

Office of the Renewable Energy Regulator

Increasing Australia's renewable electricity generation

Annual Report 2008



About this Report

ORER's Annual Report 2008 has been prepared in accordance with the requirements of *section 105 Renewable Energy* (*Electricity*) *Act 2000.*

It is available in print from 39 libraries around Australia and the ORER Office. It is also available online at www.orer.gov.au/publications/index.html#annual-reports

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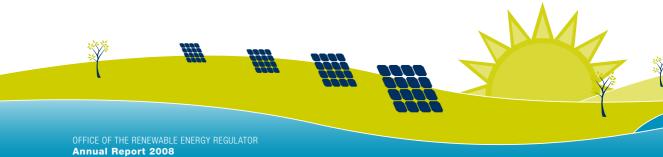
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Australian Government

Office of the Renewable Energy Regulato

Senator the Hon Penny Wong

Minister for Climate Change and Water

Dear Minister

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

This 2008 Annual Report focuses on the working of the *Renewable Energy (Electricity) Act 2000* for the 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

Amarjot Singh

Acting Renewable Energy Regulator

April 2009



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Welcome from the Regulator

The year 2008 saw significant Australian Government action on climate change with the launch of the White Paper on the Carbon Pollution Reduction Scheme and the circulation of the exposure draft legislation for the expanded national Renewable Energy Target (RET).

The draft RET legislation follows through on the Australian Government's commitment to ensuring 45,000 gigawatt hours (GWh), approximately 20 percent, of Australia's electricity supply comes from renewable energy by 2020. Expected to be in place by mid 2009, the RET legislation will be one of the key mechanisms for achieving substantial and sustainable growth in Australia's renewable energy sector.

ORER has already started work on examining processes for implementation of the expanded national RET and will be communicating with stakeholders following approval of the final legislation as to the processes and delivery of the expanded national RET scheme.

In 2008 investment in the renewable energy industry increased with several new renewable energy power stations and deemed units accredited under the Mandatory Renewable Energy Target (MRET). ORER accredited 16 more renewable energy power stations bringing the total number of accredited renewable energy power stations to 269. ORER estimates that total investment stands at approximately \$5 billion and

the generating capability of the system is in the order of 9,000,000 megawatt hours (MWh) of eligible renewable energy per typical year. This is equivalent to the residential electricity needs of over 1.4 million households.

It has been another busy year for ORER with a 20 per cent increase in the the 2008 target as compared to the 2007 target. MRET participants created nearly 9 million renewable energy certificates (RECs) and ORER staff validated on average 35,000 RECs each working day. More than 96,000 additional participants registered with the scheme and the number of RECs created in the 2008 year was approximately 2 million more compared with 2007.

Strong industry support of the MRET scheme is evidenced by nearly 100 percent compliance through RECs by wholesale electricity purchasers (liable parties) for 2007. Several liable parties, who had shortfalls in previous years made up their shortfalls by surrendering additional RECs in 2008. The renewable power percentage for 2008 was set at 3.14 percent of additional renewable electricity which resulted in a demand of 6.8 million RECs created by liable parties.

Voluntary surrender has proven a popular addition to the mandatory scheme with over 2.4 million RECs offered for voluntary surrender in 2008. A majority of these RECs were offered for voluntary surrender by GreenPower participants



4 in order to meet their compliance obligations under the GreenPower scheme. All registered owners of RECs can choose to voluntary surrender RECs for any reason including encouraging additional generation of electricity from renewable sources. RECs accepted for voluntary surrender are permanently removed from the REC market and this creates demand for RECs over and above the mandatory liability.

In 2008 ORER implemented a number of software changes to the REC Registry to make it more user friendly. The Register of Accredited Power Stations with renewable energy baselines was made available to public users through the REC Registry. ORER is working with REC Registry software designers to implement a number of enhancements that will ensure that requirements arising from expanded national RET are met.

We look forward to working with MRET stakeholders on the implementation of the expanded national RET scheme and playing a leading role in the growth of the renewable energy industry in Australia.

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Acting Renewable Energy Regulator

Annual Report 2008

Chapter 1 ORER and the MRET scheme

The 2008 Annual Report provides details on the administration of the *Renewable Energy (Electricity) Act 2000* during the 2008 calendar year.

MRET explained

The Australian Government's Mandatory Renewable Energy Target (MRET) has been introduced to encourage additional generation of electricity from renewable energy sources. The MRET legislation sets the framework for both the supply and demand of renewable energy certificates (RECs) via a REC market.

REC Demand - liable parties

The MRET places a legal liability on wholesale purchasers of electricity, defined as liable entities (liable parties) under the *Renewable Energy (Electricity) Act 2000*, to proportionately contribute towards the generation of **additional** renewable electricity.

Liable parties support additional renewable energy generation from renewable energy power stations, solar water heaters (SWHs) and small generation units (SGUs) through the purchase of RECs in the Internet Based Registry System (IBRS), commonly referred to as the REC Registry. This process is market driven with the price of RECs determined by supply and demand. The renewable power percentage establishes the rate of liability for each calendar year.

Liable parties are required to annually surrender the number of registered RECs equal to their liability for the previous calendar year. RECs that are marked as 'invalid due to surrender' by ORER are no longer available to reuse during the life of the MRET.

REC Supply - eligible parties

Eligible parties transfer RECs in the REC Registry to liable parties for a negotiated price.

