INCREASING AUSTRALIA'S RENEWABLE ELECTRICITY GENERATION ANNUAL REPORT 2011

About this Report

ORER's Annual Report 2011 has been prepared in accordance with the requirements of Section 105 of the *Renewable Energy (Electricity) Act 2000*.

It is available in print from 36 libraries around Australia and the ORER website.

If you have any queries about this report or suggestions about how we could improve it, please contact:

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Australian Government

Office of the Renewable Energy Regulator

The Hon Greg Combet AM, MP

Minister for Climate Change and Energy Efficiency

Dear Minister

I am pleased to present to you the eleventh Annual Report of the Office of the Renewable Energy Regulator.

This Annual Report focuses on the working of the *Renewable Energy (Electricity) Act 2000* for the 2011 calendar year.

The report is submitted for presentation to the Parliament in accordance with Section 105 of the *Renewable Energy (Electricity) Act 2000.*

Yours sincerely

Andrew Livingston

Renewable Energy Regulator

March 2012

TABLE OF CONTENTS

REGULATOR'S REVIEW

Welcome from the Regulator

The 2011 year was a time of great change for the Renewable Energy Target (RET) with the splitting of the scheme into the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES). The renewable energy industry has adapted well to the resulting changes in the market.

Changes resulting from the split included the establishment of the STC Clearing House, accessed via the REC Registry and the reclassification of renewable energy certificates into large-scale generation certificates (LGCs) and small-scale technology certificates (STCs).

Under the new schemes stakeholders can apply to the Regulator to have a certain number of STCs transferred into the LRET and converted to LGCs if they can show evidence of a contract that was entered into on or before 25 February 2010. The Regulator received 13 applications to apply for an Annual Transfer Number by 31 December 2011.

In 2011, investment in the renewable energy industry increased with new renewable energy power stations and many small-scale systems accredited under the RET.

ORER accredited 20 new renewable energy power stations bringing the total number of accredited renewable energy power stations to 335. ORER estimates that total investment in large-scale renewable energy power stations stands around $10.5 billion and the generating capability of the large-scale system is in the order of 13,700 GWh of eligible renewable energy per typical year. This is equivalent to the residential electricity needs of over 2.1 million households.

In 2011, RET participants created over 68 million valid certificates and ORER staff validated, on average, 260,000 certificates each working day. More than 468,000 additional renewable energy participants joined the scheme and the number of valid certificates created in the 2011 year was approximately 34 million more as compared with 2010.

ORER continued to focus on compliance under the Act in 2011. ORER accepted 15 enforceable undertakings and ORER's compliance team are actively investigated incidences of non-compliance including 66 site visits, eight warrants, two Agent suspensions and 89 compliance visits to discuss compliance issues with companies.

ORER commenced an inspection program for small-scale solar panel, wind and hydro (referred to as small generation units (SGUs)) installations. The inspections program was established to ensure that installations meet the legislated requirements for the creation of STCs. As of 22 December 2011, ORER received 692 completed inspection reports.

ORER continued to see growth in the number of small-scale systems installed and registered. In 2011, over 363,000 SGUs and over 105,000 solar water heaters were validated on or before 22 January 2012. Of these, SGUs created 54,806,132 valid STCs and solar water heaters created 3,287,210 valid STCs.

ORER has also expanded the practice of conducting pre-validation checks on small-scale installations. The aim is to check the systems comply with the Act before the certificates have been passed. Pre-validation checks are conducted by site visits, aerial photography, documentation checks and phone calls to the installation owner. ORER conducted over 58,000 pre-validation checks in 2011.

There were a number of regulatory changes in 2011 that had an impact on certificate creation for eligible SGUs under the SRES. From 1 February 2011, all certificates associated with the purchase, installation, and grid-connection of a SGU and created in the REC Registry must be accompanied by a calculation of the out-of-pocket expenses. This is regardless of the installation date of the system. The 2011 average out-of-pocket expenses per kilowatt (kW) of installed capacity throughout Australia were published on the ORER website as follows:

- Registered in Quarter 1 2011: $2,716/kW
- Registered in Quarter 2 2011: $2,599/kW
- Registered in Quarter 3 2011: $2,991/kW
- Registered in Quarter 4 2011: $3,004/kW.

The Government also released new Solar Credit arrangements which reduced the multiplier from 4 to 3 for SGU systems installed from 1 July 2011 to 30 June 2012. Fees for the creation of certificates for these systems increased from 8 cents to 47 cents from 17 October 2011. All other fees remained unchanged from their original 2001 level.

The new ORER legislative instrument for calculating STCs was published on 23 March 2011 on the ComLaw website at http://www.comlaw.gov.au/Details/F2011L00486. All solar water heater models listed on the Register of solar water heaters must use this methodology to continue being eligible for STCs.

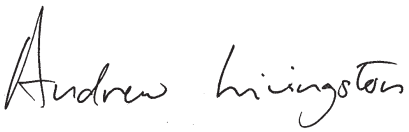
The Act includes provisions to provide partial exemption from LRET and SRES liability for electricity used in defined emissions-intensive trade-exposed (EITE) activities from 2010 onwards. Under the Act prescribed persons (typically entities that carry on EITE activities) may apply for partial exemption certificates (PECs). In the 2011 compliance year, the Regulator received 117 PEC applications by the legislated deadlines. Applications spanned all 31 eligible EITE activities. As at 31 December 2011, 110 PECs were issued, totalling 27,244 gigawatt-hours (GWh) of partial exemption under the legislation.

Strong industry support of the RET scheme is evidenced by nearly 100 per cent compliance by wholesale electricity purchasers (liable entities) for 2011.

In 2011, ORER implemented a number of software changes to the REC Registry finalising the Enhanced Renewable Energy Target (ERET) Project (2010 – 2011). The ERET Project implemented the required system changes to ensure REC Registry compliance with the 2010 *Renewable Energy (Electricity) Act 2000* legislative amendments. The major functionality amendments included the split of RET into the LRET and SRES, the introduction and continued improvement of the STC Clearing House, the introduction of quarterly STC surrender and amendment of LGC annual surrender.

ORER released a new website in December 2011 to improve stakeholder access to information and updates. The website has been a result of research into stakeholder needs and features stronger navigation and search capacity.

In November 2011, the Clean Energy Future legislation was passed through the Senate, establishing a framework for environmental and economic reform that will drive investment in clean energy. From 2 April 2012, ORER will form part of the Clean Energy Regulator and will continue to administer the Renewable Energy Target including the LRET and SRES. We look forward to working with stakeholders and continuing to build a sustainable renewable energy industry.



Andrew Livingston
Renewable Energy Regulator
March 2012

CHAPTER 1

ORER and the RET scheme

This annual report provides details on the administration of the *Renewable Energy (Electricity) Act 2000* (the Act) during the 2011 calendar year.

RET explained

The Australian Government's Renewable Energy Target (RET) was introduced to encourage additional generation of electricity from renewable energy sources.

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

As a result of the split, renewable energy certificates (certificates) were reclassified from 1 January 2011 into two certificates types: large-scale generation certificates (LGCs) and small-scale technology certificates (STCs). LGCs are created in the online REC Registry by accredited renewable energy power stations. STCs are created in the online REC Registry for correctly installed solar water heaters, heat pumps and small-scale solar panel, wind and hydro systems.

The LRET and SRES encourage additional generation of electricity from renewable energy sources to meet the Government's commitment to achieving a 20 per cent share of renewables in Australia's electricity supply by 2020.

The schemes create a financial incentive for investment in renewable sources through the creation and sale of certificates.

Certificate demand – liable entities

The RET places a legal liability on wholesale purchasers of electricity, defined as liable entities under the Act to proportionately contribute towards the generation of additional renewable electricity.

Liable entities support additional renewable energy generation from:

- renewable energy power stations through the purchase of large-scale generation certificates (LGCs). The renewable power percentage (RPP) establishes the rate of LGC liability for each calendar year. Liable entities are required to annually surrender the number of registered LGCs equal to their liability for the previous calendar year. LGCs that are marked as 'invalid due to surrender' by ORER are no longer available for use during the life of the LRET; and
- solar water heaters, heat pumps, small-scale solar panels, wind and hydro systems through the purchase of small-scale technology certificates (STCs). The Small-scale Technology Percentage (STP) establishes the rate of liability for SRES and commenced on 1 January 2011. The STP is designed to remove STCs from the STC Market for the current year liability. Liable entities are required to quarterly surrender the number of registered STCs equal to their required surrender amount. STCs that are marked as 'invalid due to surrender' by ORER are no longer available to reuse during the life of the SRES.

Certificate supply – eligible parties

Eligible parties transfer LGCs and STCs in the REC Registry to buyers for negotiated price.

Eligible parties include:

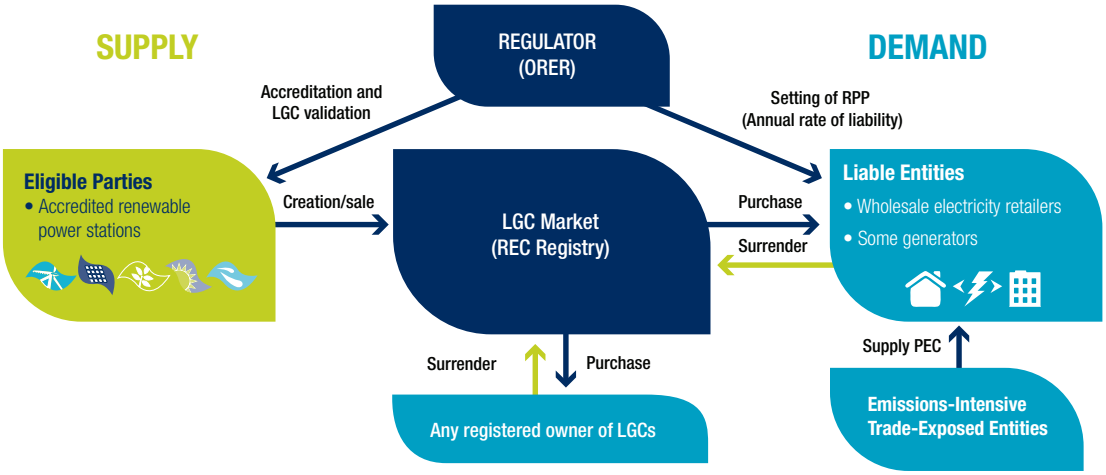
- renewable energy power stations such as wind, hydro, landfill gas, solar and bagasse
- owners of small-scale systems, such as solar water heaters, heat pumps, solar panel, wind and hydro systems
- Agents of small-scale systems.

Eligible parties can create LGCs for eligible electricity generated above the accredited renewable energy power station's baseline or STCs for eligible solar water heaters, heat pumps, small-scale solar panels, wind or hydro systems. Certificates that become registered are a tradable commodity in the certificate markets.

