induction cooktop replacing gas cooktop
- electric vehicle (EV) Level 2 charger
- draught proofing windows and doors
- ceiling fans
- switchboard upgrade
- home energy assessment.

See Appendix 1 for specific technical standards which apply to these upgrades. Approved suppliers will need to ensure these standards are met as part of the installation process.

Note: The loan only applies to the upgrade and its installation. It cannot be used for any extra work at the property that might be needed to get ready for installation.

Financial product limits

The following are the financial product limits for the Home Energy Saver loan program as agreed. Financial product limits can be amended from time to time.

Financial product limits include:

- Consumer maximum loan amount of $15,000.
- No interest.
- No fees or on-costs. Eligible customers must not be charged, required to pay, or otherwise incur any fees, charges, loadings, on -costs or other amounts of any kind in respect of or in relation to Home Energy Saver loans or the supply, installation or operation of any related eligible technology. This includes, without limitation, any loan account fees, merchant establishment fees, service fees, administrative fees, membership or subscription fees, surcharges, premiums, margin loadings, or any other direct or indirect costs, regardless of how described or structured.
- For the avoidance of doubt, any fees including any late fees levied on customers, would need to be approved by the ESC.
- No associated promotion or financing. Participating program partners must not, in connection, or association with any Home Energy Saver loan , or the supply of any related eligible technology, market, promote or offer to, or enter into any arrangement with, any eligible customer for the purposes of providing financing or other financial accommodation to the eligible customer unless the ESC has given its prior written approval.
- Maximum loan tenor of 10 years.
- Home Energy Saver loans are to be separate facilities and not rolled into or merged with another financial offering.
- Home Energy Saver loans must comply with National Consumer Credit Protection standards. The following are not eligible products or offerings for concessional financing as part of the Home Energy Saver loan program:
    - » Unregulated financial products: The ESC will not finance buy now pay later offerings.

Roles and responsibilities

Our role

The Energy Security Corporation will:

- manage and oversee the overall delivery of the program by finance providers, including monitoring their progress and outcomes
- provide wholesale funding to the finance provider to deliver loans to eligible households
- set the minimum product standards.

The Energy Security Corporation is not:

- involved in the agreement between the customer and the approved supplier
- involved in the agreement between the customer and the finance provider
- responsible for the supply or installation of the products offered through Home Energy Saver – the approved supplier is responsible for this.

The finance provider's role

The finance provider will:

- Provide an application and assessment process to confirm that customers meet the eligibility criteria outlined in these guidelines.
- Assess each application, including ensuring that responsible lending requirements are met. They will notify applicants of the outcome including reasons for unsuccessful applications.
- Maintain a list of approved suppliers who hold the necessary accreditations and licences to carry out upgrades under the Home Energy Saver loan program.
- Manage payments to suppliers of the loan funds on the customers behalf.
- Collect and manage information provided during the application, assessment and installation stages and supply this to the Energy Security Corporation securely and in line with privacy requirements.
- Manage customer enquiries, complaints and feedback throughout the application, assessment and installation journey.
- Oversee the performance of suppliers and their installers to ensure installations meet program standards.

The role of the finance provider's approved suppliers

The approved supplier will:

- Supply an itemised quote showing the full cost of the upgrade, including the product cost, installation cost and the Home Energy Saver loan. An itemised quote will also show any discounts that have been applied from other federal or NSW incentives.
- Enter into a customer installation agreement with the customer, before installation.

- Arrange for the supply and installation of the selected upgrade. The approved supplier will ensure the upgrade is installed correctly and is working as intended.
- Provide guidance on how to use and maintain the upgrade, including any maintenance or servicing requirements.
- Supply the relevant warranties for both the upgrade and the installation. These warranties outline what is covered and for how long.
- Support the customer throughout the installation process by answering any questions they may have about the upgrade, installation, or how it works.



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Questions and feedback

We will continue to update our frequently asked questions.

Feedback or questions about the Home Energy Saver loan program can be sent through the ESC's Contact Us form

02

Appendix

Approved products

The following are the eligible clean energy technologies for the Home Energy Saver loan program. The approved product criteria can be amended from time to time.

A product will only be considered an approved product if it:

- is the type of product listed in the table in Part A: Approved product list and complies with the requirements set out in that section of this Schedule
- complies with the 'Activity Requirements' set out in column 1 of the table in Part B: Minimum product specifications corresponding to that type of product.