Eligible parties include:

- renewable energy sourced power stations such as wind, hydro, landfill gas, solar and bagasse
- owners of SWHs and SGUs
- agents of SWHs and SGUs.

Eligible parties can create RECs for eligible renewable electricity generated above the accredited renewable energy power station's baseline or for eligible SWHs and SGUs. RECs that become registered are a tradable commodity in the REC market.

The RFC market

The Act allows for RECs to be electronically transferred between REC Registry account holders (typically between eligible and liable parties) listed in the REC Registry. 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 RECs determined by supply and demand. The transfer of RECs between liable and eligible parties is not a rebate but a financial transaction. The REC price is not regulated by ORER.



REC N

SUPPLY

Accreditation and REC validation

REGU (OF

Eligible Parties

- Accredited renewable power stations
- Eligible solar water heaters
- Eligible small generation units



Creation/sale

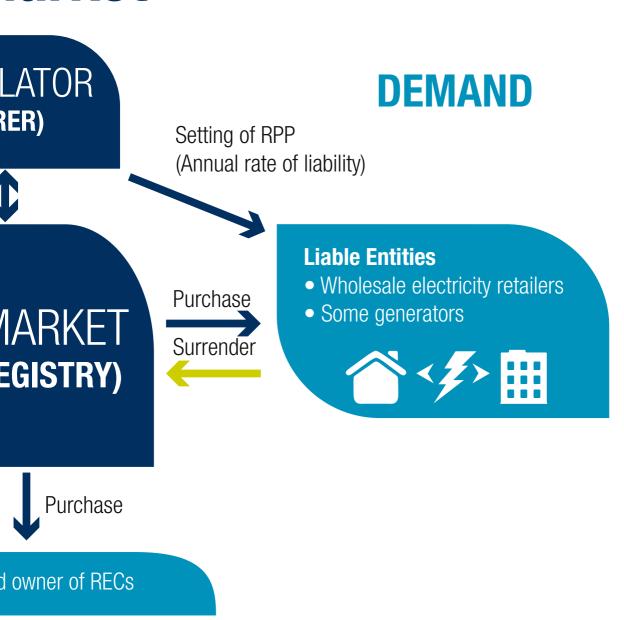
REC N (REC RI

Voluntary surrender

Any registered



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Baselines

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The main objective of the MRET is to encourage **additional** generation of electricity from renewable energy sources. During the accreditation process of a renewable energy power station the Regulator generally determines the baseline by using the average amount of annual electricity generated from eligible renewable energy sources over the 1994, 1995 and 1996 years. Eligible parties can only create RECs for electricity generated above the baseline.

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

The MRET process

The Act operates on a calendar year (1 January – 31 December). The process for participating in the MRET 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 RECs or make
 mandatory or voluntary REC surrender offers.
- lodge Registered Person Application with ORER and pay application fee — If individuals or companies wish to create RECs, a registered person application must be lodged with ORER and a \$20 application fee paid.
- 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 RECs can be created for eligible electricity generation above the renewable energy power station's baseline

- o create RECs for their own eligible deemed unit
- apply for registration as an agent. If successfully registered, an agent can create RECs on behalf of owners of deemed unit installations who assign their right to create RECs to the agent.

Registered RECs

RECs created by registered persons are checked and either validated or failed by ORER. For RECs to be registered they must be validated by ORER and the applicable registered person must pay an 8 cent registration fee per REC.

Registered RECs can be:

- **transferred** between parties who have an account in the REC Registry
- surrendered by liable parties to discharge their mandatory liability under the Act. RECs surrendered by liable parties 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 RECs can choose to make voluntary REC surrender offers for any reason, for example:
 - to encourage additional generation of electricity from renewable sources
 - o to reduce greenhouse gas emissions.

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

Reporting period

MRET participants are required to report their annual activities such as electricity generation, deemed unit REC 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. The *Renewable Energy (Electricity) Amendment Act 2006*, which incorporated a number of recommendations from the 2004 review process was compiled and established on 11 September 2006.

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
- to ensure that renewable energy sources are ecologically sustainable.

The Act, which established the market for RECs, came into effect on 1 April 2001.

The Act is supported by the *Renewable Energy (Electricity)* (Charge) Act 2000 (the Charge Act), which sets the Renewable Energy Shortfall Charge (RESC), payable where RECs are not surrendered. The RESC is currently set at \$40 per REC not surrendered to the Regulator. The Charge Act came into force in 2000, and was subsequently amended in 2001.

The Act is also supported by the *Renewable Energy (Electricity) Regulations 2001* (the Regulations), which provide more details on a number of issues, including eligibility criteria for renewable energy sources, criteria for accreditation of power stations and deemed units.

The Regulations were established on 6 February 2001, and have subsequently been amended twenty times, with new amendments expected each year. Up until 2008 the amendments to the Regulations predominantly included changes relating to SWHs, SGUs, and setting the renewable power percentage for a given year, allowing liable parties to calculate their REC liability. The amendments to the Act in September 2006 allowed the Register of SWHs to be updated with new models without amendments to the Regulations.

In combination the Act, the Charge Act and the Regulations set the framework for the implementation of the Australian Government's MRET.

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. Consequently ORER also publishes a separate 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, Minister for Climate Change and Water appointed Mr Amarjot Singh as the Acting Renewable Energy Regulator. Mr Singh took over from Mr Rossiter on 1 July 2008.

