



LRET/SRES – the basics

INFORMATION ABOUT THE LARGE SCALE RENEWABLE ENERGY TARGET (LRET) AND SMALL SCALE RENEWABLE ENERGY SCHEME (SRES)

In this fact sheet:

- [Overview](#)
- [Small-scale Renewable Energy Scheme \(SRES\)](#)
- [STC Clearing House](#)
- [Large-scale Renewable Energy Target \(LRET\)](#)
- [Classification of Certificates](#)
- [Other surrender](#)
- [Compliance](#)
- [Liable entities \(purchasers of certificates\)](#)
- [Partial exemption for emissions-intensive trade-exposed activities](#)
- [Role of the Office of the Renewable Energy Regulator](#)
- [Helpful links](#)

OVERVIEW

As of 1 January 2011, the enhanced Renewable Energy Target (RET) was split into two parts, the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES).

- Both parts of the scheme have been established to encourage additional generation of electricity from renewable energy sources by providing a mechanism by which small-scale systems and renewable energy power stations can create and sell certificates based on how much renewable electricity they generate or displace.
- The LRET and SRES are administrated by the Office of the Renewable Energy Regulator.

Small-scale Renewable Energy Scheme (SRES)

- The SRES creates a financial incentive for owners to install eligible small-scale installations such as solar water heaters, air sourced heat pumps and small generation units (small-scale solar panel, wind and hydro systems).
- Eligible systems are entitled to a certain number of small-scale technology certificates (STCs) based on the amount of renewable electricity the system produces or displaces. These STCs can be created and sold to buyers (usually liable entities).
- The SRES places a legal liability on liable entities (typically electricity retailers) to purchase an amount of small-scale technology certificates (STCs) each year.
- Owners have two options for gaining a financial benefit for their STCs:
 - Assigning the right to create STCs to a STC Agent, in exchange for a discount or delayed cash payment, or





- Selling the certificates themselves, either through the open STC market (pricing subject to market forces) or through the STC Clearing House (price fixed at \$40 per STC, excl. GST.)

Visit - [Small Generation Units Owners Guide](http://www.orer.gov.au/sgu/index.html) at <http://www.orer.gov.au/sgu/index.html>