Part A: Approved product list

Home upgrade category	Home upgrade type
Building thermal performance	Draught proofing and external shading of windows, doors, chimneys and exhaust fans
	Insulation (ceiling)
	Double-glazed windows or doors
Appliances	Heat pump water heater or solar (electric boosted) water heater
	Reverse-cycle air conditioner
	AC or DC ceiling fans
	Induction cooktop (replacing gas or electric cooktop)
	Electric vehicle (EV) Level 2 charger
Electricity supply and demand management	Rooftop solar photovoltaic (PV) system
	Battery Energy Storage System
	Switchboard upgrade
Energy performance assessment services	NatHERS (Nationwide House Energy Rating Scheme) for existing homes assessment and certificate

For all activities:

a. Before any work commences, an electrical safety inspection, as described in Note 1 below, is required before anyone enters higher risk areas, such as the roof space to evaluate insulation. This covers all home upgrades listed as a minimum, except for double-glazing, external shading and draught proofing (which can be determined to be needing an electrical safety inspection depending on the specific situation).
b. The company and installer undertaking the upgrade must hold the appropriate contractor licence(s).

c. The products and installation must meet relevant Australian codes and standards, and must be professionally installed, and be in compliance with the manufacturer's installation instructions.
d. The installer must also remove and dispose of any equipment that is no longer required, and any waste, in a safe and compliant manner, in particular solar PV panels.
e. Geo-tagged before and after photos must be provided clearly demonstrating the quality of the installation and decommissioning of any connections that are no longer required.
f. The products must be installed by suitably qualified and licenced tradespersons with the relevant plumbing, electrical, refrigerant and gas licences, depending on the products being removed and installed.
g. Must undertake the following requirements for ethical marketing including:
    1. a description of ethical and inclusive marketing and publicity activities to be undertaken in connection with the Home Energy Saver loan program
    2. a commitment to open, respectful and non-coercive outreach
    3. a prohibition on direct sales tactics, including door-to-door sales and cold calling
    4. enforcement of these standards across the supplier's or subcontractor's (as applicable) installer network.
h. Integration with other government programs: Before an eligible household receives a Home Energy Saver loan, suppliers and subcontractors must ensure that any relevant incentives or benefits available through existing Commonwealth and/or NSW Government energy programs are first applied to the participant, including those available under the NSW Energy Security Safeguard, covering, without limitation, the Energy Savings Scheme (ESS) and the Peak Demand Reduction Scheme (PDRS). This ensures the participant can combine both federal and/or state programs to reduce their overall costs.
i. Notes 1, 2 3, 4 and 5 below must be followed.

Note 1

A household electrical safety inspection must be carried out by a licenced electrician before any electrical work commences, including before anyone enters high risk areas such as the roof space to evaluate and/or install insulation. This inspection does not need to be carried out separately for each activity. It may have been completed within the previous 12 months or completed prior to the installation activity, and needs to include an evaluation of:

a. electricity supply capacity to the house
b. any upgrades required to the meter, switchboard, or wiring
c. safety and condition of wiring, particularly in any areas to be accessed, such as the roof space, walls or under-floor or around exhaust fans, and compatibility with installation of insulation
d. any upgrades required to minimise the risk of fire or electrocution
e. capacity and condition of the current wiring circuits for exhaust or ceiling fans, hot water, heating and cooling and stovetop
f. suitability of the current electricity supply, meter, switchboard and wiring for any activities being considered, such as the addition of a PV system, battery, EV charger or larger capacity air conditioner, particularly if considering three-phase installations.

Note 2

Any electrical work installation must be done by an electrician with a current NSW electrical licence, as per NSW electrical licensing, and adhering to AS/NZS 3000.

Additionally, if an upgraded supply is needed to the house to install a new product, this requires an accredited service provider (ASP) to perform this work (this includes switchboard work or replacement). A notification of

service work (NOSW) must be submitted to the DNSP to notify of the increased demand in accordance with the NSW Service and Installation Rules and AS/NZS 3000.

Note 3

Any electrical work requires the installer to complete a Certificate of Compliance – Electrical Work (CCEW) form. A copy of the form must be forwarded to:

a. The Obligor
b. NSW Building Commission
c. NSW Fair Trading
d. The electricity retailer and metering provider
e. The electricity distributor

The form must be provided within 7 days of completion of the work.

Note 4

Any plumbing or drainage work requires the installer to complete a Certificate of Compliance for Plumbing and Drainage Work. A copy of the form must be forwarded to:

a. The Obligor
b. NSW Building Commission
c. NSW Fair Trading or the local plumbing regulator, for the type of work requiring an inspection

The form must be provided within 7 days of completion of the work.

