



SGU Owners Guide

MRET PROCESS FOR OWNERS OF SMALL GENERATION UNITS (SGUs)

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Options for gaining financial benefits from your RECs

The Mandatory Renewable Energy Target (MRET) scheme does not provide a rebate. The purchase of a SGU may entitle you to renewable energy certificates (RECs) if your SGU is eligible. These certificates can then be sold and transferred to liable parties on a market based online system called the REC Registry.

For more information about MRET visit – [MRET explained](#)



You must be the owner of the system at the time it is installed to be entitled to assign or create RECs. In some circumstances where the SGUs are installed in new buildings, this can be the builder or property developer.

There are two options for reimbursement of your RECs under the MRET scheme:

OPTION 1 - AGENT ASSISTED

Find an agent and assign your RECs to the agent in exchange for a financial benefit which could be in the form of a delayed cash payment or upfront discount on your SGU. A majority of owners take this option.

OPTION 2 – INDIVIDUAL TRADING

Create the RECs yourself. Sell and transfer them in the REC Registry.

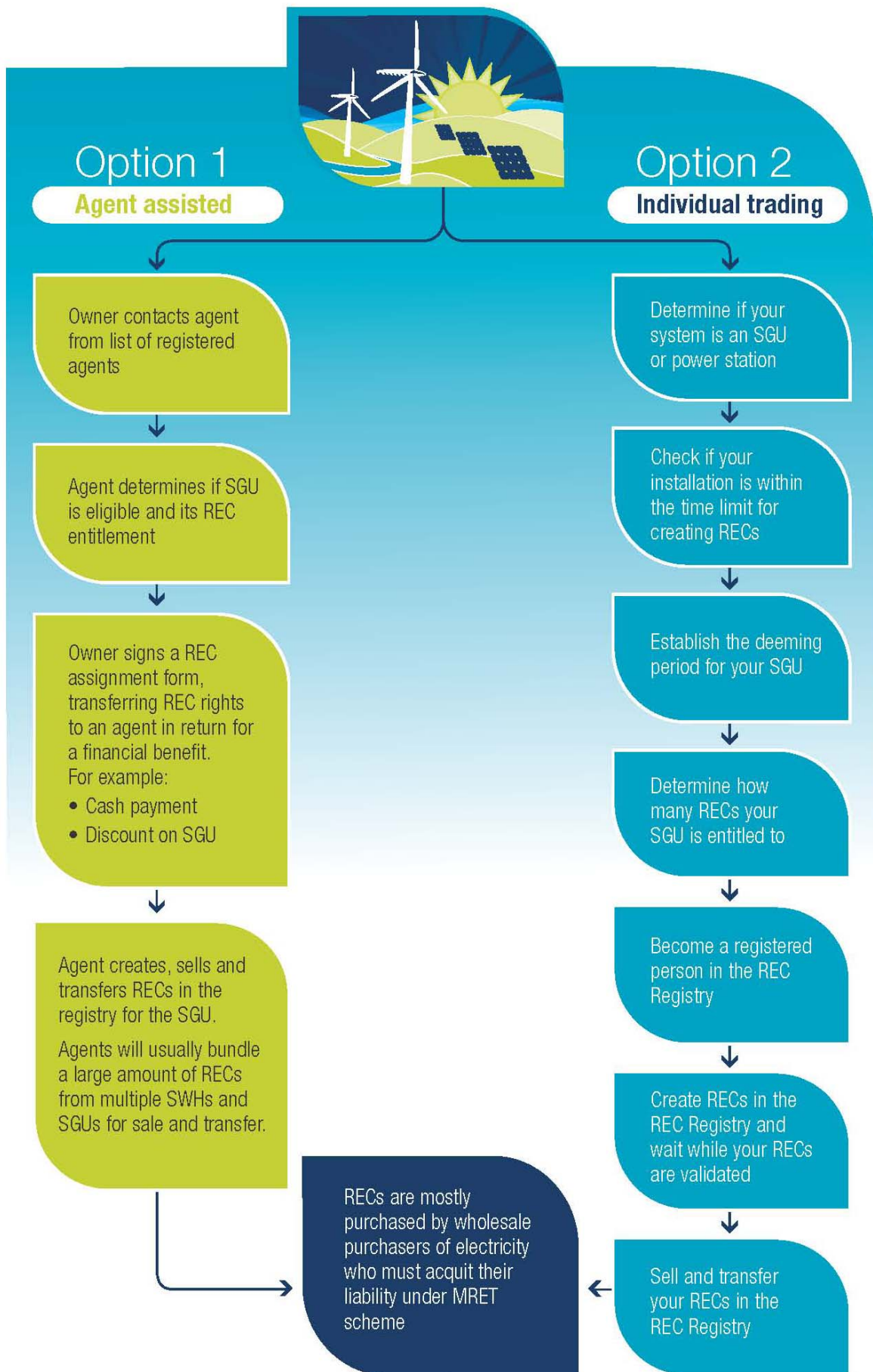
RECs defined

The commodity in the REC market is the Renewable Energy Certificate (REC) - each REC represents the equivalent of 1 MWh of electricity generation from an eligible renewable energy source.

The number of RECs that a SGU is entitled to is calculated by determining the amount of electricity the SGU produces over a determined period (called a deeming period) given that the installation and ongoing use of the system will reduce demand on the electricity grid.



SGU process – Options for gaining financial benefits from your RECs





GAINING FINANCIAL BENEFITS FROM YOUR RECS: OPTION 1

Agent Assisted

A majority of owners of SGUs find it convenient to assign their rights to create RECs at the point of purchase to a registered agent. A registered agent will:

- Determine whether your SGU is eligible for the MRET
- Determine for you how many RECs your SGU is entitled to under the MRET scheme
- Offer a financial benefit to you. This may be in the form of a cash payment or discount on your SGU.