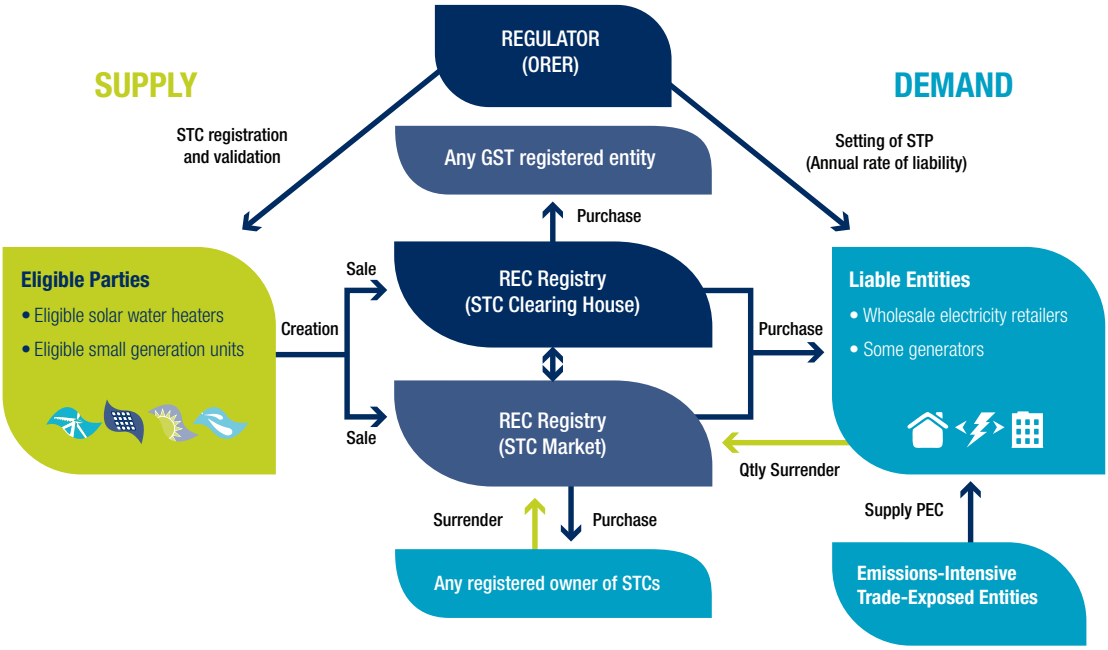
The certificate market

The Act allows for LGCs and STCs to be electronically transferred between REC Registry account holders (typically between eligible parties and liable entities). REC transfers are reported automatically to the Regulator in the REC Registry under Section 28 of the Act. This process is market driven with the price of LGCs and STCs determined by supply and demand. The transfer of certificates between eligible and liable entities is not a rebate but a financial transaction. Certificate prices are not regulated by ORER.

Large-scale generation certificate (LGC) Market



Small-scale technology certificate (STC) Market



STC Clearing House

Valid STCs created in the REC Registry for eligible installed solar hot water, heat pump, solar panel, wind or hydro systems can be sold through the STC Clearing House at the fixed price of $40 (excl. GST). STCs are only sold when there is a buyer and there is no guarantee on how long STCs will take to sell in the STC Clearing House. The STC Clearing House is located in the REC Registry.

Baselines

The main objective of the LRET is to encourage additional generation of electricity from renewable energy sources. The Regulator has to approve the 1997 eligible renewable power baseline for each power station. The Regulator generally determines the baseline for a pre-1997 renewable energy power station by using the average annual amount of electricity generated from eligible renewable energy sources over the 1994, 1995 and 1996 years. Schedule 3 of the Regulations provides guidelines for determining the 1997 eligible renewable power baseline for power stations. Power stations which generated electricity for the first time after 1 January 1997 have a baseline of zero. Accredited power stations are eligible to create certificates from electricity generation above the baseline.

The RET process

The Act operates on a calendar year (1 January – 31 December). The process for participating in the LRET and SRES is as follows:

- *apply to become a registry user* – Individuals or companies wishing to become a registry user must create an account in the REC Registry. At this point individuals or companies are only able to own and transfer registered certificates or make mandatory or voluntary certificate surrender offers.
- *complete a Registered Person Application and pay application fee* – If individuals or companies wish to create certificates, a registered person application must be lodged with ORER and a $20 application fee paid. If the individual or company wishes to sell their STCs via the STC Clearing House they must complete online registration and complete the proof of identity process.
- *Registered Person Application is approved* when registration is successfully completed, a registered person may:
  - seek accreditation of a renewable energy power station for which they are a nominated person, by applying to the Regulator. If the renewable energy power station is accredited by the Regulator, then LGCs can be created for eligible electricity generation above the renewable energy power station's baseline.
  - create small-scale technology certificates (STCs) for an eligible solar water heater, heat pump, small-scale solar panel, wind or hydro system.
  - apply for registration as an Agent. If successfully registered, an Agent can create STCs on behalf of owners of solar water heater, heat pump, small-scale solar panel, wind and hydro installations who assign their right to create STCs to the Agent.

Registered certificates

STCs and LGCs created by registered persons are checked and either validated or failed by ORER.

For STCs and LGCs to be registered they must be validated by ORER and the applicable registered person must pay an 8 cent registration fee per LGC for renewable energy power stations and an 8 cent fee per STC for solar water heaters and heat pumps. If the STCs are created for a small scale solar panel, wind or hydro system on or after 17 October 2011 a 47 cent fee must be paid per STC.

Registered certificates can be:

- transferred between parties who have an account in the REC Registry
- surrendered by liable entities to discharge their mandatory liability under the Act. Certificates surrendered by liable entities under Section 29 of the Act and accepted by ORER are marked 'invalid due to surrender' in the REC Registry
- voluntary surrendered under Section 28A for any reason. All registered owners of certificates can choose to make voluntary certificate surrender offers for any reason.

Certificates accepted for surrender are permanently removed from the market.

Reporting period

Participants are required to report their annual activities such as electricity generation, solar water heater, heat pump, small-scale solar panel, wind or hydro system certificate information, and liable electricity acquisitions for each calendar year by 14 February of the following year by lodging annual returns or statements.

Legislative framework

The Act came into force on 18 January 2001, after passage through Parliament on 8 December 2000.

Section 3 of the Act sets out three main objectives:

- to encourage the additional generation of electricity from renewable sources
- to reduce emissions of greenhouse gases in the electricity sector
- to ensure that renewable energy sources are ecologically sustainable.

The Act, which established the market for certificates, came into effect on 1 April 2001 and has been amended three times:

- 2006 – to reflect outcomes of the 2004 review followed by amendments.
- 2009 – to support the expansion of the RET.
- 2010 – to split the RET into two parts – the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES).

The Act is supported by:

- two Charge Acts. *The Renewable Energy (Electricity) (Large-scale Generation Shortfall Charge) Act 2000* to support the LRET and the *Renewable Energy (Electricity) (Small-scale Technology Shortfall Charge) Act 2010* to support the SRES. Both provide the rate of charge for the applicable renewable energy shortfall charge.
- the *Renewable Energy (Electricity) Regulations 2001* (the Regulations), which provide more details on a number of issues, including eligibility criteria for renewable energy sources and criteria for accreditation of power stations and small-scale systems. For more information about regulation amendment see "Amending the Regulations" under Chapter 3 of this report.
- Regulations referred to as transitional provisions so that LRET and SRES participants are not disadvantaged by certain legislative and Regulation amendments. As such there are two transitional provision Regulations. For more information about regulation amendment see "Amending the Regulations" under Chapter 3 of this report.

In combination the Act, the Charge Acts, the Regulations and supporting Regulations set the framework for the implementation of the Australian Government's RET (including the LRET and SRES).

Administering the Act

ORER was established to administer the Act on 12 February 2001, and became a prescribed agency under the *Financial Management and Accountability Act 1997* from 1 July 2003. ORER publishes a financial year annual report, outlining activity over the financial year from 1 July to 30 June each year.

The role of the Regulator and ORER are established under Part 14 of the Act. The key role of ORER is to assist the Regulator in performing the Regulator's functions (Section 150 of the Act). The Regulator and ORER constitute a Statutory Agency for the purposes of the *Public Service Act 1999.*

The first Regulator was appointed on 12 February 2001 by the then Minister for the Environment and Heritage, Senator the Hon Robert Hill. Mr David Rossiter accepted this role, and led ORER for an initial period of 5 years. At the end of this term, the then Minister for the Environment and Heritage, Senator the Hon Ian Campbell, reappointed Mr Rossiter for a further 5 year period. Senator the Hon Penny Wong, the then Minister for Climate Change and Water, appointed Mr Amarjot Singh as the Acting Renewable Energy Regulator on 1 July 2008 and Mr Andrew Livingston as the Renewable Energy Regulator on 1 June 2009.

Role of the Regulator

Maintaining a register of registered persons

Under Section 135 of the Act, the Regulator must maintain a register of registered persons, accredited power stations, certificates and applications for accredited power stations. These registers are maintained and accessible through the REC Registry. Under the Act certain information from these registers is required to be made publicly available on the REC Registry.

Registration of registered persons

Individuals and companies must be registered before they can seek accreditation of renewable energy power stations, create LGCs above the renewable energy power station's baseline or create STCs for eligible small-scale systems such as solar hot water, heat pump, solar panel, wind or hydro systems. Each registered person is allocated a unique registration number, which is accessible from the register of registered persons.

Accreditation of eligible renewable energy power stations

Renewable energy power stations must apply for accreditation in order to participate in the LRET. Nominated persons of accredited renewable energy power stations may be eligible to create LGCs in respect of the eligible generation above the baseline.

The accreditation process includes:

- verification that the renewable energy power station meets eligibility criteria as specified in the legislation
- verification that a renewable energy power station is using one or more eligible renewable energy sources
- establishment of an annual baseline. The baseline for renewable energy power stations that started generating electricity after 1 January 1997 is zero and for pre-1997 renewable energy power stations is non-zero
- allocation of a unique accreditation code if the renewable energy power station is accredited.

Registration of certificates

Certificates must be created by registered persons, pass validation checks conducted by ORER and have a registration fee paid by the registered person in order to become registered certificates.

There are three types of registered persons:

- nominated persons for renewable energy power stations
- individual owners of small-scale systems
- Agents for small-scale systems.

Registered certificates can be transferred to other persons, voluntarily surrendered under Section 28A of the Act or surrendered to discharge a mandatory liability under Sections 29, 44 and 95 of the Act. Certificates surrendered to discharge a mandatory liability incur a fee per certificate surrendered.

Monitoring and compliance

All participants of the LRET and SRES must comply with relevant sections of the Act, Charge Act and Regulations for the creation of certificates, reporting and other requirements.

ORER uses intelligence analysis and risk assessment to make strategic decisions about compliance activities undertaken, with the intent to maximise the number of stakeholders who voluntarily comply with their obligations under the Act.

Monitoring and compliance activities involve:

- assessing and overseeing the submission of annual returns and statements such as:
  - Annual Electricity Generation Returns (EGR). Nominated persons for renewable energy power stations report their renewable electricity generation above the baseline and LGC creation in the EGR
  - Annual Solar Water Heater and Small Generation Unit Returns (SWH/SGUR). Agents report STC information with respect to the number of small-scale systems that were entitled to STCs
  - Annual Energy Acquisition Statements (AEAS) and Renewable Energy Shortfall Statements (RESS). Liable entities are required to lodge an AEAS or RESS and acquit their liability by surrendering certificates and/or paying a Renewable Energy Shortfall Charge (RESC) in accordance with the Act. Liable entities that have a LGC shortfall less than 10 per cent of the total liability in a given year are not required to pay the RESC and are allowed to carry forward the certificate shortfall without paying the RESC. Where applicable, ORER imposes any penalties for non-compliance within the provisions of the legislation. The RESC equals $40 per certificate not surrendered for the 2001-2009 compliance years and $65 per certificate for the 2010 and future compliance years. Where applicable, the Act allows liable entities to redeem any LGC shortfall, if shortfalls are made up within years of the shortfall year.
- ensuring the integrity of the measure by undertaking audits of participants including eligible and liable entities
- analysis of information reported by registered persons and corporations
- desktop investigations, including data analysis
- checks against third party data and other innovative analysis techniques
- targeted investigations using authorised officers. This includes but is not limited to site visits, outreach visits, monitoring warrants and compliance visits
- audits of eligible parties and liable entities. Audits include:
  - liability compliance audits – seek to verify the information provided in the AEAS or RESS
  - eligibility compliance audits – seek to verify information provided in the EGR or SWH/SGUR.