Role of the Regulator

The main roles of the Regulator are:

Maintaining a register of registered persons, accredited power stations, renewable energy certificates and applications for accredited power stations by electronic means

Under section 135 of the Act the Regulator must maintain a register of registered persons, accredited power stations, RECs and applications for accredited power stations. These registers are maintained and are 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

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Individuals and companies must be registered before they can seek accreditation of renewable energy power stations, create RECs above the renewable energy power station's baseline or create RECs for eligible deemed units. 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 MRET. Nominated persons of accredited renewable energy power stations can be eligible to create RECs 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 renewable energy certificates

RECs must be created by registered persons, pass through a validation test conducted by ORER and have a registration fee of 8 cents per REC registered paid by the registered person.

There are three types of registered persons:

- nominated persons for renewable energy power stations
- · individual owners of deemed units
- · agents for deemed units.

Registered RECs 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. RECs surrendered to discharge a mandatory liability incur an 8 cent fee per REC surrendered.

Monitoring and compliance

The Regulator is responsible for ensuring compliance and maintaining the integrity of the MRET scheme. This involves assessing and overseeing the submission of:

- Annual Electricity Generation Returns (EGR). Nominated persons for renewable energy power stations report their renewable electricity generation above the baseline and REC creation in the EGR
- Annual Solar Water Heater and Small Generation Unit Returns (SWH/SGUR). Agents report REC information with respect to the number of deemed units that were entitled to RECs
- Annual Energy Acquisition Statements (AEAS) and
 Renewable Energy Shortfall Statements (RESS). Liable
 parties are required to lodge an AEAS or RESS and
 acquit their liability by surrendering RECs and/or paying a
 Renewable Energy Shortfall Charge (RESC) in accordance
 with the Act. Liable parties that have a shortfall less than
 10 percent of the total liability in a given year are not
 required to pay the RESC and are allowed to carry forward
 the REC shortfall without paying the RESC. The RESC equals
 \$40 per REC not surrendered.

Field and desk audits under section 100 to 115 of the Act

Any information provided to the Regulator under the Act can be audited including information relating to accreditation, deemed units, eligible generation and electricity acquisition. ORER has developed a risk assessment methodology to select parties to be audited.

This methodology evaluates potential risks against various factors and the overall risk rating is used to select the parties for audit. 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 and eligible parties understand the application of the MRET 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 liable parties appear to lack the internal procedures that would lead to efficient and accurate reporting of relevant acquisitions.

Role of ORER

ORER assists the Regulator in:

- registration of individuals or companies seeking to become registered persons
- · accreditation of eligible renewable energy power stations
- · overseeing the validation of RECs
- overseeing the acceptance of RECs offered under section 28A of the Act
- imposing any penalties for non-compliance with the provisions of the legislation
- allowing liable parties to redeem any RECs, if shortfalls are made up within three years of the shortfall year
- ensuring the integrity of the measure by undertaking audits of participants including eligible and liable parties
- maintaining and updating the REC Registry, accessible at www.rec-registry.gov.au. This includes releasing software upgrades and maintaining the publicly available registries

- providing industry and other stakeholders with appropriate advice about the measure
- providing information to public users and stakeholders about MRET on ORER's website www.orer.gov.au.

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. For example, an assessment made under the Act (eg. an assessment of renewable energy certificate shortfall or decision to not register a renewable energy certificate) is a reviewable decision.

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 fully, and 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 ask an ORER officer who was not involved in the original decision to assist in the review. Once the Regulator has reviewed the original decision, having regard to the reviewing officer's recommendation, and made a decision (the 'review decision') to confirm, vary or set aside the original decision, the person seeking the review will be informed in writing, explaining the reasons for the review decision; or the original decision is confirmed if the Regulator does not give written notice of the review decision within 60 days of the request.

If after receiving the review decision the affected person is not satisfied with that decision, the person 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, under section 66 of the Act, and information for the 2008 year is as follows:

Approve or refuse an application for registration as a registered person

The Regulator may register a person as specified under section 11 of the Act. In 2008 no requests to review a decision under this category were lodged with ORER.

Approve or refuse provisional accreditation of renewable energy power station application

The Regulator may provisionally accredit a renewable energy power station as specified under section 12B of the Act. In 2008 no requests to review a decision under this category were lodged with ORER.

Determining certain matters relating to an application for accreditation of a renewable energy power station

Under section 14 of the Act the Regulator determines whether information provided in the application for accreditation of a renewable energy power station is sufficient to consider the application and may request further information. In 2008 no requests to review a decision under this category were lodged with ORER.

Approve or refuse accreditation of renewable energy power station application

The Regulator may accredit a renewable energy power station as specified under section 15 of the Act. In 2008, no requests to review an accreditation decision were lodged with ORER.

In 2007, one company submitted a request for review in respect of an accreditation decision. In the one case for review, the company submitted its request within the allowable timeframe, in accordance with section 66 of the Act. The review was finalised in 2008. The company then lodged an appeal for review of the power station accreditation decision before the Administrative Appeals Tribunal (AAT).

On 13 May 2008 the AAT set aside the decision and determined that the application for accreditation of the power station was approved.

Amending electricity generation returns

Under section 20A of the Act the Regulator may choose to amend an Electricity Generation Return (EGR) for an accredited power station. In 2008 no requests to review a decision relating to amending electricity generation returns were lodged with ORER.