It is important to note that agents list different prices and payment processes for RECs. After buying the RECs from you the agent will register your RECs and usually bundle them with other small generation unit and solar water heater RECs for sale and transfer in the REC Registry.



The ORER recommends that SGU owners contact a range of agents before entering into any contractual agreement.

Visit – [List of registered agents](#)

Before entering into any contractual arrangement to assign your right to create RECs:

- Make sure you are satisfied with the financial benefit and the date of payment the agent is offering for your RECs.
- Check that details are recorded in writing through a REC assignment form that should be provided by your agent.

If you experience a delay in receiving payment for your RECs contact the agent you have agreed to sell them to.



The ORER does not set the price of RECs nor does it get involved in disputes between buyers and sellers. Payment for RECs or the rights to create RECs is a contractual matter between the buyer and seller.





GAINING FINANCIAL BENEFITS FROM YOUR RECS – OPTION 2

Individual Trading



As this process is relatively complex a majority of owners assign their RECs to an agent. For information on how to engage an agent see – **Option 1: Agent Assisted**

Step 1: Determine if your system is an SGU or power station

Compare your system’s kW capacity against the following criteria to determine if your system is an SGU or power station:

System type	System capacity and annual electricity output	Installation periods
Small wind turbines	No more than 10 kW or a total annual electricity output less than 25 MWh	On or after 1 April 2001
Solar (photovoltaic) systems	No more than 100 kW and a total annual electricity output less than 250 MWh	On or after 14 November 2005
Solar (photovoltaic) systems	No more than 10 kW and a total annual electricity output less than 25 MWh	Between 1 April 2001 and 13 November 2005
Hydroelectric systems	No more than 6.4 kW and a total annual electricity output less than 25 MWh	On or after 1 April 2001

If the kW rating or MWh generation for a SGU is above the respective thresholds or if the unit was installed prior to 1 April 2001, it is not eligible to have RECs created for it as a SGU. However, it may be eligible for accreditation as a renewable energy power station. Information on the power station accreditation process is available on the [power stations page](#) of the ORER website.