Audits not only help liable entities and eligible parties understand the application of the RET, LRET and SRES to their circumstances, but also provide feedback to ORER on areas where systems might need some improvement. The field audits confirmed that audited parties were reporting consistently in accordance with the legislation. However, as in previous years, ORER found that some parties appear to lack the internal procedures that would lead to efficient and accurate reporting of relevant acquisitions.

Issuing partial exemption certificates (PECs)

Eligible prescribed persons (typically entities that carry on EITE activities) may apply for a PEC each calendar year by completing the Application for a Partial Exemption Certificate form. For 2011 and future years, the application is typically due before 31 March of the year to which it relates.

All applications received are assessed by ORER's Partial Exemptions team for compliance with legislative requirements for the making of PEC applications.

If an application is approved, the Regulator will issue the prescribed person with a PEC stating the amount of megawatt-hours of electricity for which exemption can be provided to the liable entity named on the PEC (usually the retail electricity supplier) for electricity used in the EITE activity in the year mentioned on the PEC.

Information about partial exemptions (including details of PECs that have been issued) are published on the ORER website in accordance with Section 38C of the Act and 22E of the Regulations.

Publishing information as required under the legislation

The Regulator is required to publish a range of information for the public. Together the Act and Regulations require that the Regulator:

- may publish a list of liable entities that have a shortfall for a particular year, including the amount of each liable entity's shortfall for that year; and the proportion of that shortfall relative to the liable entity's required renewable energy for that year (Section 134).
- must publish a list of liable entities before 1 October each year, that received PECs (Section 38C and Regulation 22E). This includes any revisions, the value in dollars estimated by the Regulator of the amount of the entity's partial exemption for the year and the name of the prescribed person.
- assist the publication of the renewable power percentage for the year, before 31 March of the year that it applies to (Section 39 and Regulation 23).
- assist the publication of the Small-scale Technology Percentage (STP) for the year, before 31 March of the year that it applies to (Section 40A and Regulation 23A) and an estimate of the STP for the next two years (Section 40B).
- must publish:
  - before 1 October each year, the total amount of partial exemptions given for each EITE activity for that year (Section 38C and Regulation 22E)
  - within 14 days after the PEC is issued, the name of the prescribed person to whom the PEC is issued and the EITE activity set out in the PEC (Section 38C and Regulation 22E).
- must, by 31 October in the given year, publish the volume weighted average market price for a REC/LGC including a brief description of the method used to arrive at the estimate and weigh the prices and volumes for RECs/LGCs. This information must include details of the sources of information used (Regulation 22ZH). This is applicable to the partial exemption assistance rate.
- must publish a list of the acceptance of undertakings (Section 154Q) as required under the civil penalties and other remedies provisions of the legislation. This list applies to eligible parties that conduct activities that contravene the legislation.
- must, at intervals of no more than 6 months, publish on the ORER website an invitation to invite persons (Regulation 19BD) to make requests for determinations under Regulations 19BC and 19BA for determination of the number of certificates for solar water heaters. This includes a 30 day period for requests.
- must, for each quarter within a period mentioned in Regulations 20AA, and within 28 days after the end of the quarter from 1 January 2011, publish details of out of pocket expenses incurred for small generation units (SGUs) where STCs are created during the quarter (Regulation 19G)
- must publish details of any determination made by the Regulator in relation to eligible premises (Regulation 20AB and 20AA(5)).
- must, for each year, publish the number of inspections conducted under Part 7 – Inspections of SGUs during the year. The Regulator may also publish any other general information about inspections that the Regulator considers appropriate (Regulation 32).
- may publish a the name of a person if they are declared ineligible to design and install SGUs for the purposes of Regulation 20AC, providing that the person has been

subject to adverse findings on three separate occasions (Regulation 47).

Together the Act and the Regulations refer to documents used by LRET and SRES participants to comply with the legislation for eligibility purposes. Subsequently the Regulator is required to publish and maintain documentation used by manufacturers of solar water heaters and heat pump water heaters to calculate the eligible amount of STCs for individual solar water heater and heat pump water heater models. Documentation for this purpose includes:

- REC calculation methodology for solar water heaters and heat pump water heaters with a volumetric capacity over 700 litres
- REC calculation methodology for solar water heaters and heat pump water heaters with a volumetric capacity up to and including 700 litres
- Heat Loss Test Procedure for Solar Water Heaters with a Hot Water Storage Tank Greater than 630 (Regulation 3A).

The Register of solar water heaters (Section 23AA and Regulation 19C), lists models that are determined eligible under the applicable Australian and New Zealand standards together with the Act and Regulations.

Role of ORER

ORER administers the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES). The framework for the LRET and SRES is established by the:

- *Renewable Energy (Electricity) Act 2000*
- *The Renewable Energy (Electricity) (Large-scale Generation Shortfall) Charge Act 2000*
- *The Renewable Energy (Electricity) (Small-scale Technology Shortfall) Charge Act 2010*
- *Renewable Energy (Electricity) Regulations 2001*
- *Renewable Energy (Electricity) Regulations 2001 – STC Calculation Methodology for Solar Water Heaters and Air Source Heat Pump Water Heaters.*

The main functions of ORER, in implementing the requirements of this legislative framework are:

- maintaining several registers, which includes:
  - Register of Renewable Energy Certificates (inactive as of 1 January 2011)
  - Register of Small-scale Technology Certificates (made available from 1 January 2011)
  - Register of Large-scale Generation Certificates (made available from 1 January 2011)
  - Register of Accredited Power Stations
  - Register of Applications for Accredited Power Stations
  - Register of Registered Persons.
- registering STCs for solar water heaters and heat pumps and small-scale solar panels, wind and hydro systems
- managing and maintaining the online REC Registry and the STC Clearing House
- accrediting eligible renewable energy power stations
- registering LGCs for accredited renewable energy power stations
- updating and maintaining the Register of Solar Water Heaters
- managing the partial exemption process for emissions-intensive trade-exposed (EITE) industries
- assessing the AEAS lodged by liable entities and imposing any Renewable Energy Shortfall Charge
- monitoring compliance with the Act
- managing inspections of small-scale solar panels, wind and hydro installations for which certificates have been created
- communicating the Act and Regulations to participants.

Requests to review decisions

A person who has received a decision from the Regulator can lodge a formal review request for the Regulator to reconsider the decision under:

- Part 6 of the Act
- Regulation 49 of the *Renewable Energy (Electricity) Regulations 2001*
- Regulation 11 of the *Renewable Energy (Electricity) Amendment (Transitional Provisions) Regulations 2010.*

In some cases, it may be possible to resolve issues with the Regulator and/or the ORER contact officer without a formal review.

If issues cannot be resolved without a review, an affected person can lodge a request for a review. The request for a review must be lodged in writing. To assist the Regulator in reviewing the decision, the request should state in detail the grounds for review. The request for a review of the decision must be given to the Regulator within 60 days after the decision is made.

At this point the Regulator can appoint an ORER officer who was not involved in the original decision to assist in the review. The Regulator reviews the original decision with reference to the reviewing officer's recommendation. The person seeking the review will be informed in writing, explaining the reasons

for the review decision. The original decision is confirmed if the Regulator does not give written notice of the review decision within 60 days of the request.

If the affected person is not satisfied with the review decision they can apply to the Administrative Appeals Tribunal (AAT) for a review of the decision.

A list of decisions that can be reviewed by the Regulator, can be found on the ORER website.

No applications for internal review under Section 66 of the Act were lodged in 2011.

An application for review of the Regulator's decision was lodged with AAT in 2009. The application related to accreditation of a power station. On 6 February 2012, the AAT affirmed the Regulator's decision.

CHAPTER 2

2011 activity

Summary of 2011

The Act operates on a calendar year basis. This report focuses on the operation of the Act between 1 January and 31 December 2011. In some areas, previous data is provided for comparison purposes.

Table 1: 2011 Activity

Number of registered person applications approved	4,241
Number of applications for renewable energy power stations accredited	20
Number of applications for Partial Exemption Certificates	117
Number of small-scale systems registered with validated STCs [1]	468,787
Number of LGCs validated [2]	15,560,750
Number of STCs validated [2]	52,492,528
Number of STCs converted to LGCs	299,564
Busiest month for LGC creation	January
Busiest month for STC creation	June
Number of LGC transfer transactions in the REC Registry	4,637
Number of STC transfer transactions in the REC Registry	8,769
Number of LGCs accepted for voluntary surrender	2,351,449
Number of STCs accepted for voluntary surrender	29
Number of LGCs accepted for non-compliance	24,654
Number of STCs accepted for non-compliance	7,373
Number of LGCs accepted for surrender for the 2010 compliance year [3]	12,454,953
Number of liable parties with a 2010 LGC shortfall	6
Percentage liability acquitted for 2010 by LGC surrender	99.21%
Number of applications for annual transfer number	13
Number of SGUs inspected under Section 23AAA [4]	692

[1] These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

[2] Validated by ORER on or before 22 January 2012

[3] This includes certificates surrendered against future liability.

[4] Number of final inspection reports received by ORER up to 22 December 2011

Registration of persons

During 2011, ORER approved 4,241 applications to be a registered person.

The registrations covered a range of individuals and companies seeking to create certificates for renewable energy power stations or small-scale systems. The growth in applications predominately relates to an increase of individuals wanting to create certificates for their small-scale systems.

As at 31 December 2011, the total number of registered person accounts since commencement of the scheme reached 5,930.

Registered Agents for small-scale systems

In 2011, ORER registered 569 Agents, bringing the total number of Registered Agents to 1,083 as at 31 December 2011.

Assessing the validity of created certificates

A total of 161,506,347 certificates had been created in the REC Registry as at 31 December 2011.

In accordance with the Act:

- only registered LGCs created between 2001 – 2011 can be used to acquit a liable entity's 2011 LGC liability
- only registered STCs created by 31 December 2011 or directly purchased from the STC Clearing House between 1 January 2011 to 14 February 2012 and surrendered can be used to acquit a liable entity's 2011 STC liability
- Only parties that applied to transfer STCs to LGCs were allowed in the REC Registry to convert STCs to LGCs. As at 31 December 2011, a total of 299,564 STCs were converted to LGCs.