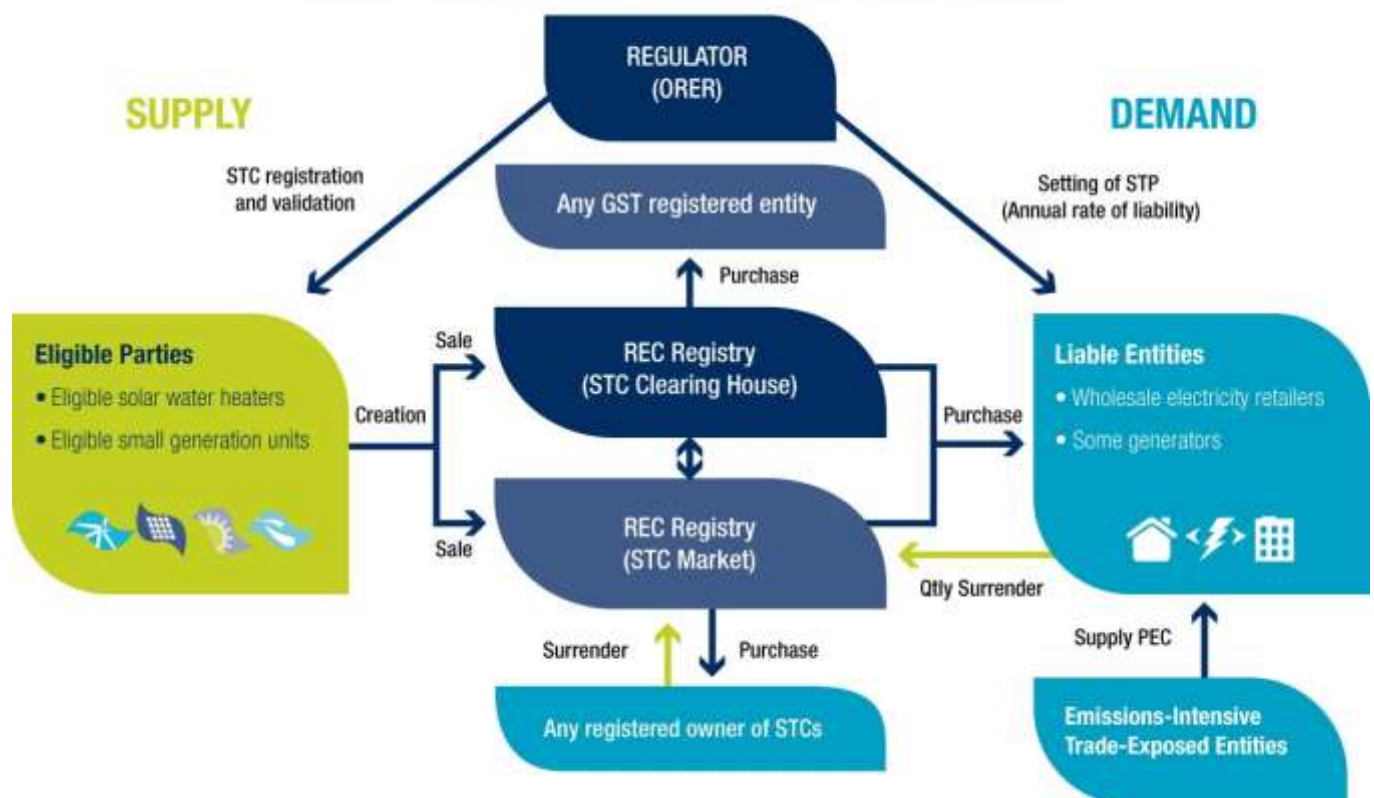
[Solar Water Heaters Owners Guide](http://www.orer.gov.au/swh/index.html) at <http://www.orer.gov.au/swh/index.html>

- Agents have STCs assigned to them by owners of eligible solar water heaters or small generation units and bundle these STCs for sale. They have two options for selling their STCs to a buyer:
 - STC Market trade - Agents can sell their validated STCs directly to a buyer, such as a liable entity or STC trader/broker. The market price is dependent on supply and demand and can fluctuate daily.
 - STC Clearing House – Agents can sell the validated STCs through the STC Clearing House for a guaranteed price of \$40 (excl. GST).

Visit – [Agents Guide](http://www.orer.gov.au/agents/index.html) at <http://www.orer.gov.au/agents/index.html>

- The SRES does not have a target and there is no cap on the number of certificates that will be created. Each year the Office of the Renewable Energy Regulator estimates how many STCs are going to be created and provides information to the Minister. The Minister then sets the Small-scale Technology Percentage (STP) for the calendar year.
- The STP determines the number of certificates liable entities (typically electricity retailers) need to purchase each year. These STCs are surrendered to ORER by liable entities quarterly in April, July, October and February.

Small-scale technology certificate (STC) Market





STC prices – information for owners

If you intend to install a small-scale system the financial benefit supplied to you by an agent, or the total price given to you by a certificate broker/trader, can vary from day to day. This is because STCs are traded in the STC market (like the stock market) and so prices vary depending on supply and demand and a number of other factors.

The only time the STC price is fixed is if it is to be traded through the ORER-managed STC Clearing House. Prices of STCs are fixed at \$40 (excluding GST), regardless of what the STC market is doing.

In the past decade, when the renewable energy certificates (RECs) were traded via a market, the spot price of a REC has varied between AUD\$15 and AUD\$60. This information is based on data provided to ORER by certificate brokers. Brokers monitor the price of certificates and their information can be found on the web.

Outside of the STC Clearing House, the Office of the Renewable Energy Regulator (ORER) does not set the price of STCs nor does it get involved in disputes between buyers and sellers. Payment for STCs or the rights to create STCs is a contractual matter between the buyer and seller, unless the STC has been sold within the STC Clearing House.

