



Increasing Australia's renewable electricity generation



Office of the Renewable Energy Regulator Annual Report 2001



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The Hon Dr David Kemp
Minister for the Environment and Heritage

Dear Minister

I am pleased to present to you the first Annual Report of the Office of the Renewable Energy Regulator. The Report comprises an overview of the first year of operation of the *Renewable Energy (Electricity) Act 2000*. While the Act came into force on 18 January 2001, the main provisions covering creation of renewable energy certificates and the accrual of liabilities only operated between 1 April 2001 and 31 December 2001. The report therefore has a stronger focus on this period.

The report is submitted in accordance with section 105 of the *Renewable Energy (Electricity) Act 2000*.

Yours sincerely



David Rossiter
Renewable Energy Regulator

April 2002

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Opening Statement by the Regulator

It has been a privilege to assist the Government in operating the inaugural year of the world's first national tradeable renewable energy certificate program. The year has been challenging and rewarding for not only the staff of the Office of the Renewable Energy Regulator but also for the participants and potential participants in the scheme put in place by the *Renewable Energy (Electricity) Act 2000*.

The year opened with the knowledge that the enabling legislation was in place, Regulations were being drafted and deadlines were rapidly approaching.

The detailed and consistent application of the requirements of the Act to a diverse range of industries was a considerable challenge met head on by industry and my staff. The cooperation that developed between these two parties is to be admired as often solutions to the many issues arising from the application of the framework of the legislation and the very prescriptive requirements of some Regulations were not immediately apparent. I must congratulate industry representatives and my staff who participated in workshops and discussions to resolve these issues on their tolerant persistence towards equitable and efficient mechanisms to legally and effectively meet the needs of the Act.

While this need for detail to underscore the Act and its Regulations took time to develop it did not inhibit the operation of the scheme. Where ORER received substantially complete applications for accreditation and

a delay occurred because of methodological matters in determining accreditation, accreditation was ultimately backdated to the date of receipt of the application.

The year closed with the knowledge that over twice the number of renewable energy certificates needed to meet the 2001 target of 300,000 had been created and that this performance would assist towards the achievement of 2002's larger target of 1,100,000 certificates. The current performance is a strong accolade for both liable and eligible participants in the scheme who seem to have adopted this innovative way of establishing a market for renewable energy with great vigour.

Over the next year we look forward to building on this successful start and further improving and refining our operation of the renewable energy certificate system.

Again I would like to thank all those who have been involved in this major change in the way renewable energy is valued in Australia. With several other countries (including the United Kingdom and Japan) now taking up and considering similar schemes I think Australian industry and Government should be proud of the international lead they have demonstrated in the area of climate change through pioneering this measure.



David Rossiter
Renewable Energy Regulator

Glossary

Term	Meaning
Accreditation	A process of determining if a power station is eligible to participate in the MRET and contribute to the achievement of annual targets.
Compliance date	Eligible and liable participants must report their activities and surrender RECs (for liable parties) by 14 February of the year following the compliance period.
Compliance period	The period over which annual targets must be achieved, predominantly full calendar years.
Eligibility	The ability to create renewable energy certificates
Federal Executive Council	The Federal Executive Council is established by section 62 of the Constitution to 'advise the Governor-General in the government of the Commonwealth'
kW	Kilo watt—one thousand watts
Liability	The requirement to surrender renewable energy certificates
Minister	Minister for the Environment and Heritage
MRET	The mandatory renewable energy target, enacted through the Act and Regulations
MWh	Mega watt hour—a measure of electricity generation. One thousand kilo watt hours
ORER	The Office of the Renewable Energy Regulator
REC vintage	The calendar year in which the claim for the REC was entered into the internet registry. This may be different from the year in which the generation actually occurred.
RECs	Renewable energy certificates—the mechanism for trading renewable energy rights under the Act