Approve or refuse to register RECs

The Regulator may refuse to register a REC under section 26 of the Act. In 2008 no requests to review a decision under this category were lodged with ORER.

Suspending a registered person

Under section 30 and 30A of the Act the Regulator may suspend the registration of a person for a period of time or indefinitely. In 2008 no registered persons were suspended and no requests to review a decision under this category were lodged with ORER.



Approve or refuse to change a nominated person for an accredited renewable energy power station

The Regulator may refuse to change a nominated person for an accredited renewable energy power station as specified under section 30B of the Act. In 2008 no requests to review a decision under this category were lodged with ORER.

Approve or refuse to vary what constitutes components of an accredited renewable energy power station

The Regulator may refuse to vary components of an accredited renewable energy power station for the purposes of this measure as specified under section 30C (1) of the Act. In 2008 no applications were made to review a decision under this category were lodged with ORER.

Suspending the accreditation of a renewable energy power station

The Regulator may suspend the accreditation of a renewable energy power station for the purposes of this measure as specified under section 30D or 30E of the Act. In 2008 no accredited renewable energy power stations were suspended and no requests to review a decision under this category were lodged with ORER.

Requesting to vary an accredited renewable energy power station's baseline

The Regulator may increase or decrease a renewable energy power station's baseline for the purposes of this measure as specified under section 30F of the Act. In 2008 no requests to vary a renewable energy power station's baseline were received and no requests to review a decision under this category were lodged with ORER.

Amending annual energy acquisition statements

Under section 45A the Regulator may choose to amend an annual energy acquisition statement for wholesale acquisitions of electricity relating to liable parties. In 2008 no requests to review a decision under this category were lodged with ORER.

Assessing a penalty charge where an arrangement to avoid a renewable energy shortfall charge occurred

Under section 102 the Regulator may assess and enforce a penalty charge where a liable party has made an arrangement to avoid a renewable energy shortfall charge. In 2008 no such assessments were made and no requests to review a decision under this category were lodged with ORER.



Chapter 2 2008 activity

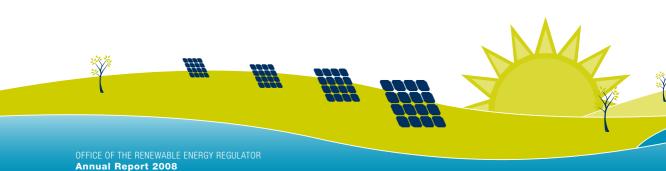
Summary of 2008

The Act operates on a calendar year basis. This report focuses on the operation of the Act between 1 January and 31 December 2008. In some areas, previous year's data is provided for comparison purposes.

2008 Activity	
Number of registered person applications approved	173
Number of applications for renewable energy power stations accredited	16
Number of RECs created	8,921,231
Number of SWH & SGU installations that created RECs in 2008	96,000
Busiest month for REC creation	November
Number of REC transfer transactions in the REC Registry	2,793
Number of RECs accepted for surrender for the 2007 compliance year*	5,746,957
Number of RECs accepted for voluntary surrender	2,400,405
Number of liable parties with a 2007 shortfall	3
2007 liability acquitted by REC surrender	99.45%

2001 – 2007 Activity	
Number of registered persons approved	441
Number of applications for renewable energy power stations accredited	253
Number of RECs created	28,190,050
Number of SWH & SGU installations that created RECs	214,000
Busiest month for REC creation – 2007 only	November
Number of REC transfer transactions in the REC Registry	5,726
Number of RECs accepted for surrender for the 2001 – 2006 compliance years*	13,429,151
Number of RECs accepted for voluntary surrender	1,525
Number of liable parties with a REC shortfall for the 2001 – 2006 compliance periods	39
Average liability acquitted by REC surrender for the 2001 – 2006 compliance periods	98.35%

^{*} This includes RECs surrendered against future liability.



Registration of persons

During 2008, ORER processed 173 applications to be a registered person. The registrations covered a range of individuals and companies seeking to create RECs for renewable energy power stations or deemed units.

As at December 2008, the total number of registered persons since commencement of the scheme reached 614.

Accreditation of power stations

As at 31 December 2008 ORER had received 311 applications for accreditation of renewable energy power stations since the establishment of the scheme. Of these applications:

- 269 renewable energy power stations were accredited and eligible to create RECs from eligible renewable energy sources under the Act. This includes 16 renewable energy power stations that were accredited in 2008
- 12 renewable energy power stations were de-accredited as they failed to comply with relevant sections of the Act or were decommissioned

- 4 applications for accreditation of renewable energy power stations were rejected
- 3 renewable energy power stations withdrew their applications from the accreditation process
- 23 renewable energy power stations remain pending accreditation as additional information from the applicants or third party approvals is still required, prior to the Regulator's decision to approve or refuse the application for accreditation.

In 2008, no accredited power stations were suspended under section 30D or 30E of the Act. Nor were any accredited power stations suspended for non compliance under section 20 of the Act - lodging an EGR.