Note 5

Any gas fitting work requires the installer to complete a Gas Supply Licensee's Certificate of Compliance. A copy of the form must be forwarded to:

a. The Obligor
b. NSW Building Commission
c. NSW Fair Trading
d. The relevant network operator

The form must be provided within 5 business days of completion of the work.

Part B: Minimum product specifications

Building thermal performance

Draught proofing and external shading of windows, doors, chimneys and exhaust fans

Activity requirements
Installation of measures that prevent air leakage through external windows, external doors, chimneys or exhaust fans that: a. meets the requirements of one or more of the following NSW Energy Savings Scheme activities, as amended from time to time: E7: Modify an external door with draught-proofing E8: Modify an external window with draught-proofing E9: Modify a fireplace chimney by sealing with a damper E10: Install an external blind to a window or door E12: Modify an exhaust fan with a sealing product D15: Replace an exhaust fan with a self-sealing exhaust fan b. is professionally installed c. if electrical work is required, the installer must also complete and submit a CCEW. Refer to Note 3 above.

Insulation (ceiling)

External insulation is excluded.

Activity requirements
Installation of new ceiling insulation for a residential home that: a. is installed by an Energy Efficiency Council (EEC) Certified Insulation Installer and follows all EEC requirements – this applies to all insulation installers engaged and working on the site b. is installed in compliance with AS 3999 and either Part J4D3 of NCC Volume One for building classes 2-9, or Part 13.2.2 of the ABCB Housing Provisions for Building Classes 1 and 10 c. is an insulation product which complies with the performance requirements of AS/NZS 4859.1, as evidenced by test reports from an accredited NATA laboratory, and has a warranty of at least 25 years d. is not a foil or foil-faced bulk insulation product, noting any type of conductive insulation materials are prohibited for use e. meets minimum thermal performance requirements of: R3 for ceilings in NCC Climate Zones 2 or 3 R3.5 for ceilings in NCC Climate Zones 4, 5 or 6 R5 for ceilings in NCC Climate Zones 7 or 8 f. is only installed in ceiling spaces with an exposed roof (as defined by the National Construction Code)

g. is only installed following completion of an electrical safety check and electrical risk assessment, by a licenced electrician, who deems it safe to install insulation (see Note 1 above and Note 6 below)

h. is only installed following a check of the existing insulation (if present) in accordance with the ICANZ Ceiling Insulation Guidelines for Existing Homes[2] to evaluate the type and condition of insulation, determine whether topping up the existing insulation or removing and replacing it will achieve the best outcome for the consumer, and ensure safety (see Note 7 below)

i. is installed in 95% of the ceiling area, which can have insulation installed

j. the cut outs around ceiling penetrations, such as downlights, are kept to the minimum permitted by regulation, and the requirements from AS/NZS 5110 for recessed luminaries must be followed where applicable (see Note 9 below)

k. use of metal staples must be excluded from any installation and is prohibited

l. must not be a combustible product, blow-in insulation, or cellulous-based product, and must not be any form of loose fill insulation

m. any existing insulation that needs to be removed and disposed of must be done in a safe and compliant manner

n. all insulation products used must be on the CodeMark registry

o. if electrical work is identified as being required during the safety check, and is completed, the installer must also complete and submit a CCEW – refer to Note 3 above

p. completed certificate of insulation installation make, model and R-value of insulation product(s) sold.

Note 6

An insulation installer can organise an electrical safety check/inspection, but a licenced electrician must perform the inspection. The check aims to minimise any safety risks for the insulation installers and reduce the risk of fires or electrocution following the installation. It also ensures the home's electrical system is assessed as safe, in good condition, and compatible with the installation of insulation in the areas to be accessed during the installation.

If existing foil insulation is found in the roof cavity, then this must be removed and not be re-used and be disposed of safely and compliantly.

Note 7

Opportunities to 'top-up' the existing insulation rather than removing all the existing insulation (if still in usable condition) should be sought as a first option to reduce insulation waste, as long as a full electrical safety inspection can be performed and not be impacted/limited by the existing insulation. The Insulation Council of Australia and New Zealand (ICANZ) guidelines[3] for evaluating existing insulation should be used, with the installers needing to provide a letter of confirmation to the Seller or Subcontractor (as applicable) confirming that

[2] ICANZ Guide to assessing ceiling insulation R-values in existing homes, p.7 (When should ceiling insulation be upgraded?) - https://icanz.org.au/wp-content/uploads/2024/06/ICANZ-Ceiling-Insulation-Guidelines-Existing-Homes.pdf

[3]ICANZ Guide to assessing ceiling insulation R-values in existing homes, p.7 (When should ceiling insulation be upgraded?) - https://icanz.org.au/wp-content/uploads/2024/06/ICANZ-Ceiling-Insulation-Guidelines-Existing-Homes.pdf

the existing insulation can be revitalised and meet AS/NZS 3999 installation requirements. All insulation removed needs to be disposed of safely and in a compliant manner.