Solar credits

Solar Credits is a mechanism which increases the number of STCs able to be created for eligible installations of small generation units (small-scale solar panel wind or hydro systems) through the use of a multiplier. Solar Credits are not means tested and applies to the first 1.5 kilowatts (kW) of on-grid capacity installed in an eligible premises OR to the first 20kW of capacity for off-grid systems.

Generation from capacity above 1.5 kW (on-grid) or 20kW (off-grid), either on the original unit or on any additional capacity installed at a later date, will still be eligible for the standard 1:1 rate of STC creation.

Visit – [Solar Credits](http://www.orer.gov.au/squ/solarcredits.html) at <http://www.orer.gov.au/squ/solarcredits.html>

STC Clearing House

The STC Clearing House facilitates the exchange of STCs between buyers and sellers at the fixed price of \$40 (excl.GST) and is accessible via the REC Registry. The STC Clearing House can only be utilised when the creator of the STCs has fulfilled certain compliance and process requirements under the *Renewable Energy Electricity Act 2000* (the Act), and the STCs are validated by ORER. This could include determining system eligibility, installing the system, completing compliance paperwork and creating STCs in the REC Registry.

The STC Clearing House works on a Surplus/Deficit system. Those wishing to sell their STCs place an order to sell into the STC Clearing House. If there are no buyers wanting to purchase at that time, the STC Clearing House is said to be in 'Surplus' (there is a surplus of STCs for sale). The seller in a Surplus market is added to the end of the STC Clearing House Transfer List to be dealt with on a first-in-first-served basis as buyers enter the market. When a buyer places a purchase order, the number of STCs to be purchased will be filled from the top of the list down. If there are more Buyers than sellers, the STC Clearing House is said to be in 'Deficit'.

Visit – [STC Clearing House](http://www.orer.gov.au/clearinghouse/index.html) at <http://www.orer.gov.au/clearinghouse/index.html>

Please note:

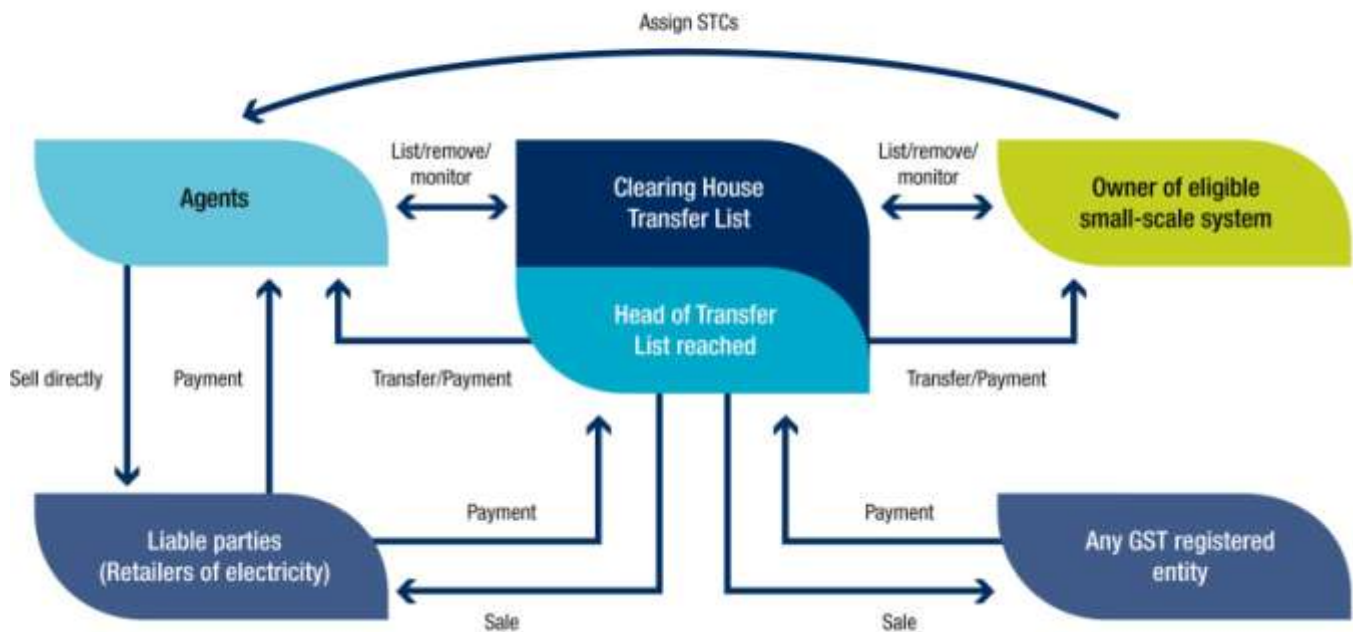
- There is no per-STC fee to sell STCs through the STC Clearing House.
- You can only use the STC Clearing House for STCs created for eligible SWH/SGU systems installed after 1 January 2011.