Table 2: Assessing the validity of created certificates from 2001 to 31 December 2011

Status of certificates [1]	Certificates by type		Total number of certificates created between 2001 – 31 December 2011
	LGC [2]	STC	
Registered	44,931,856	23,273,088	68,204,944
Pending transfer	53,805	29,959	83,764
Pending surrender	0	250	250
Pending voluntary surrender	80,453	496	80,949
Pending STC Clearing House sale	0	7,079,948	7,079,948
Pending conversion	0	60,000	60,000
Pending registration	1,216,164	1,822,964	3,039,128
Invalid due to audit	3,720,662	3,605,657	7,326,319
Accepted for surrender "Invalid due to surrender"	46,381,109 [3]	20,028,811 [4]	66,409,920
Accepted for voluntary surrender "Invalid due to voluntary surrender"	9,214,219	6,906	9,221,125
Grand Total	**105,598,268**	**55,908,079**	**161,506,347**

[1] All certificates in the table above are "Registered" or were once registered if they were accepted for surrender or voluntary surrender. Certificates classified as "Invalid due to audit" are deemed ineligible for registration. Certificates classified as "Pending registration" are waiting to be audited by ORER or may require payment of the registration fee.

[2] RECs created on or before 31 December 2010 transitioned into LGCs in the REC Registry on 1 January 2011.

[3] LGCs accepted for surrender against the 2001 – 2010 liability compliance years.

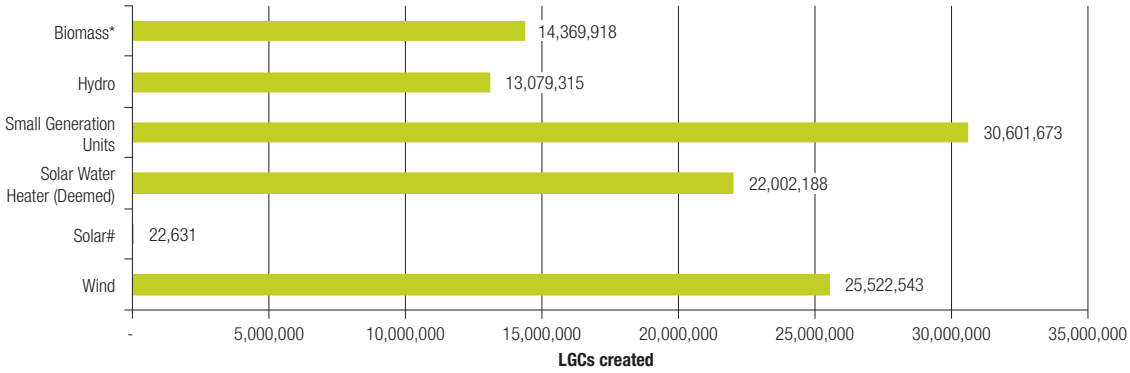
[4] STCs accepted for surrender against the 2011 liability compliance year for quarters 1 to 3. The 2011 liability compliance year reporting is due by 14 February 2012.

Details of the 2011 liability compliance year will be provided in the 2012 Annual Report.

As shown in the graphs below, a wide range of eligible renewable energy sources were used to create certificates in 2011. Not all accredited renewable energy power stations, Agents or individuals created certificates in 2011.

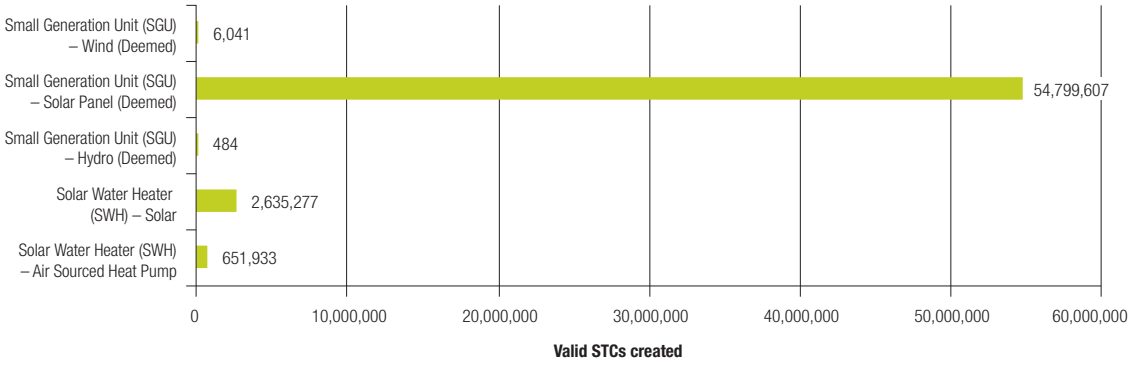
As was the case in previous years, ORER recommended that registered persons create their eligible certificates by 31 December 2011 to ensure certificates could be validated by ORER in January 2012 and be available for trading to liable entities prior to the compliance date of 14 February 2012.

Graph 1: Certificates created by 31 December 2011 by eligible renewable energy sources under the LRET



* Biomass includes multiple energy sources under the Act (agricultural waste, bagasse, bagassee co-generation, biomass-based components of municipal solid waste, black liquor, crop waste, energy crops, food and agricultural wet waste, food processing waste, food waste, municipal solid waste combustion, sewage gas, sewage gas and biomass-based components of sewage, waste from processing of agricultural products and wood waste).

Graph 2: STCs created by 31 December 2011 by eligible small-scale systems under the SRES



Certificates created by power stations

Under Section 19 of the Act, accredited renewable energy power stations were allowed to create certificates for eligible renewable electricity generated above the renewable energy power station's baseline for the 2010 generation year by the 31 December 2011 deadline. Renewable energy power stations that did not create certificates within the allowed timeframe are no longer eligible to create certificates for eligible renewable electricity generated in the 2010 generation year.

Certificates created by small-scale systems

Under Section 21 of the Act, eligible solar water heater and heat pump water heater certificates must be created within 12 months of the installation date.

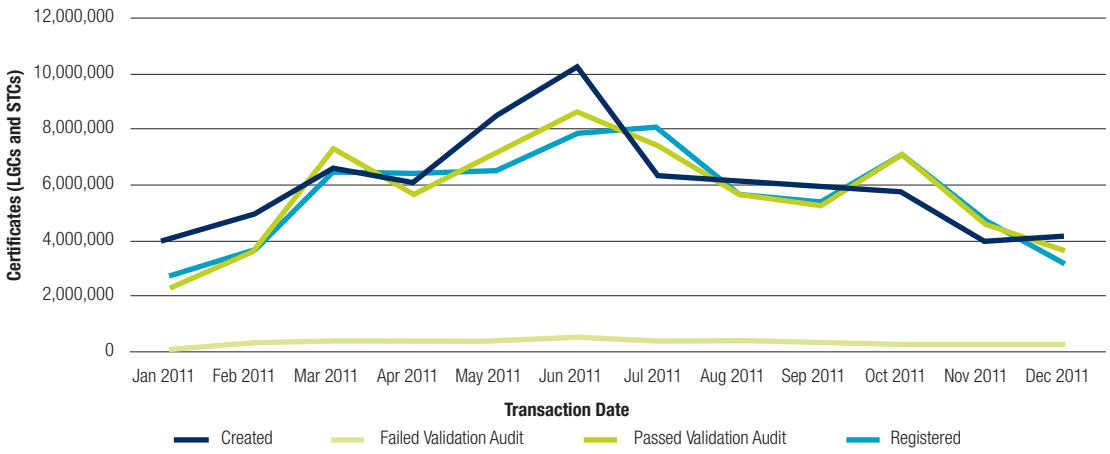
Under Regulation 19D of the Regulations for Section 23A of the Act, eligible small-scale solar panel, wind and hydro (referred to as small generation units (SGUs)) installed on or after 6 October 2007 must create certificates:

- within 12 months of the installation date for a one year or five year period
- at the end of the period that the right was exercised to create certificates. For example, a person created certificates for an installation for one year. At the end of that period the person may create certificates for another year until the end of the scheme.
- within 12 months of the installation date for a 15 year period. If this option is chosen no further certificates can be created for the installation.

SGUs installed between 1 April 2001 and 5 October 2007 are eligible to create certificates at anytime for a one or five year period. At the end of each period owners or Agents (if the certificates have been assigned) can create certificates for the next deeming period.

If Agents or individuals do not create certificates within the allowed timeframe they are no longer eligible to create certificates for their small-scale installation.

Graph 3: Certificate transactions by month for 2011



Accreditation of power stations

For ORER to assess an Application for Accreditation of a Power Station form, the applicant must successfully complete all sections of the form and supply sufficient supporting evidence to demonstrate that the renewable energy power station can be accredited under the Large-scale Renewable Energy Target (LRET).

When the application is deemed to be correctly made by ORER, the applicant is notified by email to pay an accreditation fee online through the REC Registry. Once the fee has been paid, details of the renewable energy power station are listed on the public Register of Applications for Accredited Power Stations (accessed via the REC Registry) and the application process continues.

If the application is `properly made' under Section 13 of the Act (this includes payment of the fee), and the Regulator approves the application under Sections 14 and 15 of the Act, the renewable energy power station is listed on the Register of Accredited Power Stations and becomes eligible to create large-scale generation certificates (LGCs).

The applicant will then be entitled to create LGCs for eligible electricity that was generated after the date the application was deemed to be properly made under Section 13 of the Act. If the renewable energy power station begins generating electricity after this date, LGCs can be created from the date the renewable energy power station begins generating eligible electricity.

Of the 378 renewable energy power station applications listed in the REC Registry as at 31 December 2011:

- 335 renewable energy power stations were accredited and eligible to create LGCs from renewable energy sources under the Act. This includes 20 renewable energy power stations that were accredited in 2011.
- 14 renewable energy power stations have been de-accredited up to 2011. One renewable energy power station was de-accredited in 2011.
- 4 renewable energy power station applications were pending registration.
- 21 renewable energy power station applications were withdrawn up to 2010 because applications were not properly made by applicants. No renewable energy power station applications were withdrawn in 2011.
- 4 renewable energy power station applications were not approved.

During 2011, no accredited power stations were suspended under Section 30D or 30E of the Act.

Requesting variations to renewable energy power station accreditations

In 2011, the Regulator received one request from a registered person to vary the renewable energy power station baselines for their power stations. In this case, the Regulator amended the renewable energy power stations baselines under Regulation 30F.

Table 3: Comparative number of renewable energy power stations accredited

Renewable energy source	Accredited in 2010	Accredited in 2011
Food Processing Waste	2	1 [1]
Hydro	10	5
Landfill Gas	2	0
Sewage Gas and Biomass-Based Components of Sewage and Municipal Solid Waste	0	1
Solar	4	5
Wind	6	8
Wood Waste	0	1
Total number accredited in a year	**24**	**20**
Total cumulative number of power stations accredited	**316**	**335**

[1] One power station under the Food Processing Waste renewable energy source was de-accredited in 2011.

Table 4: Comparative number of accredited renewable energy power stations

Renewable energy source	Accredited up to 2010	Accredited up to 2011
Agriculture, Food and Agriculture Waste	12	12 [1]
Bagasse Co-generation, Energy Crops	29	29
Black Liquor	2	2
Hydro	95	100
Landfill Gas	59	59
Sewage Gas and Biomass-Based Components of Sewage and Municipal Solid Waste	28	28
Solar	44	48
Wind	53	61
Wood Waste	19	20
Total [2]	**316**	**335**

[1] One power station under the Food Processing Waste renewable energy source was de-accredited in 2011.

[2] Certain power stations are accredited for multiple fuel sources.