Term	Meaning
Registered person	A person registered by the ORER as the owner/operator of a power station, owner or a solar water heater or small generation unit or agent whose name appears in the registry of registered persons. A person must be registered to create RECs.
Registration	A process of registering persons that intend to create RECs
Registration of RECs	The change in status required for a REC to be traded and used against a liability which results from successfully demonstrating the accuracy of a REC claim and payment of the specified fee
Registry	An internet based database of information on participation under the Act
Regulator	The person overseeing the achievement of the MRET through the provisions of the Act and Regulations
Small generation units	A device using hydro, solar or wind to generate electricity, with a generation capacity of less than 10 kW and generating less than 25 MWh per year.
The Act	<i>The Renewable Energy (Electricity) Act 2000</i>
The Regulations	<i>The Renewable Energy (Electricity) Regulations 2001 (as amended)</i>

Introduction

Background

The mandatory renewable energy target (MRET) is a key element of a broader government response to climate change and possible international commitments to reduce greenhouse gas emissions. The MRET has been introduced to increase the contribution that renewable energy sources make to Australia's electricity demands in order to achieve reductions in greenhouse gas emission and the development of a more sustainable energy supply.

The MRET is supported by legislation that operates to develop a market for renewable energy. The physical renewable energy is represented in the market by renewable energy certificates. The legislation sets the framework for both the supply and demand sides of the market.

On the demand side are the wholesale purchasers of electricity—those parties purchasing electricity directly from a generator or from the wholesale electricity market. These parties, usually called the liable parties, are directly responsible for increasing the amount of electricity purchased from renewable energy sources. This is demonstrated through the acquisition and surrender of renewable energy certificates.

On the supply side are the parties generating renewable electricity and creating renewable energy certificates, normally called the eligible parties. Generation assets

must meet set eligibility criteria prior to being accredited. Accreditation is necessary if a generation asset is to contribute towards the achievement of the annual targets.

The Act requires the Regulator to give the Minister a report on the working of the Act during the year, for presentation to Parliament. This report is provided against that requirement.

Legislative Framework

The *Renewable Energy (Electricity) Act 2000* (the Act) came into force on 18 January 2001, after passage through the Parliament on 8 December 2000.

The Act sets out three main objectives:

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

The main provisions of the Act, which form the basis of the market for renewable energy, came into effect on 1 April 2001. The main role of the Office of the Renewable Energy Regulator (see below) is to oversee the implementation of these provisions.

The Act is supported by the *Renewable Energy (Electricity) (Charge) Act 2000* and the *Renewable Energy (Electricity) Regulations 2001*. In combination, the Act, associated Act and Regulations, set the framework for the implementation of the Government's mandatory renewable energy target (MRET).

The *Renewable Energy (Electricity) (Charge) Act 2000* came into force and was subsequently amended in 2000. The *Renewable Energy (Electricity) Regulations 2001* came into force on 6 February 2001.

Administration

The Act establishes the role of Renewable Energy Regulator to oversee the implementation of the MRET. The Renewable Energy Regulator is to be supported in this role by the Office of the Renewable Energy Regulator (ORER). The Regulator and the Office of the Renewable Energy Regulator constitute a Statutory Agency for the purposes of the *Public Service Act 1999*.

The first Renewable Energy Regulator was appointed on 12 February 2001 by the then Minister for Environment and Heritage, Senator the Hon Robert Hill. Mr David Rossiter accepted this challenging role and will lead the Office of the Renewable Energy Regulator for a period of 5 years.

The main roles of the Regulator are:

- **Maintenance of a registry of owners/operators of eligible power stations**

Individuals must be registered before they can seek accreditation of power stations. Registered entities are each allocated a unique registration number which is entered onto the Registry of Registered Persons. The registry is required to be publicly available via the Internet.

- **Accreditation of eligible power stations**

Renewable energy power stations must be accredited before Renewable Energy Certificates can be created for their generation. The accreditation process includes:

- application for accreditation;
- verification that a power station is using eligible renewable energy sources;
- establishment of a baseline (indicating the likely amount of electricity generated by the power station in a typical 1997);
- estimation of the amount of additional energy that will be generated from the power station; and
- confirmation that the energy generated is being used.