- The status of the STC Clearing House Transfer List will be publicly available and updated on an hourly basis.
- If liable entities meet their surrender liabilities and there are still STCs on the STC Clearing House Transfer List they will remain on the transfer list till a buyer buys the STCs which could be in the next quarter.
- ORER cannot provide an estimate of the likely waiting time to sell STCs on the Transfer List. The STC Clearing House Transfer List will not necessarily clear at the end of each quarter.
- As an STC buyer or seller you must undergo a Proof of Identity Verification and ensure you have the correct REC Registry account in order to view and use the STC Clearing House.

STC Clearing House process



Large-scale Renewable Energy Target (LRET)

- The LRET creates a financial incentive for large-scale renewable power stations such as wind, solar and hydro-electric by providing a mechanism for the creation of large-scale generation certificates (LGCs) by these power stations according to how much renewable energy electricity they produce.
- The LRET also places a legal liability on liable entities (typically electricity retailers) to purchase an amount of large-scale generation certificates (LGCs) from these power stations to meet an annual target.
- LGCs are negotiated and paid for outside the REC Registry and transferred within the REC Registry. The market price is dependent on supply and demand and can fluctuate daily.
- The amount of certificates liable entities need to purchase is set by the Renewable Power Percentage (RPP).
- Annual LRET targets have been adjusted as the number of RECs exceeded 34.5 million (34,500 GWh) by approximately 8.1 million RECs (8,100 GWh) at the end of the 2010 calendar year.





Annual Targets 2011-2030

Year	Target (GWh)
2011	10 400
2012	16,338
2013	18,238
2014	16 100
2015	18 000
2016	20,581
2017	25,181
2018	29,781
2019	34,381
2020-2030	41,000

Large-scale generation certificate (LGC) Market



Baselines

The main objective of the LRET is to encourage **additional** generation of electricity from renewable energy sources and achieve reductions in greenhouse gas emissions in the electricity sector. During the accreditation process of a power station the Regulator determines the baseline which is generally the average amount of electricity generated over the 1994,1995 and 1996 years. Eligible parties can only create LGCs for electricity generated above the baseline.

Power stations which generated electricity for the first time after 1 January 1997 have a baseline of zero.





Classification of certificates

From 2001 to end 2010 the commodity in the market was Renewable Energy Certificates (RECs). From 1 January 2011 RECs are reclassified into two certificate types: large-scale generation certificates (LGCs) and small-scale technology certificates (STCs).

Large-scale generation certificates (LGCs)

Large-scale generation certificates (LGCs) are an electronic form of currency created on the REC Registry by renewable energy power stations. A LGC is equivalent to:

- 1 MWh of eligible renewable electricity generated above the power station baseline

Properly created LGCs are validated by ORER and are able to be transferred between eligible parties and liable parties for a negotiated price. Payment is arranged outside the REC Registry.

LGCs are surrendered:

- annually to demonstrate liability compliance against the requirements of the LRET;
- voluntarily for any reason throughout the year; or
- for non compliance (such as under the relevant enforceable undertaking sections of the of the Act) throughout the year.