If the existing insulation does limit the ability to perform a full electrical safety inspection or is foil insulation, then the existing insulation must be removed (to also allow the electrical safety inspection to be done properly). New insulation must then be used for the installation, with the removed insulation not to be re-used.

Note 8

Structural work (roof) required to upgrade the insulation could be included and is subject to approval by the Seller or Subcontractor (as applicable). Additional extensions or upgrades are excluded. The Seller or Subcontractor (as applicable) may require further evidence to demonstrate that structural work was required to upgrade the insulation.

Note 9

Any existing ceiling downlights, including halogen downlights, must be replaced with or upgraded to IC-4 rated fittings before any insulation work begins, in order to ensure they can be sealed and insulated. Additionally, any work requiring ceiling penetrations and roof access, such as updating light fittings, must be completed as much as possible before draught-proofing and insulating the ceiling.

Double-glazed windows or doors

Activity requirements
Installation of double-glazed windows or doors, or the installation of secondary glazing that: **a** replace an external single glazed window or door with a thermally efficient window or door; **b.** modify an external window or glazed door by installing secondary glazing; **c.** the product (glazing and frame) is listed on the Window Energy Rating Scheme (WERS), with a verified maximum total U value of 4.0 in accordance with AS 2047; **d.** complies with the performance requirements as per AS 2047 and AS 1288; **e.** the surrounding wall system incorporates, or will be upgraded to incorporate, compliant flashing and weather-resistive barrier provisions. Window upgrades in lightweight single-skin construction without these measures are not eligible for funding; and **f.** The window or door must have a warranty of at least 5 years.

Note 10

Homes in warmer climates or with higher heat loads should consider windows with a lower solar heat gain coefficient (SHGC) to limit the heat load from direct sunlight. Refer to the Australian Government's Your Home website[4] for guidance on SHGC and glazing.

[4] Australian Government Your Home website – Glazing - https://www.yourhome.gov.au/passive-design/glazing

Appliances

Heat pump water heater or solar (electric boosted) water heater

Activity requirements
Installation of a heat pump water heater or solar (electric boosted) water heater that: a. is installed by suitably qualified and licenced tradespersons with the relevant plumbing, electrical, refrigerant and gas licences, depending on the products being removed and installed (refer to Note 2 and Note 12 above) b. is listed on the IPART Accepted Products List for solar (electric boosted) water heaters or heat pump water heaters c. is listed on the Clean Energy Regulator's register of air-source heat pump water heaters or solar water heaters d. contains a refrigerant with a GWP of less than 700, as defined in Note 11 above, if it is a heat pump water heater e. has a minimum 5-year whole-of-system warranty from the product manufacturer on all major components f. includes the 'capping' of gas connections and removal of relevant gas appliances, if applicable g. the installer must also complete and submit a CCEW (refer to Note 3 above) h. the installer must also complete and submit a 'Certificate of Compliance for Plumbing and Drainage Work', and a 'Gas Supply Licences' Certificate of Compliance', if applicable (refer to Note 4 and Note 5 above) i. includes the decommissioning of previous connections (gas, water, electrical, etc.) that are no longer required, if applicable.

Note 11

GWP means the 100-year global warming potential (GWP-100) of a refrigerant gas as defined in Table 1 below, or as defined by the Home Energy Saver program administrator. Note that the names of refrigerants are often referred to interchangeably as R-### or HFC-### for hydrofluorocarbons and hydrofluorocarbon blends, and R-### or HFO-### for hydrofluoro-olefins.

Table 1: GWP of common refrigerants

Refrigerant	GWP	Refrigerant	GWP
R-1234yf	< 5	R-428A	3607
R-1234ze(E)	< 5	R-429A	13
R-125	3500	R-430A	94
R-1270 (Propene/Propylene)	< 5	R-43-10mee	1640