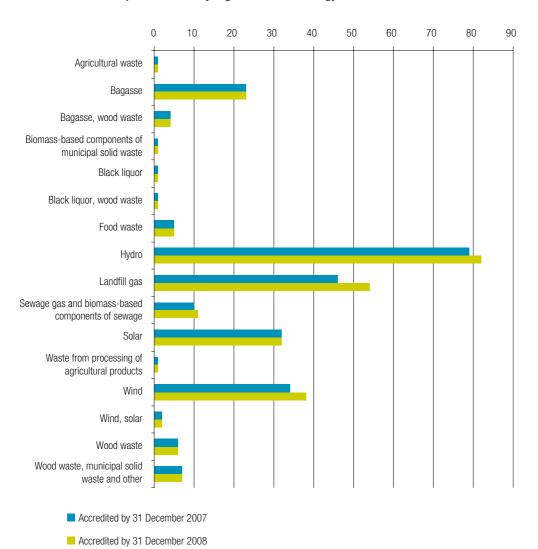
Number of renewable energy power stations accredited in 2008

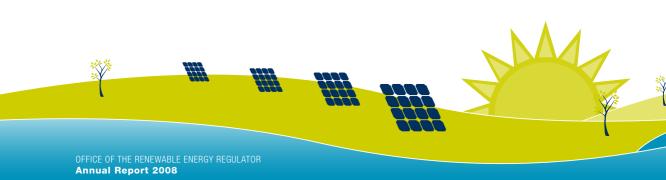
Renewable Energy Source	Accredited in 2008
Hydro	3
Landfill gas	8
Sewage gas and biomass-based components of sewage	1
Wind	4

Comparative number of accredited renewable energy power stations

Renewable Energy Source	Accredited by 31 December 2007	Accredited by 31 December 2008		
Agricultural waste	1	1		
Bagasse	23	23		
Bagasse, wood waste	4	4		
Biomass-based components of municipal solid waste	1	1		
Black liquor	1	1		
Black liquor, wood waste	1	1		
ood waste	5	5		
Hydro	79	82		
_andfill gas	46	54		
Sewage gas and biomass-based components of sewage	10	11		
Solar	32	32		
Naste from processing of agricultural products	1	1		
<i>W</i> ind	34	38		
Wind, solar	2	2		
Nood waste	6	6		
Nood waste, municipal solid waste and other	7	7		
Total	253	269		

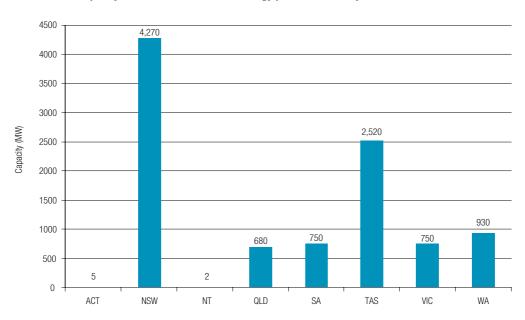






Fuel Source(s)	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Grand Total
Agricultural waste							1		1
Bagasse		1		21				1	23
Bagasse, wood waste		2		2					4
Biomass-based components of municipal solid waste		1							1
Black liquor							1		1
Black liquor, wood waste		1							1
Food waste		1	1					3	5
Hydro	1	27		9		30	12	3	82
Landfill gas	2	12	1	11	4	3	12	9	54
Sewage gas and biomass-based components of sewage		3		4		1	2	1	11
Solar	1	11	5	4	3		4	4	32
Waste from processing of agricultural products				1					1
Wind		4		2	9	4	8	11	38
Wind, solar				1			1		2
Wood waste		1		2	1	1		1	6
Wood waste, municipal solid waste and other		5		1			1		7
Total	4	69	7	58	17	39	42	33	269

Installed MW capacity of accredited renewable energy power stations by state as at 31 December 2008*



 $^{^{\}star}$ This excludes renewable energy sources that are used in co-firing processes



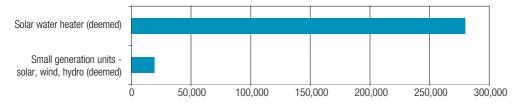


SWH and SGII installations

18

From 1 April 2001 to 31 December 2008 more than 310,000 deemed unit installations created RECs in the REC Registry. Of these, more than 83,000 SWH and 13,000 SGU installations created RECs between 1 January 2008 and 31 December 2008.

Number of deemed unit installations that created RECs up to 31 December 2008



^{*} Excludes failed installations

Assessing the validity of created renewable energy certificates

A total of 37.111.281 RECs had been created in the REC Registry as at 31 December 2008. Of these, 8,921,231 RECs were created between 1 January 2008 to 31 December 2008. In accordance with the legislation, only registered RECs created between 2001 – 2008 could be used to acquit a liable party's 2008 REC liability.

As at 31 December 2008, there were:

- 13,614,015 registered RECs
- 295,275 RECs pending registration
- 19,176,108 RECs accepted for surrender by ORER against the 2001 – 2007 liability compliance periods. These RECs are marked 'invalid due to surrender' in the REC Registry
- 3,522 RECs pending voluntary surrender (section 28A)

- 2,398,408 RECs accepted under section 28A of the Act for voluntary surrender. These RECs are marked 'invalid due to voluntary surrender' in the REC Registry
- 1.626.998 RECs were failed. These RECs are marked 'invalid due to audit' in the REC Registry.

A wide range of eligible renewable energy sources were used to create RECs in 2008. Not all accredited renewable energy power stations, agents or individuals created RECs in 2008.