Table 5: Number of accredited renewable energy power stations by state as at 31 December 2011

Renewable energy source	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Total
Agriculture, Food and Agriculture Waste	0	4	2	1	0	0	2	2	12
Bagasse Co-generation, Energy Crops	0	4	0	24	0	0	0	1	29
Black Liquor	0	1	0	0	0	0	1	0	2
Hydro	1	31	0	10	1	34	20	3	100
Landfill Gas	2	15	1	12	4	3	13	9	59
Sewage Gas and Biomass-Based Components of Sewage and Municipal Solid Waste	0	16	0	5	0	1	5	1	28
Solar	1	13	9	5	5	1	7	7	48
Wind	0	8	0	3	15	5	14	16	61
Wood Waste	0	10	0	5	1	1	2	1	20
Total [1]	**4**	**88**	**11**	**61**	**26**	**45**	**61**	**39**	**335**

[1] Certain power stations are accredited for multiple fuel sources.

Partial exemption certificates

In 2011, the Regulator received 117 partial exemption certificate (PEC) applications by the legislated deadlines. Applications from prescribed persons spanned all 31 eligible emissions-intensive trade-exposed (EITE) activities.

As at 31 December 2011, 110 PECs were issued totalling 27,244 GWh of partial exemption under the legislation.

In accordance with Regulation 22E(2) of the Regulations, the name of the person to whom a PEC is issued and the EITE activity that the PEC relates to is published on the ORER website.

Table 6: Total amount of 2011 partial exemptions given for each EITE activity as at 31 December 2011

EITE activity	Partial exemption (MWh)
Alumina refining	1,043,316
Aluminium smelting	18,428,464
Cartonboard manufacturing	53,725
Dry pulp manufacturing	36,516
Integrated iron and steel manufacturing	869,908
Integrated production of lead and zinc	40,729
Manufacture of carbon steel from cold ferrous feed	403,059
Manufacture of newsprint	968,018
Packaging and industrial paper manufacturing	664,053
Petroleum refining	888,438
Printing and writing paper manufacturing	71,396
Production of bulk flat glass	31,173
Production of carbamide (urea)	32,394
Production of carbon black	14,146
Production of clinker	283,981
Production of copper	263,567
Production of ethene (ethylene)	83,682
Production of fused alumina	23,017
Production of glass containers	212,272
Production of high purity ethanol	14,707
Production of lime	52,241
Production of magnesia	51,397
Production of manganese	552,073
Production of methanol	25,515
Production of polyethylene	122,834
Production of silicon	248,028
Production of sodium carbonate (soda ash) and sodium bicarbonate	26,157
Production of synthetic rutile	41,839
Production of white titanium dioxide (TiO^2) pigment	107,780
Smelting zinc	1,442,350
Tissue paper manufacturing	147,400
Total	**27,244,175**

* Please note that in accordance with Regulation 22E(3) of the Regulations, the total amount of partial exemptions given for each EITE activity must be published by 1 October in the year to which the partial exemptions relate.

Volume weighted average market price for a REC/LGC

Under Regulation 22ZH of the Regulations, the Regulator is required to estimate and publish the volume weighted average market price for a REC/LGC for the 2012 year, by 31 October 2011.

The Regulator estimated the volume weighted average market price for a REC/LGC for the 2012 year at $35.24 and published this, along with the methodology used to estimate the volume weighted average market price, on the ORER website. The volume weighted average market price for a REC/LGC for the 2012 year is factored into the calculation of the partial exemption assistance rate for the year.

Small-scale installations

From 1 April 2001 to 31 December 2011, more than 1,329,580* small-scale installations created certificates in the REC Registry and validated by ORER. Of these, more than 105,101 solar water heater (SWH) and 363,686 small-scale solar panel, wind and hydro (referred to as small generation units (SGUs)) installations created valid certificates between 1 January 2011 and 31 December 2011. Of the SGU installations, solar panels make up 99.082% of the installations followed by wind (0.017%) and hydro (0.001%).

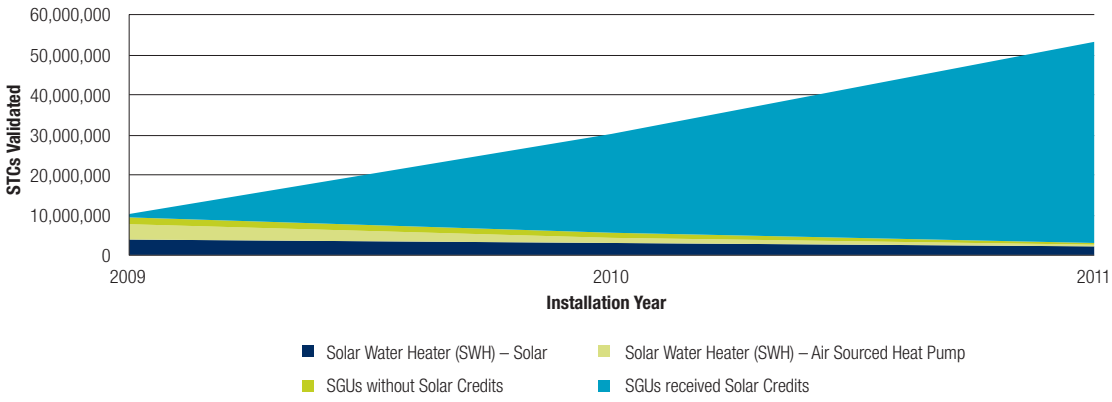
During 2011:

- Approximately 7,300 SWH installations were installed each month compared to approximately 10,600 per month in 2010*.
- Approximately 28,100 SGU installations were installed each month compared to approximately 16,500 per month in 2010*.

Growth in the installation of solar panels was encouraged by various state and federal initiatives including Solar Credits, a mechanism administered by ORER which multiplies the number of certificates able to be created for SGUs installed on or after 9 June 2009.

Graph 4: Number of certificates validated for eligible small-scale systems – 2009 to 2011

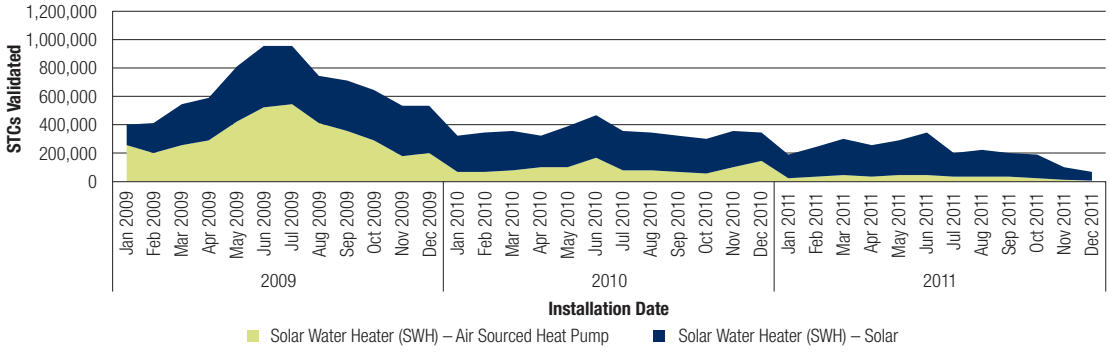
The graph below shows the number of certificates that have been validated for small-scale systems installed from 2009 to end 2011.



* These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

Graph 5: Number of certificates validated for solar hot water and heat pump installations 2009 – 2011

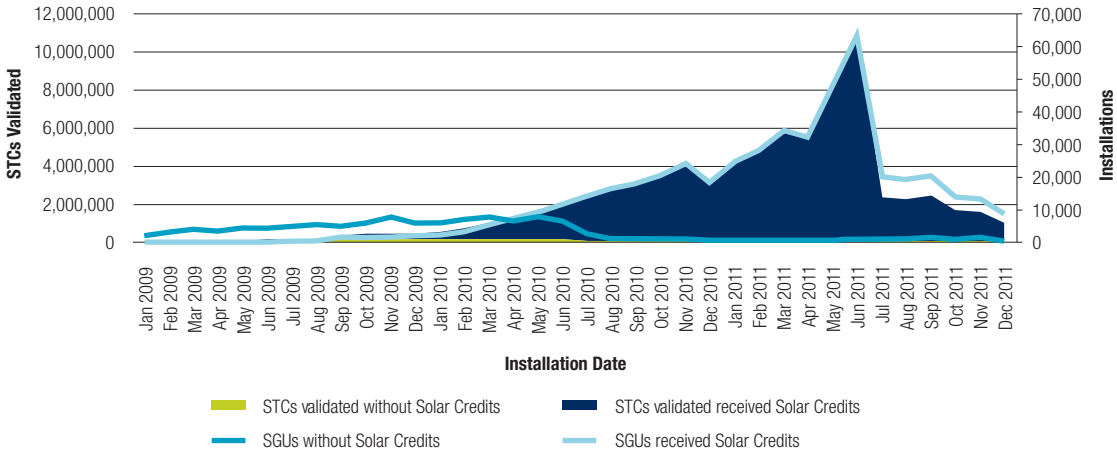
The graph below represents valid certificates created by the two solar water heater types (solar and heat pump). Solar hot water systems accounted for 85% of certificates deemed in 2011, followed by heat pump water heaters which equated to 15% of all certificates respectively.*



* These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

Graph 6: Small generation units and Solar Credits 2009 – 2011

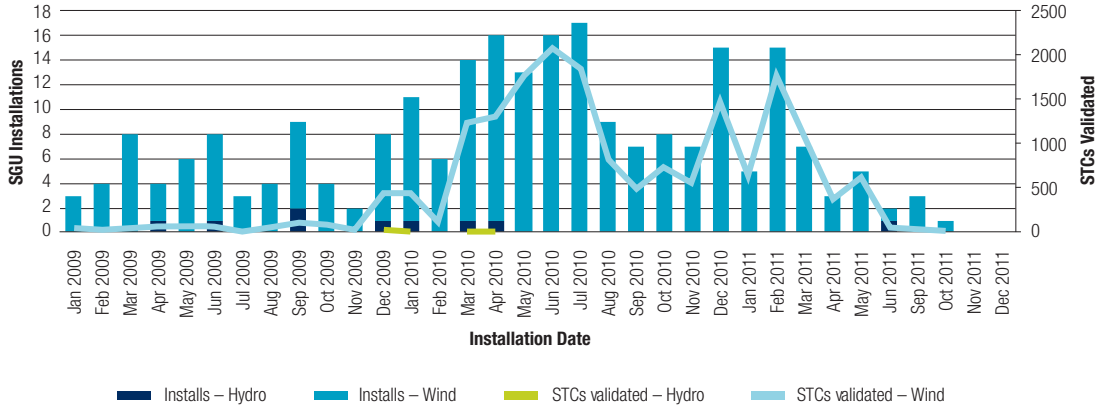
The graph below represents valid certificates created by small-scale solar panel, wind and hydro systems (referred to as small generation units (SGUs)) The total number of SGUs installed in 2011 was 337,333. Of these around 97%, or 327,213 systems received Solar Credits.*



* These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

Graph 7: Small generation wind and hydro systems 2009 – 2011 activity

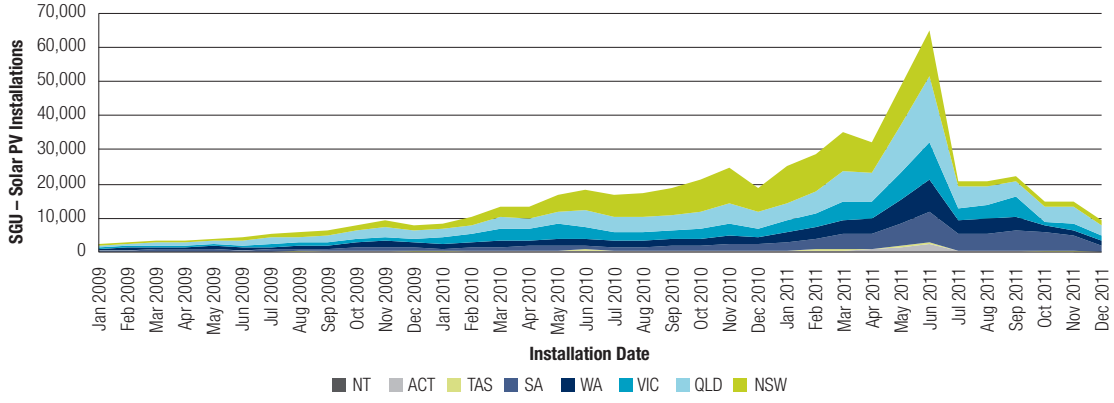
The graph below represents the number of systems installed against the number of certificates validated. Solar panel systems were the most popular SGU installed during 2011, followed by wind systems with 40 systems installed, receiving 4,567 certificates.*



* These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

Graph 8: Solar panel installations by state 2009 – 2011

The graph below represents the number of solar panel installations registered by state. The greatest number of solar panel installations in 2011 was in Queensland at 27% followed by New South Wales (23%) and South Australia at (17%).*



* These figures are based on the date the system was installed and are current as at 22 Jan 2012. These numbers are likely to increase as certificates can be created up to 12 months after the date the system was installed.