Refrigerant	GWP	Refrigerant	GWP
R-12A	< 5	R-431A	36
R-134a	1430	R-434A	3245
R-143a	4470	R-435A	26
R-152a	124	R-437A	1805
R-170 (Ethane)	< 5	R-438A	2264
R-227ea	3220	R-439A	1983
R-22A	< 5	R-440A	144
R-23	14800	R-442A	1888
R-236cb	1340	R-444A	87
R-236ea	1370	R-444B	293
R-236fa	9810	R-445A	129
R-245ca	693	R-446A	459
R-245fa	1030	R-447A	582
R-290 (Propane)	< 5	R-447B	739
R-32	675	R-448A	1386
R-365mfc	794	R-449A	1396
R-404A	3922	R-449B	1411
R-407A	2107	R-449C	1250
R-407B	2804	R-450A	601
R-407C	1774	R-451A	146
R-407D	1627	R-451B	160
R-407E	1552	R-452A	2139
R-407F	1825	R-452B	697
R-407G	1463	R-452C	2219
R-41	92	R-453A	1765
R-410A	2088	R-454A	236

Refrigerant	GWP	Refrigerant	GWP
R-410B	2229	R-454B	465
R-413A	2053	R-454C	145
R-417A	2346	R-455A	145
R-417B	3027	R-456A	684
R-417C	1809	R-457A	136
R-419A	2967	R-458A	1650
R-419B	2384	R-507A	3985
R-421A	2631	R-508A	13214
R-421B	3190	R-508B	13396
R-422A	3143	R-512A	189
R-422B	2526	R-513A	629
R-422C	3085	R-513B	593
R-422D	2729	R-515A	386
R-422E	2592	R-515B	292
R-423A	2280	R-600 (Butane)	< 5
R-424A	2440	R-600A (Isobutane)	< 5
R-425A	1505	R-601A (Isopentane)	< 5
R-426A	1508	R-717 (Ammonia)	< 5
R-427A	2138	R-744 (CO2)	< 5
Engas M50**	< 5	Engas M60**	< 5

*Engas M50 and M60 are proprietary blends of hydrocarbon refrigerants[5], with low GWP, similar to that of R-290 (Propane). Engas M50[6] is >75% Propane, <16% Propylene, <8% Ethan and < 1% Butane. Engas M60[7] is <35% Propane, >60% Propylene, <5% Isobutane, <1% Butane.

The above values of GWP (excluding Engas M50 and M60) were obtained from the Australian Government Department of Climate Change, Energy, the Environment and Water webpage on Hydrofluorocarbon refrigerants – global warming potential values and safety classifications[8], and are based on those listed in the Intergovernmental Panel on Climate Change (IPCC) fourth assessment report, 2007 (AR4)[9].

Note 12

At a minimum, solar water heater and heat pump water heater installers must hold a current plumbing licence issued by NSW Fair Trading. An electrician with a current electrical licence must complete any required electrical work. If the selected heat pump water heater is a split system comprising two components requiring refrigeration pipes to complete the refrigeration circuit, the installer must hold an Australian Refrigeration Council (ARC) refrigerant handling licence. If the selected hot water heat pump uses a flammable refrigerant (such as propane), any additional licencing and equipment requirements must be followed. A suitable, qualified installer must complete the decommissioning of gas water heaters and their connections.

Note 13

It is recommended that the heat pump water heater is installed with a user configurable timer (either within the unit, or within the circuit/meter box) to enable the limiting of heating to preferred times of day such as when there is excess electricity being generated by PV at the property, cheaper electricity tariffs, warmer temperatures (better efficiency), or to exclude running at night; however, the installer must ensure that this does not breach the heat pump water heater manufacturer's warranty or legionella control, and that the timer is suitable for the load it will be switching.

Note 14

To ensure product suitability and maximise system efficiency, selecting an appropriate system size for the household is recommended and ensuring that the minimum operating temperature specified on the product datasheet is lower than the minimum recorded temperature for the relevant climate, as specified by the Bureau of Meteorology (BOM). Solar Victoria[10] and the Victorian Energy Upgrade Program[11] provide some useful general guidance on selecting and sizing water heaters. Refer to the Clean Energy Regulator's and Victorian Energy

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[5] Engas Website - https://www.engas.com.au/products/

[6] Engas M50 Material Safety Data Sheet - https://www.engas.com.au/resources/technical/Engas-M50--March-2025.pdf

[7] Engas M60 Material Safety Data Sheet - https://www.engas.com.au/resources/technical/Engas-M60--March-2025.pdf

[8] DCCEEW Hydrofluorocarbon refrigerants GWPs - https://www.dcceew.gov.au/environment/protection/ozone/rac/global-warming-potential-values-hfc-refrigerants#hfcs

[9] Intergovernmental Panel on Climate Change (IPCC) fourth assessment report, 2007 (AR4) - https://www.ipcc.ch/site/assets/uploads/2018/05/ar4-wg1-errata.pdf

[10] Solar Victoria: Water heater sizing - https://www.solar.vic.gov.au/solar-hot-water-buyers-guide/section-4-deciding-your-hot-water-system-size-and-tank

[11] VEU Guidance on selecting hot water systems - https://www.energy.vic.gov.au/victorian-energy-upgrades/products/hot-water-system-discounts/hot-water-buyers-guide

Upgrade's product registers, and the NSW IPART public list of accepted products[12] to learn more about the different heat pump water heaters and solar (electric boosted) water heaters available on the market, their annual energy savings in your climate zone, tank volume and refrigerant; and refer to the NSW What you need to know about installing heat pump water heaters webpage[13].