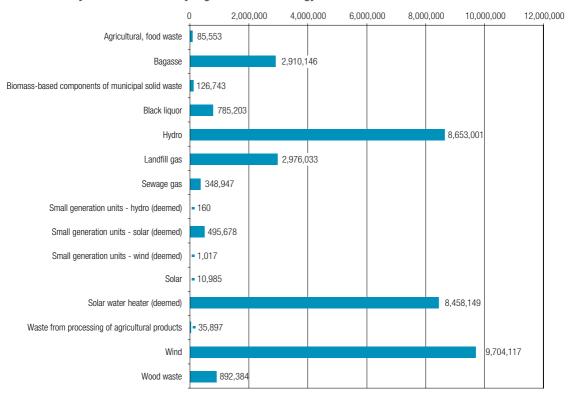
Under section 19 of the Act, RECs may be created at any time after the generation of the final part of the electricity in relation to which it is created, and before the end of the year after the year of generation. Accredited renewable energy power stations are required to create RECs for eligible renewable electricity generated above the renewable energy power station's baseline for 2007 generation year by the 31 December 2008 deadline.

^{**} Of the SGU installations solar makes up 99.35 percent of the installations followed by wind (0.63 percent) and hydro (0.02 percent)

Renewable energy power stations that did not create RECs within the allowed timeframe are no longer eligible to create RECs for the eligible renewable electricity generated in the 2007 generation year. ORER estimates that less than 100 RECs remained uncreated by registered persons for the 2007 generation year.

Under section 21 of the Act, eligible SWH installation RECs must be created within 12 months of the installation date. If agents or individuals do not create RECs within the allowed timeframe they are no longer eligible to create RECs for their SWH installation.

RECs created by 31 December 2008 by eligible renewable energy sources1



¹ Excluding 'invalid due to audit' RECs



Under regulation 19D of the Regulations for section 23A of the Act, eligible SGUs installed on or after 6 October 2007 must create RECs:

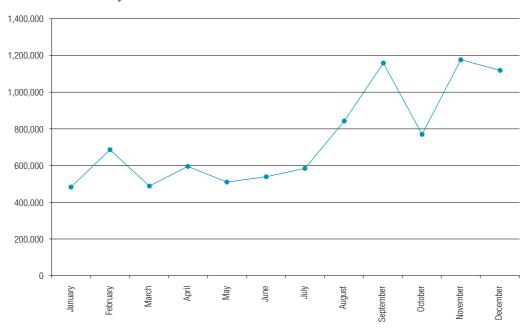
- within 12 months of the installation date for a one year or five year period
- at the end of the period that the right was exercised to create RECs. For example a person created RECs for an installation for one year. At the end of that period the person may create RECs for another year until the end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

If agents or individuals do not create RECs within the allowed timeframe they are no longer eligible to create RECs for their SGU installation.

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

As was the case in previous years, ORER recommended that registered persons create their eligible RECs by 14 December 2008 in order to ensure RECs could be validated by the ORER through an validation process in January 2009 and be available for trading to liable parties prior to the compliance date of 16 February 2009. In 2008 there was a prompt response from registered persons to create RECs by 14 December 2008. As a result, the vast majority of the RECs created in December 2008 were registered prior to 14 January 2009.

RECs created in 2008 by month



The REC market

A total of 8,519 REC transfers took place in the REC Registry as at 31 December 2008, representing a total of 57,693,547 RECs. Of these, 2,793 REC transfers occurred in 2008, representing a total of 17,243,633 RECs.

As at 31 December 2008, there were:

- 8,258 accepted transfers, representing 55,624,383 RECs
- 181 transfers cancelled by the sellers, representing 1,421,277 RECs
- 62 transfers rejected by the buyers, representing 580,827 RECs
- 18 pending action transfers, representing 67,060 RECs.

Number of REC transfers by month





22 **Compliance and assessment of** annual returns and statements

The 2008 compliance period commenced on 1 January 2008 and ended on 31 December 2008. The due date for the lodgement of the EGR, SWH/SGUR, AEAS and RESS for the 2008 compliance period was 16 February 2009. Comprehensive details regarding the 2008 compliance period will be provided in the 2009 Annual Report.

The 2007 compliance period commenced on 1 January 2007 and ended on 31 December 2007. The due date for the lodgement of the EGR, SWH/SGUR, AEAS and RESS for the 2007 compliance period was 14 February 2008.

Summary of EGR and SWH/SGUR compliance and assessment

EGRs and SWH/SGURs assessments for 2001 - 2007 generation years (or compliance years) were analysed and the number of RECs that remained uncreated are seen below. The table demonstrates the:

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

Comparing REC eligibility and registered RECs by generation years to view RECs remaining

Category	2001 ⁽²⁾ '000	2002 '000	2003 '000	2004 '000	2005 '000	2006 '000	2007 '000
REC eligibility (1)	1000	1000	1000	1000	1000	1000	1000
Deemed units	217	528	712	821	1,011	1,050	1,625
Renewable energy power stations	1,448	2,253	3,644	2,583	3,812	4,144	4,662
Total	1,665	2,781	4,356	3,404	4,823	5,194	6,287
Registered RECs							
Deemed units	217	528	712	821	1,011	1,050	1,625
Renewable energy power stations	1,446	2,252	3,644	2,583	3,812	4,144	4,662
Total	1,663	2,780	4,356	3,404	4,823	5,194	6,287
RECs Remaining							
Deemed units (3)	-	-	-	-	-	-	-
Renewable energy power stations (4)	2	1	-	-	-	-	-

Notes

- ¹ One megawatt hour of renewable electricity generated or deemed to have been generated eguals one REC.
- ² The measure commenced on 1 April 2001. The first compliance period being 2001 was 9 months. All other compliance years are full calendar years.
- 3 There are no remaining RECs for SWHs as the time allowed to create these deemed units has expired. From 6 October 2007 there are no RECs remaining for SGUs as the time allowed to create these deemed units has expired. From 1 April 2001 to 5 October 2007 there still could be RECs remaining for SGUs if eligibility requirements are met. There is no data available to report the number of RECs remaining for this category.
- 4 The number of RECs remaining can change if EGRs are amended or additional information is received by ORER for example, at the conclusion of an audit. However, under section 19 of the Act nominated persons are no longer eligible to create RECs in respect of the 2001-2007 generation years after 31 December 2008.

