



## Renewable Energy Target

The Renewable Energy Target is designed to reduce emissions of greenhouse gases in the electricity sector, encourage the additional generation of renewable energy through financial incentives, and ensure that at least 20 per cent of Australia's electricity supply will come from renewable sources by 2020.

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### About the Renewable Energy Target

#### RET

To power our homes and businesses, Australia generates electricity from coal and gas fired power stations, as well as a range of renewable energy sources including large-scale hydropower facilities and wind farms, and small-scale solar hot water and solar rooftop panels.

The Renewable Energy Target is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.

The Renewable Energy Target works by allowing both large-scale power stations and the owners of small-scale systems to create certificates for every megawatt hour of power they generate. Certificates are then purchased by electricity retailers who sell the electricity to householders and businesses. These electricity retailers also have legal obligations under the Renewable Energy Target to surrender certificates to the Clean Energy Regulator, in percentages set by regulation each year. This creates a market which provides financial incentives to both large-scale renewable energy power stations and the owners of small-scale renewable energy systems.

In the case of small-scale systems, all certificates are provided 'up front' for the systems' expected power generation or displacement over a 15 year period. Generally, householders who purchase these systems assign the right to create their certificates to an agent in return for a lower purchase price. The level of this benefit differs across the country depending on the level of solar radiation.

In June 2015, the Australian Parliament passed the [Renewable Energy \(Electricity\) Amendment Bill 2015](#). As part of the amendment bill, the [Large-scale Renewable Energy Target](#) was reduced from 41 000 GWh to 33 000 GWh in 2020 with interim and post-2020 targets adjusted accordingly.

### How the scheme works

28 October 2015

#### RET

The Clean Energy Regulator administers the Renewable Energy Target's two schemes:

- The [Large-scale Renewable Energy Target](#), which encourages investment in renewable power stations to achieve 33 000 gigawatt hours of additional renewable electricity generation by 2020, and
- The [Small-scale Renewable Energy Scheme](#), which supports small-scale installations like household solar panels and solar hot water systems.

The Large-scale Renewable Energy Target is designed to deliver the majority of the [2020 target](#), while the Small-scale Renewable Energy Scheme supports the installation of small-scale renewables, such as household solar rooftop panels and solar hot water systems.



The Renewable Energy Target operates through the creation of tradable certificates which create an incentive for additional generation of electricity from renewable sources. Certificates are created and issued through the [REC Registry](#)—an online trading platform managed by the Clean Energy Regulator.

Through the scheme, large renewable power stations and the owners of small-scale systems are eligible to create certificates for every megawatt hour of power they generate—creating the 'supply' side of the certificate market. Wholesale purchasers of electricity, mainly electricity retailers, buy these certificates to meet their renewable energy obligations—forming the 'demand' side of the certificate market. Wholesale purchasers of electricity then surrender these certificates to the Clean Energy Regulator in percentages set by regulation each year.

The number of certificates issued to an individual or business is determined by the amount of electricity generated or displaced by an eligible system. Eligible systems may include renewable energy power stations, small-scale solar panels, wind and hydro systems, or solar water heaters and heat pumps.

Certificates are traded and paid at a rate determined by [supply and demand](#) of the market.

#### **Large-scale Renewable Energy Target**

#### **RET**

The Large-scale Renewable Energy Target creates a financial incentive for the establishment and growth of [renewable energy power stations](#), such as wind and solar farms, or hydro-electric power stations. It does this through the creation of [large-scale generation certificates](#).

Large-scale generation certificates are created based on the amount of eligible renewable electricity produced by the power stations, and can be sold or traded to [Renewable Energy Target liable entities](#), in addition to their sale of electricity to the grid. Liable entities have a [legal obligation to buy and surrender large-scale generation certificates](#) to the Clean Energy Regulator on an annual basis.

#### **Eligibility**

To participate under the Large-scale Renewable Energy Target, power stations must generate their electricity from [approved sources](#) such as solar energy, wind, ocean waves and the tide.

Electricity generated from fossil fuels, or waste products derived from fossil fuels, is not eligible for large-scale generation certificates.