Note 15

To ensure product suitability and maximise system efficiency, selecting an appropriate system size for the household is recommended and ensuring that the minimum operating temperature specified on the product datasheet is lower than the minimum recorded temperature for the relevant climate, as specified by the Bureau of Meteorology (BOM). Solar Victoria[14] and the Victorian Energy Upgrade Program[15] provide some useful general guidance on selecting and sizing water heaters. Refer to the Clean Energy Regulator's and Victorian Energy Upgrade's product registers, as well as the NSW IPART public list of accepted products[16] to learn more about the solar and heat pump water heaters available on the market. These resources provide information on annual

[12] CER Register of Heat Pump Water Heaters

– https://cer.gov.au/schemes/renewable-energy-target/small-scale-renewable-energy-scheme/small-scale-renewable-energy-systems/solar-water-heaters/register-solar-water-heaters#air-source-heat-pump-models

– https://cer.gov.au/document/air-source-heat-pump-models-0

CER Register of Solar Water Heaters

- https://cer.gov.au/schemes/renewable-energy-target/small-scale-renewable-energy-scheme/small-scale-renewable-energy-systems/solar-water-heaters/register-solar-water-heaters#solar-water-heater-models-with-a-capacity-of-less-than-700-l

- https://cer.gov.au/document/solar-water-heater-models-capacity-less-700l-0

VEU Product Register – https://www.veu-registry.vic.gov.au/public/productregistrysearch.aspx

NSW IPART public list of accepted products - https://tessa.energysustainabilityschemes.nsw.gov.au/ipart?id=accepted_products

[13] NSW What you need to know about installing heat pump water heaters webpage - https://www.energysustainabilityschemes.nsw.gov.au/ess/what-you-need-know-about-installing-heat-pump-water-heaters

[14] Solar Victoria: Water heater sizing - https://www.solar.vic.gov.au/solar-hot-water-buyers-guide/section-4-deciding-your-hot-water-system-size-and-tank

[15] VEU Guidance on selecting hot water systems - https://www.energy.vic.gov.au/victorian-energy-upgrades/products/hot-water-system-discounts/hot-water-buyers-guide

[16] CER Register of Solar Water Heaters

- https://cer.gov.au/schemes/renewable-energy-target/small-scale-renewable-energy-scheme/small-scale-renewable-energy-systems/solar-water-heaters/register-solar-water-heaters

VEU Product Register – https://www.veu-registry.vic.gov.au/public/productregistrysearch.aspx

NSW IPART public list of accepted products - https://tessa.energysustainabilityschemes.nsw.gov.au/ipart?id=accepted_products

energy savings specific to your climate zone, refrigerant types and tank volumes. For installation guidance, visit the NSW Government's webpage: What you need to know about installing heat pump water heaters[17].

Air conditioner

Activity requirements
Installation of a reverse-cycle air conditioner that: a. is installed by suitably qualified and licenced tradespersons with the relevant plumbing, electrical, refrigerant and gas licences, depending on the products being removed and installed (refer to Note 2 above) b. is a reverse-cycle air conditioner (not cooling only, nor heating only) with a product class defined on the GEMS registry for air conditioners of either: Product Class 5-7 (Unitary), Product Class 8-12 (Single Split-System) Product Class 18-21 (Multiple Split-System) c. contains a refrigerant with a GWP of less than 700, as defined in Note 11 above, if the air conditioner has: i. a product class of 5, 8, 9, 10, 18 or 19 or ii. product class of 11 and a rated cooling capacity of less than 20kW. d. has a minimum 5-year warranty from the air conditioner manufacturer e. is designed and installed in accordance with AS/NZS 5141:2018 f. includes decommissioning, removal and compliant disposal of existing appliances and unused connections (refer to Note 16 below) g. the installer must also complete and submit a CCEW (refer to Note 3 above); h. the installer must also complete and submit a 'Certificate of Compliance for Plumbing and Drainage Work', and a 'Gas Supply Licensee's Certificate of Compliance', if applicable (refer to Note 4 and Note 5 above); and i. includes the decommissioning of previous connections (gas, water, electrical, etc.) that are no longer required, if applicable.