Small-scale technology certificates (STCs)

Small-scale technology certificates (STCs) are created by eligible installations of solar water heaters, air source heat pump water heaters and small generation units (small-scale solar photovoltaic panels, wind and hydro electricity systems). A STC is generally equivalent to:

- 1 MWh of renewable electricity deemed to be generated by small generation units unless the Solar Credits multiplier applies; or
- 1 MWh of electricity deemed to be displaced by the installation of solar water heaters.

STCs can be:

- assigned to a registered agent (usually a retailer/installer) in exchange for a financial benefit such as a delayed cash payment or upfront discount; or
- created in the REC Registry, queued in the STC Clearing House and purchased for a fixed price of \$40 (excl GST).

STCs are surrendered:

- quarterly to demonstrate liability compliance against the requirements of the SRES;
- voluntarily for any reason throughout the year; or
- for non compliance (such as under the relevant enforceable undertaking sections of the of the Act) throughout the year.





Transitionals for RECs

From 1 January 2011 Renewable Energy Certificates (RECs) will undergo the following transitional arrangements:

- RECs created from 2001 to end 2010 will be reclassified as large-scale generation certificates (LGCs).
- Renewable Energy Power stations will create LGCs from 1 January 2011.
- RECs created for solar water heaters and small generation units installed before 1 January 2011 which are created on or after 1 January 2011 will be reclassified as LGCs.
- RECs for solar water heaters and small generation units installed after 1 January 2011 will be classified as small-scale technology certificates (STCs).

REC Registry

The REC Registry is an internet based registry system that:

- Maintains various registers as set in the Act; and
- Facilitates the creation, registration, transfer and surrender of LGCs and STCs.

The STC Clearing House is a new facility contained within the REC Registry that facilitates the exchange of STCs between buyers and sellers at a fixed price of \$40 (excl.GST).

To access the REC Registry you will need to become a registered person or open an account.

The REC Registry is available at – <https://www.rec-registry.gov.au/>

To apply for a REC Registry account visit - <http://www.orer.gov.au/rec-registry/index.html>

Other Surrender (for non-mandatory purposes)

Under the Act it is mandatory for liable entities to surrender LGCs and STCs. There are also other surrender options under the Act including choosing to voluntarily surrender certificates to encourage additional generation of electricity from renewable sources. An account in the REC Registry is required to surrender.

Registered persons may also be required to surrender STCs/LGCs under the relevant enforceable undertaking sections of the Act (section 154Q – Part 15 A) throughout the year.

Visit – [Other surrender](http://www.orer.gov.au/surrender/index.html) at <http://www.orer.gov.au/surrender/index.html>

Compliance

All participants of the LRET and SRES must comply with the Act for the creation of certificates, reporting and other requirements. Failure to comply can result in penalties and prosecution where warranted. This could include suspension of your account, being named publically via the ORER website and fines that range from approximately \$5000 to \$1 million Australian dollars.

Please read the information and documentation on the ORER website carefully and ensure that you follow the correct processes. If you provide any false or misleading information to ORER, an installer or a REC Agent you may be prosecuted under the Act. All participants of the LRET and SRES can be audited at anytime so please keep your paperwork. For more about the penalties under the Act visit [Compliance](http://www.orer.gov.au/compliance/index.html) at <http://www.orer.gov.au/compliance/index.html>





Liable Entities (purchasers of certificates)

The LRET and SRES place a legal obligation on liable entities (usually electricity retailers) under the *Renewable Energy Electricity Act 2000* (the Act), to proportionately contribute towards the generation of **additional** renewable electricity.

Liable entities support additional generation of electricity from renewable energy power stations, solar water heaters and small generation units through the purchase of LGCs and STCs. The number of LGCs to be purchased each year is set by the Renewable Power Percentage (RPP). The number of STCs to be purchased each year is set by the Small-scale Technology Percentage (STP). Both the RPP and STP are set by 31 March for the given year.