EGR compliance and assessment

By 31 December 2008 a total of 253 EGRs were received for the 2007 generation year. Assessment of the EGRs continued throughout the 2008 calendar year until all EGRs were completed. A confirmation of the assessed EGRs was provided to the relevant company contact.

SWH/SGUR compliance and assessment

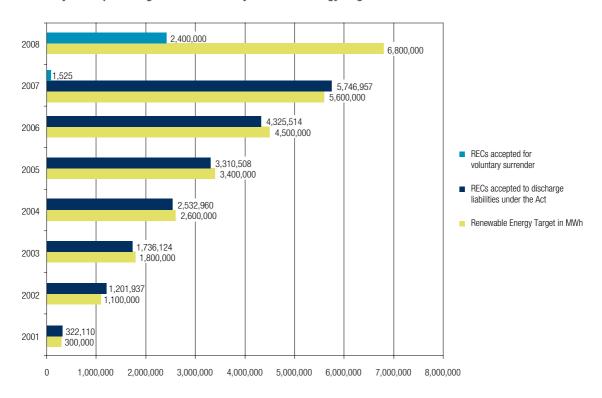
By 31 December 2008 a total of 37 SWH/SGURs were received for the 2007 compliance period (or generation year). All completed SWH/SGURs received by ORER were assessed by July 2008 with confirmation of the assessment provided by ORER to the relevant company contact.

Summary of AEAS and RESS compliance and assessment

AEAS and RESS assessments for 2001 – 2007 compliance years were analysed by ORER. The below graph represents the number of RECs that have been accepted for voluntary surrender and to discharge a mandatory liability under the Act for the given compliance year against the legislated target.

In the below graph the number of 2008 RECs accepted for voluntary surrender and the 2008 mandatory renewable energy target are illustrated. The 2008 AEAS and RESS assessments will be finalised during 2009 and the RECs offered to discharge these liabilities will be accepted. Approximately 6.79 million RECs were offered to discharge 2008 liabilities under the Act between 1 January 2009 and 16 February 2009. These activities will be reported in the 2009 Annual Report.

Summary of compliance against the Mandatory Renewable Energy Target as at 31 December 2008





24 AEAS and RESS compliance and assessment

By 31 December 2008, a total of 19,176,108 RECs were accepted for surrender against the 2001 to 2007 compliance periods and banked against future liabilities. RECs that have been accepted for surrender against future liabilities are carried forward surplus RECs. The carried forward surplus RECs can be used by relevant liable parties to discharge their liability for future compliance periods.

For the 2007 compliance period ORER identified that 212,634,530 MWh of electricity had been reported in liable acquisitions. This resulted in a liability of 5,741,131 RECs².

For the 2007 compliance period the majority of the AEAS/ RESS were submitted to ORER by 14 February 2008, (the due date). A total of 70 liable parties were identified and were required to surrender RECs.

For the 2007 compliance period, only 3 out of the 70 liable parties had individual shortfalls. The 2007 shortfall was effectively 6,333 RECs. As on 31 December 2008 more than 99.45 percent of the 2007 liability was met by the surrender of RECs.

In addition to addressing 2007 liabilities, liable parties are permitted by the Act to provide RECs to redeem any outstanding shortfall charges in the immediate three years following the shortfall year. During the 2007 compliance period assessment, REC shortfalls were reviewed for 2004 – 2006. Two liable parties redeemed 2005 and 2006 REC shortfalls and two liable parties acquitted carried forward REC shortfalls.

By 31 December 2008, the number of liable parties with a REC shortfall for the 2001 – 2006 compliance periods was 9 and the total REC shortfall was 1,543 RECs.

Summary of REC surrender for the 2007 compliance period as at 31 December 2008

RECs surrendered against 2007 liability	5,746,957
RECs surrendered against 2001 – 2006 liability	13,393,095
RECs surrendered against future liability	36,056
REC surrender 2001-2007	19,176,108
2007 liability acquitted by RECs surrender	99.45%
Parties with a 2007 liability	70
Parties with a 2007 shortfall	3
Parties with a 2001 – 2006 shortfall	9
REC shortfall for 2007	6,333
REC shortfall for 2001 – 2006	1,543

Note: Not all shortfalls resulted in the payment of the penalty of \$40/MWh, as shortfalls within 10% of the total requirement are carried forward to next year's REC liability.

Field and desk audits

In 2008 ORER initiated 3 field audits for liable parties.

All field audits related to the 2007 compliance period liability. Two audits were completed in 2008 and one is to be conducted in 2009. 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 parties were reporting consistently and in accordance with the legislation. However, as in previous years, ORER found that some liable parties appear to lack the proper internal procedures that would lead to efficient and accurate reporting of relevant acquisitions.