If your system meets the above eligibility criteria **go to Step 2**.

Step 2: Check if your SGU installation is within the time limit for creating RECs

Time limits for the creation of RECs for SGUs may apply depending on their installation date and SGU type. If the installation date and REC creation time limit for your SGU falls outside of the following thresholds your system is not eligible to create RECs.

SGU installation date	Deeming period	SGU type	REC creation time limit
On or before 6 October 2007	1 or 5 years	Wind, solar (photovoltaic), hydro	Anytime after installation
On or after 6 October 2007	First deeming period (1 or 5 years)	Wind, hydro	Within 12 months of the installation date
On or after 6 October 2007	First deeming period (1, 5 or 15 years)	Solar (photovoltaic)	Within 12 months of the installation date





Step 3: Establish the deeming period for your SGU

If your SGU meets the eligibility requirements you can establish the deeming period for your SGU. RECs may be created for SGUs in batches, for either 1, 5 or 15 year deeming periods, depending on the particular installation. At the beginning of each subsequent deeming period, the Regulator must be satisfied that the SGU is still installed and is likely to remain functional for the next deeming period. The ORER may request evidence to support this claim.

RECs may be created for **wind** and **hydro** SGUs either:

- annually; or
- on installation for the first 5 years after the installation (the deeming period) and then at the start of each subsequent 5 year deeming period.

RECs may be created for **solar (photovoltaic)** SGUs either:

- annually; or
- on installation for the first 5 years after installation (the deeming period) and then at the start of each subsequent 5 year deeming period; or
- on installation for 15 years (the deeming period) - no further RECs may be created. Special eligibility requirements are associated with the 15-year deeming option. The system needs to be installed by an accredited Business Council for Sustainable Energy (BCSE) or Clean Energy Council installer for stand-alone and grid-connected power systems.

Step 4: Determine how many RECs your SGU is entitled to

Different installations of SGUs are deemed to be eligible for different numbers of RECs based on their rated power output (kilowatt capacity) and their geographic location.

To determine the number of RECs for your system is entitled to see:

- **Page 8** for REC calculation of small hydroelectric systems and small wind turbines
- **Page 10** for REC calculation of small solar photovoltaic systems

Step 5: Become a registered person in the online REC Registry

Once you know the number of RECs you are entitled to you will need to become a registered person in the REC Registry, an internet based registry system that:

- maintains various registers (as set in the Act)
- facilitates the creation, registration, transfer and surrender of RECs.

A registered person can create, sell and transfer RECs in the REC Registry. To become a registered person in the REC Registry you will need to:





- a. **Create an account** on the REC Registry. See the **Apply for an Account** link on bottom right of the REC Registry home page.

Visit – [REC Registry](#)

- b. **Complete an Application for Registration** and send it to the ORER.

Visit - [Application for Registration](#)

- c. The ORER will notify you via phone when your Application for Registration has been approved and explain the REC Registry process.
- d. **Pay a \$20 registration fee** to complete the registration process.

Please **DO NOT** send any payment to the ORER with this application form - payment of the \$20 registration fee is made via your account in the REC Registry. The application fee is GST exempt.

Step 6: Create RECs through the REC Registry

Once your application has been approved you are ready to complete the registration process online and create RECs for your SGU installation.

Visit – [REC Registry](#)

The main details required to create RECs include the following:

- Type of system – solar, wind, hydro
- System brand
- System model
- Panel serial numbers (solar only)
- Number of panels (solar only)
- Equipment module serial number (wind and hydro only)
- Resource availability (wind and hydro only)
- Rated power output (in kW)
- Installation date
- Installation address
- Installer's details
- Owner's details

The REC registry contains online help screens and a REC Registry Support Desk to assist in the use of the Registry.