- Liable entities can purchase:
 - LGCs via the LGC market. Prices and payment are negotiated outside of the REC Registry and LGCs are transferred inside the REC Registry.
 - STCs via the STC market or the STC Clearing House at a fixed price of \$44 (incl. GST). If liable entities purchase via the STC Market prices and payment are negotiated outside of the REC Registry and STCs are transferred inside the REC Registry. See more information regarding the STC Clearing House above.

If liable entities purchase through the STC or LGC market the process is market driven with the price of certificates determined by supply and demand.

Liable entities are required to surrender the certificates they purchase to ORER via the REC Registry.

- LGCs are surrendered annually for the previous calendar year from 1 January to 14 February.
- STCs are surrendered quarterly. The STC surrender periods are as follows:
 - 15 February – 28 April
 - 29 April – 28 July
 - 29 July – 28 October
 - 29 October – 14 February
- Liable entities are more likely to buy certificates closer to the surrender periods.
- Certificates are marked as 'invalid due to surrender' and are no longer available to reuse during the life of the LRET or SRES.

Visit – Liable Entities Guide at <http://www.orer.gov.au/liable-entities/index.html>





Partial exemption for emissions-intensive trade-exposed activities

The Act and Regulations include provisions to provide partial exemption from LRET and SRES liability for electricity used in prescribed emissions-intensive trade-exposed (EITE) activities. In order to receive exemption, companies that carry on EITE activities must apply to ORER for a Partial Exemption Certificate (PEC) and trade the PEC to the named liable entity (at a value negotiated between the EITE company and the liable entity). A PEC can provide the liable entity with a certain amount of megawatt-hours of exemption from liability when included in their annual reporting.

Role of the Office of the Renewable Energy Regulator

The ORER assists the Regulator in:

- maintaining several registers, which include the register of:
 - registered persons;
 - accredited power stations;
 - small-scale technology certificates (STCs);
 - large-scale generation certificates (LGCs);
 - applications for accredited power stations;
- accrediting eligible renewable energy power stations;
- registering LGCs for accredited renewable energy power stations;
- registering STCs for solar water heater and small generation unit installations;
- managing and maintaining the online REC Registry and the STC Clearing House;
- monitoring compliance with the Act;
- communicating the Act and Regulations;
- updating and maintaining the Register of Solar Water Heaters;
- managing the partial exemption process for emissions-intensive trade-exposed industries.

HELPFUL LINKS

- [Department of Climate Change and Energy Efficiency](http://www.climatechange.gov.au/) – For policy updates. The Federal Government also offers a solar water heater and heat pump rebate through the Energy Efficiency, Solar and Water Initiative in addition to STCs. For more information contact 1800 808 571. <http://www.climatechange.gov.au/>.
- [Glossary of terms of LRET/SRES](http://www.orer.gov.au/publications/glossary-of-terms-lret-sres.html) - A glossary of acronyms and terminology relating to the new schemes. <http://www.orer.gov.au/publications/glossary-of-terms-lret-sres.html>
- [Clean Energy Council](http://cleanenergycouncil.org.au/about/index.php) - Manages the accreditation of installers of small-scale solar photovoltaic, wind and hydro units and is the peak body representing Australia's clean energy sector. <http://cleanenergycouncil.org.au/about/index.php>.
- [GreenPower](http://www.greenpower.gov.au/home.aspx) - An initiative for people/business' to voluntarily buy and surrender STCs. <http://www.greenpower.gov.au/home.aspx>
- [Living Greener](http://www.livinggreener.gov.au) – is an Australian Government website containing information for householders to help them live more sustainably. This includes information on solar photovoltaic panels and small-scale wind and hydro units. <http://www.livinggreener.gov.au>.
- [Your Home](http://www.yourhome.gov.au) – is an Australian Government website that contains a suite of consumer and technical guide materials and tools developed to encourage the design, construction or renovation of homes to be comfortable, healthy and more environmentally sustainable. <http://www.yourhome.gov.au>.