² The sum of individual liability may produce a total liability greater or lesser than the liability calculated by multiplying total liable acquisitions by the 2007 Renewable Power Percentage (RPP). This is due to the rounding of individual liability to whole RECs.



Chapter 3 Other activities

Amending the Act

ORER continues to work with the Department of Climate Change, which incorporates the former Australian Greenhouse Office, to identify issues and develop solutions in respect of a variety of administrative matters related to the MRET.

The current target for 2010 is 9,500 GWh and is set to increase five fold given the Australian Government's commitment to a target of 45,000 GWh additional renewable energy in Australia's electricity supply by 2020.

Design of the expanded Renewable Energy Target (RET) is underway. Draft legislation was released for public comment in December 2008. Legislative and regulatory amendments to implement the design of the RET are expected to be in place by mid-2009, with the revised annual targets commencing from 2010.

Amending the Regulations

The Regulations, which were first established on 6 February 2001 were amended once during 2008. This was in addition to the nineteen amendments until 31 December 2007.

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

Amendment round twenty, was minor and machinery in nature and was not provided for public consultation prior to the amendments.

The amendment specified the renewable power percentage for 2009 as 3.64% as compared to 3.14% for 2008. Regulation 23 of the Regulations specifies previous renewable power percentages that have been set.

Regulation amendments in 2008

Activity	Round Twenty
Federal Executive Council Meeting	12 December 2008
Amendment regulations registered	18 December 2008
Amendment regulations tabled in the House of Representatives	3 February 2009
Amendment regulations tabled in the Senate	3 February 2009

Note: See Annual Reports from previous years for details of rounds one to nineteen

REC Registry

The Act requires the Regulator to maintain four registers by electronic means. A REC Registry is made available for this purpose and also allows for the online creation, registration, transfer voluntary surrender and surrender of RECs. The REC Registry has been in operation since 1 April 2001.

The REC Registry was 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.

One scheduled upgrade to the software was released in 2008. Version 1.4, which was released on 18 December 2008, included several changes which stem from the *Renewable Energy (Electricity) Amendment Act 2006.* The most notable of these changes was the addition of new functionality to view the annual baselines in the Register of Accredited Power Stations.



26 **Advice to industry**

ORER placed a number of public notices in 2008 to remind stakeholders of the annual reporting and compliance requirements and to inform stakeholders of software upgrades to the REC Registry.

In addition, a wide range of information was provided through ORER's website, www.orer.gov.au, to advise the participants of the framework and processes for participating in the MRET. Information was also sent directly to all REC Registry users via email on a number of occasions.

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 2008, ORER continued the positive interaction with the 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 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 the Department of the Environment, Water, Heritage and the Arts. ORER also liaises with other interested Commonwealth and State Government Departments and agencies. Some of these include NSW Greenhouse Gas Abatement Scheme, GreenPower, Queensland Gas Energy Certificate Scheme, Victorian Mandatory Renewable Energy Target and the Western Australian Sustainable Energy Development Office.

Working with the community

ORER provides information to a variety of stakeholders. ranging from individuals wishing to create RECs for SWHs, to special purpose interest groups.



Glossary 27

AAT

Administrative Appeals Tribunal

Accreditation

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

AEAS

Annual Energy Acquisition Statement

Agents

Agents are registered persons that are able to create RECs on behalf of owners of eligible solar water heater or small generation unit installations

Baseline

During the accreditation process of a power station the Regulator determines the baseline by generally using the average amount of annual electricity generated from eligible renewable energy sources over the 1994, 1995 and 1996 years. Eligible power stations can only create RECs for electricity generated above the baseline.

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

Compliance period

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

Deemed unit

A solar water heater or small generation unit installation that is eligible for REC creation. The eligibility requirements for deemed units are set out in the Regulations

EGR

Electricity Generation Return

Eligibility

The eligibility to create RECs

Eliqible Parties

Parties that are eligible to create RECs for renewable electricity generated by accredited power stations or for deemed units

IBRS

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

kW

Kilowatt-one thousand watts

kWh

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

Liability

The liability to surrender RECs or pay a renewable energy shortfall charge

Liable Parties

Parties that make wholesale acquisitions of electricity

Minister

Minister for Climate Change and Water

MWh

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

ORER

Office of the Renewable Energy Regulator

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



28 **REC**

Renewable energy certificate is an electronic certificate that may be created, on the REC Registry, by eligible parties for each megawatt hour of eligible renewable electricity generated or deemed to have been generated. RECs may be traded separately from the physical electricity market

MRET

Mandatory Renewable Energy Target, enacted through the Act and the Regulations

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 RECs

Regulator

The Renewable Energy Regulator appointed under section 143 of the Act to oversee the achievement of the MRET

RESC

Renewable Energy Shortfall Charge

RESS

Renewable Energy Shortfall Statement

RPP

Renewable Power Percentage sets the rate of liability, achieves the legislated targets and must be published in the Regulations prior to 31 March of the year it applies to

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

SWH

A solar water heater is a device that heats water from solar energy and can only create RECs as a deemed unit under the Regulations. Solar water heaters that are eligible to create RECs 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 Charge Act

The Renewable Energy (Electricity) (Charge) Act 2000

The Regulations

The Renewable Energy (Electricity) Regulations 2001

Voluntary REC surrender

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



Notes



Notes