Step 7: Wait while your RECs are validated

Once you have created your RECs, they will be audited by an ORER officer to ensure they have been created correctly. **This can take up to 4 weeks.** When your RECs have passed the ORER audit, they will become 'Registered'. Registered RECs are able to be sold and transferred in the REC Registry, and surrendered either voluntarily or meet a liability under the *Renewable Energy Electricity (Act) 2000*.

Visit – [REC Registry](#)





Step 8: Find a buyer for your RECs. Sell your RECs and transfer them in the REC Registry



You do not have to sell your RECs at all, but if you wish to create RECs for your SGU installation you must create them within 12 months of the date of installation of the system.

If you wish to sell your RECs, it is your responsibility to find a buyer and negotiate the price and other terms of sale. Potential buyers may include:

- large electricity retailers who may need to purchase RECs to meet their REC liability
- registered agents for deemed units, who create and trade RECs from SGUs
- traders of RECs

Price and payment date should be key considerations when negotiating the sale of your RECs. You should ensure that:

- you are satisfied with the price and payment date you receive for your RECs
- details are recorded in **writing** before entering any contractual arrangement to sell your RECs.

Once you have found a buyer and negotiated the terms of sale, you will need to transfer the RECs to the buyer through the REC Registry and arrange payment outside the REC Registry. The ORER does not set the price of RECs nor does it get involved in disputes between buyers and sellers. Payment for RECs or the rights to create RECs is a contractual matter between the buyer and seller.

Other Government schemes involving SGUs

Some installations of SGU may be eligible for rebates through other Federal Government schemes – refer to the rebates page of the Department of the Environment, Water, Heritage and the Arts website for details.

Visit – [Department of Environment, Water, Heritage and the Arts Rebates](#)

Some SGUs may be eligible for other State/Territory Government rebates. Please check the relevant State/Territory Government websites for details.

ORER values your feedback. If you have any feedback on how to improve this fact sheet please email ORER orer@orer.gov.au





REC CALCULATION

Calculating RECs for small hydroelectric systems and small wind turbines

The number of RECs that you are eligible to create for your small hydroelectric system or wind turbine is determined by the rated capacity of the system and the number of hours the system can operate at that capacity (resource availability).

To establish how many RECs you may be eligible to create from your system you should undertake the following steps:

1. Establish your resource availability. If you do not know the actual resource availability, then you must claim for the default amount, which is:

- Hydroelectric - 4000 hours/year
- Wind – 2000 hours/year

If you claim for resource availability above the default amount, then you must provide and retain copies of site-specific audit reports and advise the ORER of the name and contact details of the person or company that conducted the audit.

2. Establish the rated output of your system in kilowatts (kW). You can find the rated power output of your system in the specifications provided by the system manufacturer. Please ensure that you use the exact figure that applies to your particular make and model.

3. To calculate the annual number of RECs your system is eligible for you multiply the rated power output (in kW) of your system by 0.00095, multiplied by the resource availability of your system (eg. 8kW x 0.00095 x 4000 (or 2000 for wind) hours/year).

$$\boxed{0.00095} \times \boxed{\text{The rated power output (in kW) of your system}} \times \boxed{\text{Resource availability of the system (hours per annum)}} = \boxed{\text{Annual number of eligible RECs}}$$

4. If you calculate that you are entitled to more than 25 RECs per year your system is classified as a potential power station and you must apply to the ORER to become an accredited power station. If your system is classified as a power station, you cannot assign RECs to an agent.





5. You have the option of claiming RECs in regular one-year or five-year periods (deeming periods). Multiply the annual number of eligible RECs by one year or five years depending on the period over which you wish to create RECs.
6. If your calculated number of eligible RECs, over a one-year or five-year period, is:
 - a. greater than 1 MWh you must round down the calculated number to the nearest whole number of RECs.
 - b. between 0.5 MWh and 1 MWh you are allowed to round up the calculated decimal number to 1 REC.