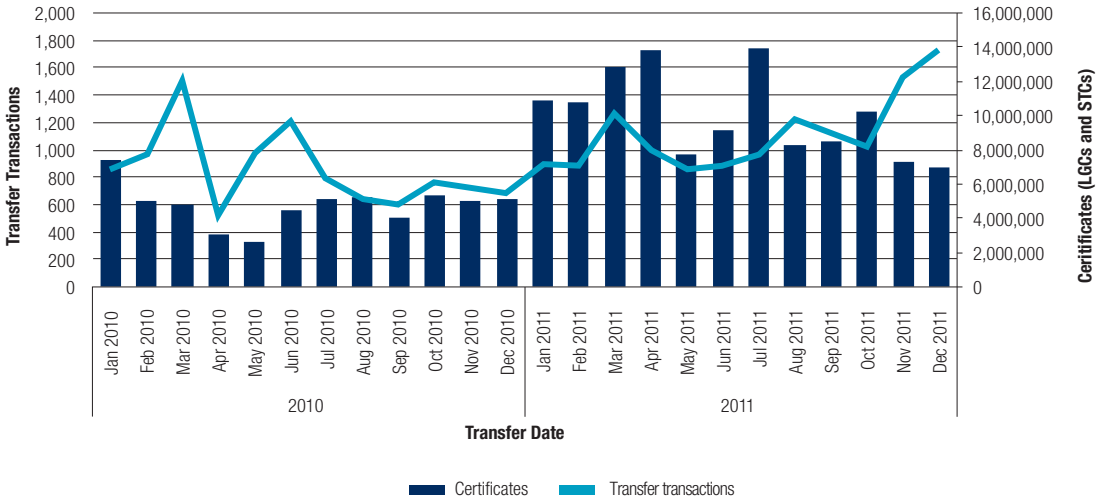
Certificate transfer activity

From 2001 to end 2011, a total of 35,793 successful transfer requests took place in the REC Registry, representing a total of 261,923,116 certificates transferred.

Of these, during 2011, there were:

- 13,404 accepted transfers, representing a volume of 120,551,445 certificates.
- 644 transfers cancelled by the sellers, representing a volume of 9,074,144 certificates.
- 152 transfers rejected by the buyers, representing a volume of 410,744 certificates.

Graph 9: Number of certificate transfers by month in 2010 and 2011



STC Clearing House

The amendments to the Act in June 2010 introduced the establishment of an optional STC Clearing House to facilitate the exchange of STCs between buyers and sellers at a fixed price of $40 (excl. GST). The STC Clearing House has been accessible via the REC Registry from early January 2011. LGCs are not included in the STC Clearing House.

Buy orders

In 2011, there were a total of 11 separate significant purchases in the STC Clearing House, while another 9 purchases were processed that were user instigated 'test transactions' of only 1 STC each. The total value of transactions was $5,880,248 (incl. GST), for a total of 133,642 STCs.

The largest buy order was 40,500 STCs to the value of $1,782,000 (incl. GST). The average significant buy order was 12,148 STCs with a value of $534,532 (incl. GST).

A total of $36,124 was refunded to buyers for GST not required to be paid to seller.

Sell orders

There were a total of 116 sell orders matched to the above buy orders via the STC Clearing House. In total $5,844,124 (excl. GST) of sell orders were transacted through the STC Clearing House, processing the 133,642 STCs that were traded. Of the STCs traded, 9,031 certificates were for sellers not registered for GST, mostly homeowners. The average transaction of non GST registered sales was 301 STCs at a value of $12,041. The largest transaction was 2,189 STCs at a value of $87,560 (excl. GST).

The STC Clearing House also processed 87 transactions for GST registered sellers. A total of 124,611 STCs were bought from these sellers totalling $5,482,884 (incl. GST). The largest transaction in this category was for 17,052 STCs at a value of $750,288 (incl. GST) and the average transaction was 1,432 STCs at a value of $63,021 (incl. GST).

Other surrender

All registered owners of certificates can choose to make other certificate surrender offers for any reason under Section 28A of the Act.

For example, individuals or companies may choose to make other surrender certificate offers:

- to encourage additional generation of electricity from renewable energy sources. If offers are made for this, or similar reasons, they are considered to be voluntary surrender offers.
- to meet GreenPower obligations. For more information on GreenPower visit **www.greenpower.gov.au**. If offers are made for this reason they are considered to be voluntary surrender offers.
- to offset the impacts of improper creation of certificates under the civil penalties and other remedies provisions of the legislation. Improper creation of certificates can incur penalties and are reported as a fraudulent activity. If offers are made for these reasons they are considered to be non-compliance surrender offers.

Any certificate accepted for other surrender is permanently removed from the market and cannot be transferred to another party or be used to discharge a mandatory liability under the Act. Once the certificates are accepted by ORER they are marked as 'invalid due to voluntary surrender' in the REC Registry.

As at 31 December 2011 a total of 9,302,074 certificates, representing 591 offers, had been accepted for other surrender in the REC Registry.

Table 7: Certificates offered for other surrender from 2001 to 31 December 2011

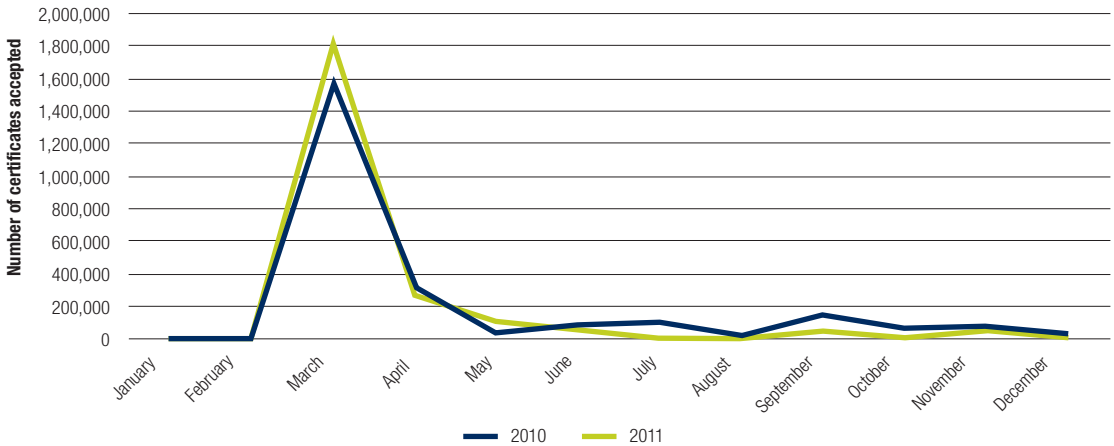
Calendar Year	Certificate and type of other surrender				Total number of certificates and offers accepted for other surrender
	LGC Voluntary	Non-compliance	STC Voluntary	Non-compliance	
2011 [1] [2]	2,351,449	24,654	29	7,373	2,383,505 representing 229 offers
2006 – 2010	6,898,368	20,201	Not applicable as STCs were created from 1 January 2011		6,918,569 representing 362 offers
Total	9,249,817	44,855	29	7,373	9,302,074 [3] representing 591 offers

[1] The busiest month for voluntary surrender was March, with 1,838,736 LGCs offered, representing 95 offers. One of the driving factors that increases the number of certificates surrendered annually is that GreenPower participants voluntary surrender certificates to meet their annual obligations by 31 March for the previous year. Voluntary surrender for GreenPower purposes represents approximately 91.7% for 2011 and 86.9% for 2010.

[2] On 28 June 2010 civil penalty and other remedies, including enforceable undertaking provisions, were introduced into the legislation. The busiest month in 2011 for non-compliance surrender was September with 15,497 certificates offered, representing 18 offers.

[3] This total assumes that LGCs and STCs offered at 31 December 2011 with a status of pending voluntary surrender will be accepted for voluntary surrender in early 2012.

Graph 10: Number of other surrender offers accepted by month in 2010 and 2011



Compliance and assessment of annual statements and returns

The 2011 compliance period commenced on 1 January 2011 and ended on 31 December 2011. The due date for the lodgement of the EGR, SWH/SGUR, AEAS and RESS for the 2011 compliance period is 14 February 2012. Comprehensive details regarding the 2011 compliance period will be provided in the 2012 Annual Report.

The 2011 Annual Report provides information of the 2010 compliance period that commenced on 1 January 2010 and ended on 31 December 2010. The due date for the lodgement of the EGR, SWH/SGUR, AEAS and RESS for the 2010 compliance period was 14 February 2011.

Summary of EGR and SWH/SGUR compliance and assessment

EGRs and SWH/SGURs assessments for 2001 – 2010 generation years (or compliance years) were analysed and the number of certificates that remained uncreated are seen at Table 8. The table demonstrates the:

- amount of renewable electricity generated or deemed to have been generated for certificate eligibility
- number of certificates which have been created and validated through a registration process (registered certificates)
- amount of certificates which cannot be created for eligible generation from accredited renewable energy power stations because nominated persons did not create the certificates within the timeline as stipulated under Section 19 of the Act.

EGR compliance and assessment

By 31 December 2011, a total of 293 EGRs were received for the 2010 generation year. Assessment of the EGRs continued throughout the 2011 calendar year, and 293 EGRs were completed as of 31 December 2011, with a confirmation of the assessment provided by ORER to the relevant company contact.

SWH/SGUR compliance and assessment

By 31 December 2011, a total of 221 SWH/SGURs were received for the 2010 compliance period. All completed SWH/SGURs received by ORER were assessed by November 2011, with confirmation of the assessment provided by ORER to the relevant company contact.