#### **Large scale generation certificates**

- [Creating and registering large-scale generation certificates](#)

07 May 2015

#### RET

Accredited renewable energy power stations are entitled to create large-scale generation certificates based on the amount of eligible renewable electricity they produce above their baseline. As a guide, one large-scale generation certificate is equal to one megawatt hour of eligible renewable electricity.

Once created and validated, these certificates act as a form of currency and can be sold and transferred to other individuals and businesses at a negotiated price. Large-scale generation certificates are usually sold to liable entities (electricity retailers), who are required to surrender a set number of certificates to the Clean Energy Regulator each year.

The Renewable Energy Target is supported by an online registry system, called the [REC Registry](#), which facilitates the creation, registration, auditing, transfer and surrender of large-scale generation certificates and [small-scale technology certificates](#).

## The price of large-scale generation certificates

Large-scale generation certificates are sold through the open large-scale generation certificate market (LGC market), where the price varies depending on supply and demand along with other market factors. Payment for sold large-scale generation certificates is completed outside of the LGC market and the REC Registry.

Learn more about [creating large-scale generation certificates](#), and [buying, selling and transferring large-scale generation certificates](#).

### Small-scale Renewable Energy Scheme

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#### RET

The Small-scale Renewable Energy Scheme creates a financial incentive for individuals and small businesses to install eligible small-scale renewable energy systems such as solar panel systems, small-scale wind systems, small-scale hydro systems, solar water heaters and air source heat pumps. It does this through the creation of [small-scale technology certificates](#) which [Renewable Energy Target liable entities](#) have a [legal obligation](#) to buy and [surrender](#) to the Clean Energy Regulator on a quarterly basis.

Small-scale technology certificates can be created following the installation of an eligible system, and are calculated by the amount of electricity a system produces or displaces.

## System eligibility

Under the Small-scale Renewable Energy Scheme, eligible small-scale renewable energy systems may be entitled to small-scale technology certificates, which can be sold to recoup a portion of the cost of purchasing and installing the system.

Small-scale renewable systems which may be eligible for certificates include:

- solar photovoltaic (PV) panels
- wind turbines
- hydro systems
- solar water heaters, and
- air source heat pumps.

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Learn more about [systems eligible under the Small-scale Renewable Energy Scheme](#).

### Small-scale systems eligible for certificates

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Under the Small-scale Renewable Energy Scheme, eligible small-scale renewable energy systems may be entitled to small-scale technology certificates, which can be sold to recoup a portion of the cost of purchasing and installing the system.

Small-scale renewable energy systems are categorised into small generation units and hot water systems.

## Eligible small generation units

To be eligible for small-scale technology certificates, small generation units (including solar photovoltaic panels, wind turbines, and hydro systems) must:

- be installed no more than 12 months prior to the creation of certificates, and have its panels and inverter, listed on the [Clean Energy Council list of approved components](#)
  - meet Australian and New Zealand standards
  - use a [Clean Energy Council accredited designer and installer](#) and meet the [Clean Energy Council design and install guidelines](#)
  - comply with all local, state, territory and federal requirements, including electrical safety, and
  - be classified as small-scale, and a:
    - solar panel system that has a capacity of no more than 100kW, and a total annual electricity output less than 25MWh
    - wind system that has a capacity of no more than 10kW, and a total annual electricity output of less than 25MWh, or
    - hydro system that has a capacity of no more than 6.4kW, and a total annual electricity output of less than 25MWh.
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If the small-generation unit is larger than the capacity limits listed above, it will be classified as a power station and must be [accredited as a power station](#) under the [Large-scale Renewable Energy Target](#). If accreditation is successful, the unit may be eligible for [large-scale generation certificates](#).

## Eligible solar water heaters systems

To be eligible for small-scale technology certificates, solar water heaters including air source heat pumps must:

- be listed on the [register of solar water heaters](#)
  - be installed no more than 12 months prior to the creation of certificates, and
  - be classified as small-scale, and a:
    - solar water heater with a capacity up to, and including 700 L ([solar water heater models over 700 L capacity](#) require additional documentation to be eligible for certificates), or
    - air source heat pump with a capacity of no more than 425 L.
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Make sure you retain [all documents which relate to the installation](#) for a period of five years, which may be requested by the Clean Energy Regulator