Calculating RECs for small solar (photovoltaic) systems

Once you have established that a small solar (photovoltaic) system meets the above eligibility requirements, to calculate how many certificates that may be created for it:

1. Establish your **Zone** by using Table 2, Ratings and Postcode Zones for Small Solar (Photovoltaic) Systems on Page 11 of this document.
2. Once you have established your Zone, look up the corresponding Zone Rating in Table 3, Zone ratings for solar (photovoltaic) Systems on Page 11 of this document.
3. To calculate your system's annual REC entitlement, multiply the Zone Rating by your SGU's rated power output (in kW). You can find the rated power output of your unit in the specifications provided by the manufacturer – please ensure that you use the exact figure that applies to your particular model.

$$\begin{array}{|c|} \hline \text{Zone} \\ \text{Rating} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{Rated power output} \\ \text{(kW) of your solar} \\ \text{(photovoltaic)} \\ \text{system} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Annual REC} \\ \text{entitlement} \\ \hline \end{array}$$

If you calculate that you are entitled to less than or equal to 250 RECs per year, proceed to step 4.

If you calculate that you are entitled to more than 250 RECs per year your system is classified as a potential photovoltaic power station and in order to create RECs you must apply to the ORER to become an accredited power station. Application forms for power station accreditation are available on the Forms page of the ORER website www.orer.gov.au. A registered person with an accredited power station can create RECs for eligible electricity generated above the power station's baseline. REC creation for power stations cannot be assigned to an agent.

4. Choose the deeming period you for which you would like to create RECs: 1-year, 5-years or 15-years, as described in the "Deeming Periods" section above. (Step 2 and 3)

Calculate the REC entitlement for each deeming period by multiplying the Annual REC Entitlement (as calculated in step 3) by the number of years in the deeming period you choose, either 1, 5 or 15.

5. If your calculated REC entitlement, over a one-year or five-year period, is not a whole number and is:
 - greater than 1 MWh you must round down the calculated number to the nearest whole number of RECs.
 - between 0.5 MWh and 1 MWh you are allowed to round up the calculated decimal number to 1 REC.





TABLE 2

Ratings and Postcode Zones for Small Solar (Photovoltaic) Systems

Postcode range			Postcode range			Postcode range			Postcode range		
from	to	zone	from	To	Zone	from	to	zone	from	to	zone
0	799	3	2900	2999	3	4474	4476	1	6251	6254	3
800	869	2	3000	3390	4	4477	4478	2	6255	6270	4
870	879	1	3391	3398	3	4479	4485	1	6271	6315	3
880	1000	2	3399	3413	4	4486	4490	2	6316	6357	4
1001	2356	3	3414	3426	3	4491	4492	1	6358	6393	3
2357	2357	2	3427	3474	4	4493	4499	2	6394	6400	4
2358	2384	3	3475	3514	3	4500	4721	3	6401	6430	3
2385	2393	2	3515	3516	4	4722	4722	2	6431	6431	2
2394	2395	3	3517	3520	3	4723	4723	3	6432	6433	3
2396	2398	2	3521	3524	4	4724	4735	2	6434	6439	2
2399	2399	3	3525	3538	3	4736	4736	1	6440	6441	1
2400	2400	2	3539	3539	4	4737	4824	3	6442	6444	3
2401	2404	3	3540	3549	3	4825	4827	2	6445	6459	4
2405	2407	2	3550	3560	4	4828	4828	3	6460	6467	3
2408	2410	3	3561	3569	3	4829	4829	2	6468	6469	2
2411	2414	2	3570	3570	4	4830	5261	3	6470	6471	3
2415	2536	3	3571	3606	3	5262	5263	4	6472	6474	2
2537	2537	4	3607	3617	4	5264	5270	3	6475	6506	3
2538	2544	3	3618	3622	3	5271	5300	4	6507	6555	2
2545	2557	4	3623	3628	4	5301	5429	3	6556	6573	3
2558	2626	3	3629	3657	3	5430	5450	2	6574	6602	2
2627	2629	4	3658	3684	4	5451	5653	3	6603	6607	3
2630	2630	3	3685	3687	3	5654	5669	2	6608	6641	2
2631	2639	4	3688	3724	4	5670	5679	3	6642	6724	1
2640	2820	3	3725	3731	3	5680	5699	2	6725	6750	2
2821	2842	2	3732	3999	4	5700	5709	3	6751	6797	1
2843	2872	3	4000	4416	3	5710	5722	2	6798	6799	2
2873	2874	2	4417	4417	2	5723	5724	1	6800	6999	3
2875	2876	3	4418	4422	3	5725	5733	2	7000	8999	4
2877	2889	2	4423	4423	2	5734	5799	1	9000	9999	3
2890	2897	3	4424	4426	3	5800	6243	3	-	-	-
2898	2899	4	4427	4473	2	6244	6250	4	-	-	-