Note 16

The air conditioner may replace an existing air conditioner, evaporative cooler, gas heater, electric resistance heater or other heating or cooling appliance. The decommissioning, removal and compliant disposal of any existing appliances and unused connections must be carried out by suitably qualified and licenced tradespersons with the relevant plumbing, electrical, refrigerant and gas licences.

Note 17

To ensure product suitability and maximise system efficiency, selecting an appropriate system size for the household is recommended and ensuring that the minimum operating temperature specified on the product datasheet is lower than the minimum recorded temperature for the relevant climate, as specified by the Bureau of

[17] NSW What you need to know about installing heat pump water heaters webpage - https://www.energysustainabilityschemes.nsw.gov.au/ess/what-you-need-know-about-installing-heat-pump-water-heaters

Meteorology (BOM). The Victorian Energy Upgrade Program[18] provides some useful general guidance on selecting and sizing air conditioners. Refer to the Greenhouse and Energy Minimum Standards (GEMS) register to learn more about the different air conditioners available on the market, their cooling and heating capacities at different outdoor air temperatures, particularly if you are in a cooler climate, and their efficiency and star ratings in your climate zone.

Ceiling fans

Activity requirements
Installation of an AC or DC ceiling fan that is: a. installed by a licensed electrician (refer to Note 2 above) b. at a safe height which meets all Australian codes and standards c. the installer must also complete and submit a CCEW. Refer to Note 3 above.

Induction cooktop (replacing gas or electric cooktop)

Activity requirements
Installation of an induction cooktop that is: a. replacing a gas or electric cooktop; b. installed by a licensed electrician (refer to Note 2 above) c. permanently installed (mounted in-bench or hard-wired, not portable) d. includes the 'capping' of gas connections and removal of relevant gas appliances by persons with the appropriate licenses, if applicable e. if modifications to existing engineered stone are required, the guidance[19] provided by SafeWork Australia is followed by a suitably qualified tradesperson, and the WHS regulator is notified[20] of the work f. the installer must also complete and submit a CCEW. Refer to Note 3 above g. the installer must also complete and submit a 'Gas Supply Licensee's Certificate of Compliance', if applicable. Refer to Note 5 above.

[18] Victorian Energy Upgrades guidance on selection of air conditioners - https://www.energy.vic.gov.au/victorian-energy-upgrades/products/heating-and-cooling-discounts/choosing-the-right-reverse-cycle-air-conditioner

[19] Engineered stone prohibition. Guidance for PCBUs. June 2024 - https://www.safeworkaustralia.gov.au/sites/default/files/2024-06/engineered_stone_prohibition-guidance_for_pcbus-june2024.pdf#page=9

[20] https://www.safeworkaustralia.gov.au/esban/faq

Electric vehicle (EV) charger

Activity requirements
Installation of a Level 2 EV charger that is: a. installed by a licensed electrician (refer to Note 2 above) b. purchased from a New Energy Tec (NET) Approved Seller under the NETCC) c. if installed in a Strata managed building, must follow the requirements outlined in the Strata Schemes Management Act[21]. d. The installer must also complete and submit a CCEW. Refer to Note 3 above.

Electricity supply and demand management

Rooftop solar photovoltaic (PV) system

Activity requirements
The installation of a solar photovoltaic (PV) system, or the addition of PV modules to an existing system or embedded network, that: a. is designed and installed by a Solar Accreditation Australia (SAA) accredited designer and installer b. meets SAA design and installation guidelines c. is an eligible small-scale renewable energy system under the Clean Energy Regulator's (CER's) Small-scale Renewable Energy Scheme (SRES) d. has its modules (panels) and inverter(s) (if required) listed on the Clean Energy Council's (CEC) list of approved components. If an inverter is installed, it must have a communication channel that is compliant with IEEE 2030.5 CSIP-AUS, either hosted locally on the inverter or a gateway device, or via a certified cloud connection to the network operator utility server e. is classified as small-scale by CER (no more than 100 kW total system capacity and generating less than 250 MWh of total system annual electricity output) f. is purchased from a New Energy Tech (NET) Approved Seller under the New Energy Tech Consumer Code (NETCC) g. is registered in the AEMO Distributed Energy Resource (DER) Register[22], and updated for all system components (inverter, PV modules) h. must only be installed in conjunction with an eligible battery system

[21] NSW Strata Schemes Management Act 2015 No 50 - https://legislation.nsw.gov.au/view/html/inforce/current/act-2015-050

22 AEMO DER Register - https://www.aemo.com.au/energy-systems/electricity/der-register

AEMO DER Register Quick Start Guide – https://aemo.com.au/-/media/files/electricity/der/2020/der-register-quick-start-guide.pdf?la=en

AEMO DER Register FAQs – https://aemo.com.au/energy-systems/electricity/der-register/der-register-faq

i. the installer must also complete and submit a CCEW. Refer to Note 3 above.