Table 8: Comparing certificates eligibility and registered certificates by generation years to view certificates remaining

Category	2001 [2] '000	2002 '000	2003 '000	2004 '000	2005 '000	2006 '000	2007 '000	2008 '000	2009 '000	2010 [8] '000
Certificate Eligibility [1]										
Renewable energy power stations	1,448	2,253	3,644	2,583	3,812	4,144	4,662	5,053	6,787	9,227
Small-scale systems	217	528	712	822	1,012	1,050	1,627	3,635	10,386	30,273
Small Generation Units	2	3	6	9	14	32	110	403	2,515	25,998
Hydro	-	-	-	-	-	-	-	-	-	-
Solar	1	3	6	9	14	32	110	402	2,513	25,985
Wind	0	0	0	0	0	0	0	1	1	13
Solar Water Heater	215	525	705	813	998	1,018	1,517	3,232	7,871	4,275
Solar Water Heater	215	525	705	813	998	1,018	1,517	3,232	7,871	3,574
Heat pump	-	-	-	-	-	-	-	-	-	205
Solar	-	-	-	-	-	-	-	-	-	495
Total	1,665	2,781	4,356	3,405	4,824	5,194	6,289	8,688	17,173	30,500
Registered certificates										
Renewable energy power stations	1,446	2,251	3,644	2,582	3,811	4,144	4,662	5,053	6,783	9,155
Small-scale systems	217	528	712	822	1,012	1,050	1,627	3,635	10,386	30,273
Small Generation Units	2	3	6	9	14	32	110	403	2,515	25,998
Hydro	-	-	-	-	-	-	-	-	-	-
Solar	1	3	6	9	14	32	110	402	2,513	25,985
Wind	0	0	0	0	0	0	0	1	1	13
Solar Water Heater	215	252	705	813	998	1,018	1,517	3,232	7,871	4,275
Solar Water Heater	215	252	705	813	998	1,018	1,517	3,232	7,871	3,574
Heat pump	-	-	-	-	-	-	-	-	-	205
Solar	-	-	-	-	-	-	-	-	-	495
Total	1,663	2,779	4,356	3,404	4,823	5,194	6,289	8,688	17,169	39,428
Certificates remaining										
Power stations [2] [6] [7]	2	2	0	1	1	0	0	0	4	75
Small-scale systems [3]	-	-	-	-	-	-	-	-	-	0

[1] One megawatt hour of renewable electricity generated or deemed to have been generated equals one certificate unless the Solar Credit multiplier applies.

[2] The measure commenced on 1 April 2001. The first compliance period in 2001 was nine months. All other compliance years are full calendar years.

[3] There are no remaining certificates for SWHs as the time allowed to create these has expired.

[4] The number of LGCs remaining can change if EGRs are amended or additional information is received by ORER for example, at the conclusion of an audit. Under section 19 of the Act nominated persons are no longer eligible to create LGCs in respect of the 2001-2010 generation years after 31 December 2011.

[5] This table now includes certificates from SWH installations split by air source heat pumps and solar. This was a legislation change commenced on 1 January 2011.

[6] For the 2010 generation year, less than 74,900 certificates remained uncreated by 26 registered persons, including three registered persons who failed to create certificates for eligible generation.

[7] For the 2010 generation year, 3,463 certificates were improperly created and became registered relating to four registered persons.

[8] This table includes all certificates that were registered under the Victorian Renewable Energy Target and transferred in the REC Registry for the 2008 - 2010 generation years.

Summary of AEAS and RESS compliance and assessment

AEAS and RESS assessments for 2001 – 2010 compliance years were analysed by ORER. Graph 11 represents the number of certificates that have been accepted to discharge a mandatory liability under the Act for the given compliance year against the legislated target.

AEAS and RESS liability and assessment

By 31 December 2011, a total of 46,381,109 certificates were accepted for surrender against the 2001 to 2010 compliance periods and banked against future liabilities. Certificates which have been accepted for surrender against future liabilities are carried forward surplus certificates. The carried forward surplus certificates can be used by relevant liable entities to discharge their liability for future compliance periods.

For the 2010 compliance period:

- ORER identified that 216,200,924 MWh of relevant acquisitions of electricity and 8,844,684 MWh of partial exemptions had been reported resulting in a reduced relevant acquisition amount of 207,356,240 MWh. This resulted in a liability of 12,399,901 certificates*. For more details see Table 9.
- A majority of AEAS/RESS assessments were submitted to ORER by the due date of 14 February 2011. A total of 81 liable entities were identified and were required to surrender certificates.
- Liable entities are permitted by the Act to provide certificates to redeem any outstanding shortfall charges in the immediate three years following the shortfall year. By 31 December 2011, the number of liable entities with a certificate shortfall for the 2001 – 2009 compliance periods was 11 and the total REC shortfall was 19,581 certificates.

* The sum of individual liability may produce a total liability greater or lesser than the liability calculated by multiplying total liable acquisitions by the 2010 Renewable Power Percentage (RPP). This is due to the rounding of individual liability to whole certificates.

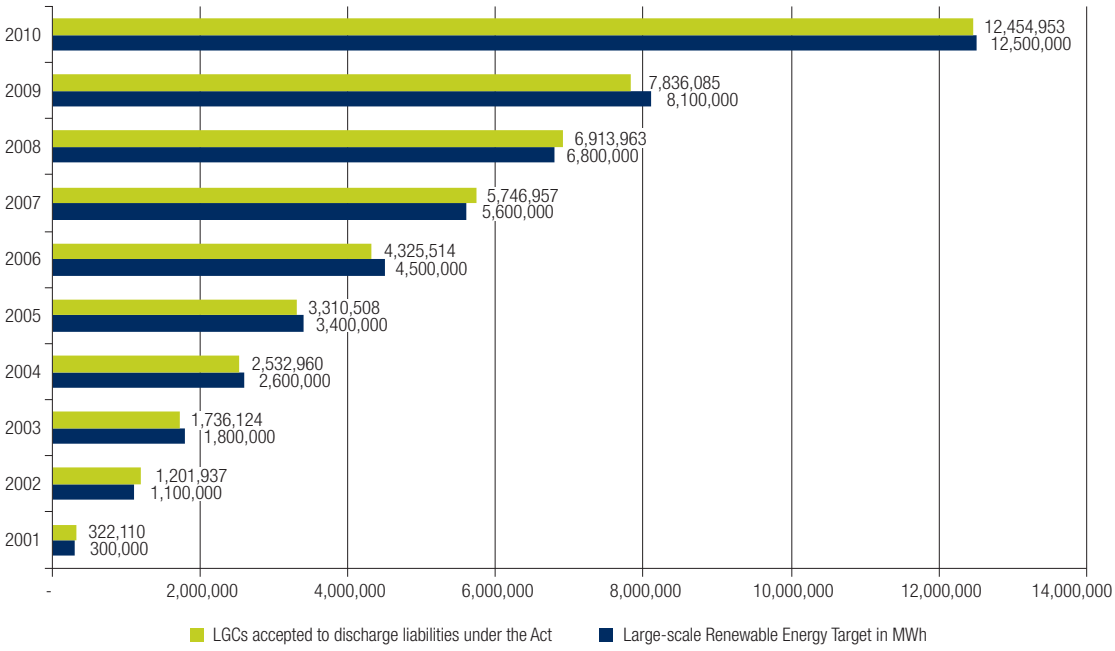
Table 9: Summary of certificate surrender for the 2010 compliance period as at 31 December 2011

Certificates surrendered against 2010 liability	12,454,953
Certificates surrendered against 2001 – 2009 liability	33,926,156
Total certificates surrendered against 2001 – 2010 (1)	46,381,109
Certificates surrendered against future liability	53,475
2010 liability acquitted by certificate surrender	99.21%
Liable entities with a 2010 liability	81
Liable entities with a 2010 shortfall	6
Liable entities with a 2001 – 2009 shortfall	11
LGC shortfall for 2010	9,346
Certificate shortfall for 2001 – 2009	19,581

(1) This includes certificates surrendered against future liability.

Note: Not all LGC shortfalls resulted in the payment of the penalty of $40 per MWh for 2001 to 2009 and $65 per MWh for 2010, as shortfalls within 10% of the total requirement are carried forward to next year's LGC liability.

Graph 11: LGC surrender against liability under the Act



Compliance with legislation

The below table shows the compliance activities ORER conducted on a monthly basis during 2011. These activities do not include ongoing investigations, desktop reviews or audits.

Table 10: Compliance activities January – December 2011

Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Site visits [1]	1	1	21	0	10	6	7	2	8	0	4	6	66
Pre-validation checks [2]	1,004	1,676	1,542	3,018	5,688	7,011	5,540	5,814	10,928	5,902	6,138	6,028	57,589
Outreach visits [3]	2	1	7	0	2	2	1	0	2	1	2	0	20
Warrants executed [4]	0	0	2	0	1	0	0	2	0	1	2	0	8
Compliance visits [5]	10	10	8	0	12	15	0	4	11	5	8	6	89
Enforceable undertakings [6]	1	3	1	3	0	4	0	0	0	3	0	0	15

[1] Site visits include physical visits to installation sites, but also include physical checks of sites where installations are viewed from the street to confirm that an installation has occurred.

[2] Pre-validation checks are checks carried out prior to the validation of certificates, these include telephone verification with the system owner, checks of aerial photography to verify installation, requests and review of compliance paperwork from Agents and physical site inspections.

[3] Outreach visits are visits to stakeholders that are not in response to a specific compliance issue and can be instigated either by ORER or at request from the stakeholder.

[4] Warrants executed refers to the execution of monitoring warrants under s125 of the Act.

[5] Compliance visits refers to visits to stakeholders in relation to specific compliance issues.

[6] The Regulator may accept an undertaking from a person that they will take specific action or refrain from taking specific action to comply with the Act or that the person will surrender one or more certificate to compensate for the creation of certificates that they were not entitled to create. If a person enters such an undertaking and the Regulator considers that the person has breached the undertaking the Regulator may apply to the federal court for enforcement of the order.

Inspections of small-scale solar panels, wind and hydro systems

The amendments to the Act in June 2010 required ORER to establish an inspection scheme for new installations of small-scale solar panels, wind and hydro systems. These systems are inspected under Section 23AAA for their compliance with the eligibility criteria to claim certificates. Small-scale solar panels are the most common installations on the rooftops of residential dwellings.

The Regulations establishing the inspection scheme were introduced in December 2010.

ORER contracted three service providers to inspect systems installed in New South Wales, the Australian Capital Territory, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Tasmania. The contractors were: Global Sustainable Energy Solutions, ECA Safety Connect and the Australian Solar Energy Society.

The locations and numbers of systems inspected are proportionate to the systems installed across Australia for which certificates have been created. The systems for inspection are randomly selected by ORER.

The first round of inspections commenced in mid-May 2011 and inspected systems installed between 30 June 2010 and 31 December 2010. The second round of inspections commenced in November 2011, inspecting systems installed between 1 January 2011 and 30 April 2011.

The inspections exclude small-scale solar panel installations for which Solar Homes and Communities Plan rebates were claimed as inspections of these installations were undertaken by the Department of Climate Change and Energy Efficiency.

Table 11: Number of final inspection reports received by ORER up to 22 December 2011

State	Unsafe*	Sub-standard*	Total number
NSW	17	122	458
NT	0	4	12
QLD	5	24	85
SA	5	8	23
VIC	1	7	59
WA	0	13	55
Total %	4%	26%	692

* As defined by the ORER inspection checklist

Liability assessment audits

In 2011, ORER initiated five field audits, visiting liable entities about their compliance obligations for the 2010 year. All audits were completed in 2011. One audit was completed relating to the 2009 compliance year. The audits were performed to substantiate information provided to the ORER and to determine compliance with the Act.