TABLE 3

Zone Ratings for Solar (Photovoltaic) Systems

Zone Rating	
1	1.622
2	1.536
3	1.382
4	1.185





REC calculation examples

EXAMPLE 1 –SMALL SOLAR PHOTOVOLTAIC SYSTEMS

If you wish to create RECs for a 15-year deeming period for a small solar panel (photovoltaic) system installed by a BCSE – accredited installer on 9 March 2009 in the postcode area of 2315, which has a rated power output of 73.8 kW. To determine eligibility:

- *Is the small solar panel (photovoltaic) system installed within the last 12 months? **Yes***
- *Does the system have a rated output of not more than 100 kilowatts (kW) or a total annual output less than 250 MWh? **Yes***
- *Was the system designed and installed by a person accredited for stand-alone and grid-connected power systems under the Australian Business Council for Sustainable Energy accreditation scheme or the Clean Energy Council accreditation scheme? **Yes***

The system meets all of the eligibility requirements, so we can now proceed to calculate the number of RECs it is entitled to create.

1. Look up the postcode in Table 2 to establish your Postcode Zone: **3**
2. Look up the Postcode Zone in Table 3 to establish your Zone Rating: **1.382**
3. Multiply your Zone Rating by the kW capacity to get the annual REC entitlement:
$$1.382 \times 73.8\text{kW} = \mathbf{101.9916 \text{ MWh}}$$
4. Multiple by 15 years to get the total REC entitlement:
$$101.9916 \times 15 \text{ years} = \mathbf{1529.874 \text{ MWh}}$$
5. Round down the total amount of electricity taken to be generated to the last whole MWh to determine the number of RECs you are eligible to create:
$$1529.874 \text{ MWh} = \mathbf{1529 \text{ RECs}}$$
6. This system is rated at less than 100 kW and has a total annual output of less than 250 MWh per year, it does not need to be accredited as a power station.





EXAMPLE 2 – SMALL WIND TURBINES

If you wished to create RECs on a 5-year basis for a system that has a rating of 2.9 kW and a wind resource availability of 3,600 hours, you must:

1. Multiply 0.00095 by the kW capacity and the wind resource availability:

$$0.00095 \times 2.9 \times 3600 = \mathbf{9.918 \text{ MWh}}$$

2. Multiply the annual electricity output by the number of years:

$$9.918 \times 5 = \mathbf{49.59 \text{ MWh}}$$

3. Round down the total electricity output to the last whole MWh to determine the number of RECs you are eligible to create:

$$49.59 = \mathbf{49 \text{ RECs}}$$

4. As a wind resource availability in excess of the default amount has been claimed you must provide and retain copies of a site-specific audit report to support your claim. If you cannot provide such a report then you may only claim for the default amount.
5. This wind turbine has a total annual output of less than 25 MWh, it does not need to be accredited as a power station.