Note 18

When the NSW Consumer Energy Resources Installer Portal is released in the future, this must also be used by the installer.

Battery Energy Storage System

Activity requirements
Installation of a Battery Energy Storage System (BESS) that: a. is installed by a battery installer accredited by Solar Accreditation Australia (SAA) and signed off by a person accredited by SAA for both battery design and installation. This includes systems classified as Grid Connected Battery Systems (GCBS) for on-grid applications and Stand Alone Power Systems (SAPS) for off-grid installations b. is installed in accordance with AS/NZS 5139 and the industry-developed Best Practice Guide: Battery Storage Equipment c. has its battery(s) and inverter(s) (if required) listed on the Clean Energy Council's (CEC) list of approved components. If an inverter is installed, it must have a communication channel that is compliant with IEEE 2030.5 CSIP-AUS, either hosted locally on the inverter or a gateway device, or via a certified cloud connection to the network operator utility server d. has a Usable Battery Capacity greater than 5 KWh as recorded on the Clean Energy Council's (CEC) approved product lists (refer to Note 19 below) e. is internet connectable and controllable by a Demand Response Aggregator to enable connection to a Virtual Power Plant (VPP). Meeting this requirement may require the existing inverter to be replaced or updated f. has a warranty of at least 10 years for each item of the system, and guarantees that at least seventy percent (70%) of Usable Battery Capacity is retained 10 years from the date the Battery Energy Storage System is installed at the site g. is installed at a site (defined by National Metering Identifier) which also has a behind the meter solar photovoltaic system h. is purchased from a New Energy Tech (NET) Approved Seller under the NETCC i. is registered on the AEMO DER Register[23], and updated for all system components (inverter, battery) j. has a working smoke alarm installed in the immediate vicinity that meets AS 3786, if the system is installed indoors k. The installer must also complete and submit a CCEW. Refer to Note 3 above.

23 AEMO DER Register - https://www.aemo.com.au/energy-systems/electricity/der-register

AEMO DER Register Quick Start Guide – https://aemo.com.au/-/media/files/electricity/der/2020/der-register-quick-start-guide.pdf?la=en

AEMO DER Register FAQs – https://aemo.com.au/energy-systems/electricity/der-register/der-register-faq

Note 19

The upper threshold is aligned with the PDRS to meet the SRES upper threshold incentive requirements for maximum nominal battery capacity. The lower end of the battery threshold is set to ensure that SRES requirements for minimum nominal battery capacity can also be met.

Note 20

When the NSW Consumer Energy Resources Installer Portal is released in the future, this must also be used by the installer.

Switchboard upgrade

Activity requirements
The upgrading of the switchboard and any associated electrical work that is: a. completed by a licenced electrician (refer to Note 2 above) b. required to safely support the completion of another activity under the HESP, such as installation of PV modules, household battery, EV charging point, hot water system, air conditioner or insulation c. the installer must also complete and submit a CCEW. Refer to Note 3 above.

Energy performance assessment services

NatHERS for existing homes assessment and certificate

The Nationwide House Energy Rating Scheme (NatHERS) provides homeowners in New South Wales a standardised assessment of residential energy performance. For existing homes, it provides a Star Rating and Home Energy Rating. The Star Rating thermal assessment gives the estimated energy demand of a home's heating and cooling needs. It considers the home's local climate, design, materials and construction. The Home Energy Rating gives the estimated overall energy use of the home. It is based on the home's thermal performance combined with the major fixed appliances, and on-site solar generation and storage. The Home Energy Rating Certificate includes upgrade guidance of how the home's energy performance can be improved. The NatHERS ratings serve as a guide for identifying energy inefficiencies, informing renovation decisions, and supporting cost-effective energy use. NatHERS ratings support Australian households to understand their home's running costs and identify cost-effective upgrades to bring down energy bills. They also support New South Wales' commitment to rolling out its mandatory Home Energy Ratings Disclosure program.

Activity requirements
a. The NatHERS for existing homes assessment must be carried out by an accredited NatHERS assessor for existing homes assessor from the Assessor Register. b. The NatHERS for existing homes assessor must provide a tailored guide to potential upgrades.

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The Energy Security Corporation 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, present and emerging.

NSW GOVERNMENT