The field audits confirmed that all audited liable entities were reporting consistently and fully in accordance with the legislation. As in previous years ORER found that some liable entities appear to lack the proper internal procedures that would lead to efficient and accurate reporting of relevant acquisitions.

Compliance outcomes

The compliance activities undertaken by the compliance team have increased stakeholder awareness of their compliance obligations. The updated compliance web page and publishing of compliance statistics sends a clear message to stakeholders of ORER's commitment to ensuring compliance with the Act by all parties.

The compliance team actively investigates allegations of breaches of the Act. During 2011, the compliance team received 220 allegations and has 47 matters currently under investigation. A total of 174 matters were closed during 2011. The majority of matters requiring further attention in 2011 related to the improper creation of certificates for PV installations.

In support of investigations, the compliance team executed seven monitoring warrants, and one warrant under the Commonwealth Crimes Act was executed with the assistance of the Australian Federal Police.

Fifteen enforceable undertakings were agreed by the Regulator arising from the outcomes of investigations and 117 other matters were resolved by administrative action.

While the aim of the ORER is to achieve voluntary compliance, civil and criminal prosecutions are pursued in the more serious matters and in accordance with the Compliance and Enforcement Framework. One matter is currently being prosecuted by the Commonwealth Director of Public Prosecutions and one other matter is currently under consideration by the Australian Government Solicitor for the commencement of civil prosecution.

CHAPTER 3

Other activities

Amending the Act

ORER continues to work with the Department of Climate Change and Energy Efficiency to identify issues and develop solutions in respect of a variety of administrative matters related to the RET.

For information regarding the scope of the legislative changes visit the legislation pages on the ORER website.

Amending the Regulations

The Regulations were established on 6 February 2001, and have subsequently been amended several times.

During 2011, no amendments were conducted by ORER. Seven amendments were conducted by the Department of Climate Change and Energy Efficiency (DCCEE).

Table 12: Number of Regulation amendment rounds as at 31 December 2011

Year	Number of Regulation amendment rounds[1]		Total
	ORER[2]	DCCEE[3]	
2011	0	7	7
2001 – 2010	19	17	36
Total	**19**	**24**	**43**

1 Visit the ORER website for information on the amendment rounds.

2 The *Legislative Instruments Act 2003* allows proposed Regulation amendments which are of a minor or machinery nature and that do not substantially alter existing arrangements to be exempt from a public consultation process.

3 For information on these regulation and transitional provision regulation amendments contact the DCCEE Renewable Electricity Markets, Strategies and Coordination Division.

The Act is also supported by Regulations referred to as transitional provisions:

- *Renewable Energy (Electricity) Amendment (Transitional Provisions) Regulations 2010* that were made by DCCEE to support the 2010 Amendment Act by DCCEE. These Regulations were amended once in 2010 by DCCEE; and
- *Renewable Energy (Electricity) Amendment (Transitional Provisions) Regulations 2009* that were made by DCCEE to support the 2009 Amendment Act.

New amendments are expected each year to support the 2010 Amendment Act and to set future Renewable Power Percentages and Small-scale Technology Percentages.

REC Registry

The Act requires the Regulator to maintain seven registers by electronic means. The public registers are made available for this purpose, these sit in the REC Registry system which also allows for the online creation, registration, transfer, voluntary surrender and surrender of certificates. The REC Registry has been in operation since 1 April 2001.

The REC Registry was re-launched on 5 June 2006 at **www.rec-registry.gov.au**, following the awarding of the contract to develop and run the REC Registry software through to 31 July 2010 to AusRegistry International Pty Ltd. In 2011 the contract was extended through to 31 July 2013.

The REC Registry underwent its next major phase of development in 2010-2011, with the completion of the Enhanced Renewable Energy Target (ERET) Project in December 2011. The ERET project implemented the resulting changes from the June 2010 legislative amendments. Changes to the REC Registry included:

- implementation of three additional Registers
- certificates were split into LGCs and STCs
- a STC Clearing House function was introduced
- individual fuel source fee items were split out to comply with a mid-2011 policy announcement
- quarterly surrender of STCs was introduced.

Outside of the ERET Project scope, the REC Registry also underwent some minor architectural amendments to ensure continued performance and integrity of the system.

Advice to industry

ORER communicates regularly with stakeholders including circulating reminders of administrative, reporting and compliance requirements and to inform stakeholders of software upgrades to the REC Registry.

In 2011, a wide range of information was provided through ORER's website to advise participants of the framework and processes for participating in the LRET and SRES. Information regarding legislative updates is also sent directly to all REC Registry users via email when appropriate.

Working with industry

ORER has dedicated substantial resources to working with stakeholders to improve their understanding of the legislation and Regulations, facilitate involvement in the scheme and provide support throughout the measure.

In 2011, ORER continued positive interaction with participants to ensure all parties were familiar with their obligations and entitlements under the legislation. ORER continued to provide telephone/email assistance and met face to face with many stakeholders and interested parties. The Regulator and other senior staff also presented at several public forums. This extensive contact and feedback enables ORER and participants to refine and develop systems to better align with the requirements of the Act.

Working with Government agencies

ORER maintains strong links with the Department of Climate Change and Energy Efficiency, Department of Resources Energy and Tourism and the Department of Sustainability, Environment, Water, Population and Communities. ORER also liaises with other interested Commonwealth and State Government Departments and agencies. Some of these include NSW Greenhouse Gas Reduction Scheme, GreenPower, Queensland Gas Scheme, and the Western Australian Office of Energy and the Essential Services Commission Victoria.

Working with the community

ORER provides information to a variety of stakeholders, ranging from individuals wishing to create certificates for solar panels to special purpose interest groups and renewable energy power station proponents.

GLOSSARY

AAT
Administrative Appeals Tribunal

Accreditation
A process of determining if a power station is eligible to participate in the LRET and contribute to the achievement of annual targets

AEAS
Annual Energy Acquisition Statement

Agents
Agents are registered persons that are able to create certificates on behalf of owners of eligible small-scale installations who have assigned their right to create certificates to the Agent

Assessment year
The period, over which each annual target must be achieved, which, except for 2001, is a full calendar year and relates to the surrender of certificates by liable entities

Baseline
Baselines are determined by the Regulator for accredited power stations. Only renewable electricity generated above the annual baseline is eligible for certificates.
A baseline for a power station that first generated electricity on or after 1 January 1997 is zero

Certificate
Certificate refers to both large-scale generation certificates (LGCs) and small-scale technology certificates (STCs)

Compliance period
The period, over which each annual target must be achieved, which, except the 2001 year, is a full calendar year

DCCEE
Department of Climate Change and Energy Efficiency

EGR
Electricity Generation Return

EITE
Emissions-intensive trade-exposed

Eligibility
The eligibility to create certificates

Eligible entities
Parties that are eligible to create certificates for renewable electricity generated by accredited power stations or small-scale systems

Generation year
The period is a full calendar year and relates to the creation of certificates from eligible renewable energy power stations or small-scale system installations

kW
Kilowatt — one thousand watts

kWh
Kilowatt-hour — a measure of electricity generation or use. One thousand watt hours

LGC
Large-scale generation certificate (LGC) is an electronic certificate that may be created in the REC Registry by eligible entities for each megawatt hour of eligible renewable electricity generated from renewable energy power stations. LGCs may be traded separately from the physical electricity in the LGC market

LGSC
Large-scale Generation Shortfall Charge

Liability
The liability to surrender certificates or pay a renewable energy shortfall charge

Liable entities
Entities that make wholesale acquisitions of electricity

LRET
Large-scale Renewable Energy Target

Minister
Minister for Climate Change and Energy Efficiency

MWh
Megawatt-hour — a measure of electricity generation or use. One thousand kilowatt-hours

ORER
Office of the Renewable Energy Regulator

PEC
Partial Exemption Certificate

Prescribed Persons
Emissions-intensive trade-exposed entity eligible to apply for Partial Exemption Certificates

Nominated person
A nominated person is able to apply for accreditation of a power station under the Act. The nominated person can be the owner, operator or a stakeholder of the power station

REC
Renewable Energy Certificate. Due to amendments to the Act, RECs were divided into two certificate types and reclassified as large-scale generation certificates (LGCs) and small-scale technology certificates (STCs) effective from 1 January 2011.

REC Registry
Internet-based registry system, which is referred to as the REC Registry **www.rec-registry.gov.au**

Registered person
A person registered under Section 11 of the Act and listed in the Register of Registered Persons. Only registered persons are able to create certificates

Registration of certificates
The change in status required for a certificate to be traded and/or surrendered against a liability, which results from providing sufficient information to support the creation of certificates for validation and payment of a specified fee

Regulator
The Renewable Energy Regulator appointed under Section 143 of the Act

RESC
Renewable Energy Shortfall Charge. Due to amendments to the Act, the RESC was divided into two: the Large-scale Generation Shortfall Charge and the Small-scale Technology Shortfall Charge.

RESS
Renewable Energy Shortfall Statement

RET
Renewable Energy Target

RPP
Renewable Power Percentage

SGU
A small generation unit is a device that generates electricity using either hydro, solar or wind energy and can be a deemed unit under the Regulations

Shortfall Charge
Is the amount of charge payable under the appropriate Act for a LGC or STC shortfall were certificates were not surrendered by the annual reporting date or quarterly surrender period. A LGC shortfall, if calculated payable, relates to the Large-scale Generation Shortfall Charge under the *Renewable Energy (Electricity) (Large-scale Generation Shortfall Charge) Act 2000.* An STC shortfall relates to the Small-scale Technology Shortfall Charge under the *Renewable Energy (Electricity) (Small-scale Technology Shortfall Charge) Act 2010*

Small-scale system
A solar water heater or small generation unit installation that is eligible for REC creation. The eligibility requirements for small-scale systems are set out in the Regulations

SRES
Small-scale Renewable Energy Scheme

STC
The STC Clearing House facilitates the exchange of small-scale technology certificates (STCs) between buyers and sellers at the fixed price of $40 (excl. GST.)

STC Clearing House
The STC Clearing House facilitates the exchange of small-scale technology certificates (STCs) between buyers and sellers at the fixed price of $40 (excl.GST).

STSC
Small-scale Technology Shortfall Charge

SWH
A solar water heater is a device that heats water from solar energy and can only create STCs as a deemed unit under the Regulations. Solar water heaters that are eligible to create STCs are listed in the Register of Solar Water Heaters

SWH/SGUR
Solar Water Heater and Small Generation Unit Return

The Act
The *Renewable Energy (Electricity) Act 2000*

The Amendment Acts
The *Renewable Energy (Electricity) Amendment Act 2009* or the *Renewable Energy (Electricity) Amendment Act 2010*

The Charge Acts
The *Renewable Energy (Electricity) (Large-scale Generation Shortfall Charge) Act 2000* or the *Renewable Energy (Electricity) (Small-scale Technology Shortfall Charge) Act 2010*

The Regulations
The *Renewable Energy (Electricity) Regulations 2001*

Voluntary surrender
Section 28A allows a registered owner to offer certificates for surrender for any reason other than to comply with mandatory liabilities under Section 44 or 95. A certificate that is accepted for surrender under Section 28A is permanently removed from the certificate market