Each accredited power station is allocated a unique accreditation number. The regulator maintains publicly available registers of applications for accreditation of power stations and power stations' accreditation codes.

- **Registration of Renewable Energy Certificates**

Once a power station is accredited and it has generated electricity above its baseline, it may seek to create one Renewable Energy Certificate (REC) for each megawatt hour of eligible renewable electricity generated and used delivered to a grid, end point user or directly to a retailer or wholesaler. Some installations of solar water heaters may also be eligible for RECs.

Certificates must be created in an electronic form via the Internet. Certificates are not valid until they are registered by the Regulator. The Regulator may check the validity of a certificate prior to allowing it to be registered.

The Regulator maintains a publicly accessible registry of certificates on the Internet. Any transfer of ownership or retirement of certificates is also recorded in this registry.

• **Monitoring and compliance**

The Regulator is responsible for ensuring compliance with the scheme. This involves overseeing the surrender of RECs from liable parties in discharging their liability. If a liable party cannot meet their liability and the shortfall is greater than 10 per cent of the total liability in a given year, then the Regulator must impose a penalty on the liable party.

In assisting the Regulator, the Office of the Renewable Energy Regulator (ORER) will:

- oversee the creation of valid renewable energy certificates;
- assess annual compliance statements;
- impose any penalties for non-compliance with the provisions of the legislation;
- redeem any renewable energy shortfall charges if shortfalls are made up within three years; and
- to ensure the integrity of the measure, undertake audits of participants including renewable energy generators and liable parties.

Overview of 2001

The Act operates on a calendar year basis. For 2001, the 'year' is deemed to be the period 1 April 2001 to 31 December 2001. For all other years, 1 January to 31 December will constitute the year. This report covers the 2001 calendar year and focuses on the operation of the Act between 1 April and 31 December 2001.

Actions that have taken place in 2002, such as surrender of renewable energy certificates against liabilities, or continued renewable energy certificate creation for generation that occurred in 2001, will be reported against in the 2002 report.

Pre- 1 April 2001

The Office of the Renewable Energy Regulator was officially established with the appointment of the Renewable Energy Regulator on 12 February 2001. Prior to, and early into, the commencement of the eligibility and liability provisions in the Act, the ORER's main role was to ensure that the framework for implementing the legislation was in place. This included:

- assisting the Government in finalising regulations made under the Act;
- development of the internet-based registries for creating and recording renewable energy certificates and other publicly available information;

- development of forms and procedures for registration, accreditation and establishment of historic levels of generation for power stations generating electricity prior to 1 January 1997;
- providing high quality information to stakeholders to allow them to participate in the scheme, including the development of an ORER website and associated information, attendance at conferences and speaking events to bring stakeholders up to date on progress with implementation and outline participation procedures;
- processing of applications received prior to and early after 1 April 2001; and
- finalising office arrangements including location and staffing.

The renewable energy certificate registry (rec-registry) was an essential part of the implementation of the MRET, given the requirement to create renewable energy certificates in an electronic form. The rec-registry was made available over the internet from 1 April 2001, at which time the provisions allowing for certificates to be created first came into force. The rec-registry is available on the internet at **www.rec-registry.com**.

Soon after, the ORER's own website was launched. The ORER makes information available to the public at www.orer.gov.au. Until the launch of a separate ORER website, information on the MRET was available on a dedicated page on the Australian Greenhouse Office website.

The ORER made registration and accreditation forms available from early 2001. A large number of forms were submitted prior to the commencement of the eligibility provisions. The ORER received 41 applications for registration and 89 applications for accreditation prior to 1 April 2001.

1 April 2001 – 31 December 2001

The Act establishes a process for participating in the MRET. Firstly a person must apply to become a registered person under the Act. If registration is successful, that person may seek to have a power station that they own/operate accredited by the Regulator. Renewable energy certificates can then be created for the eligible output of accredited power stations.

The ORER is therefore involved in a number of key tasks:

- registration of persons;
- accreditation of power stations;
- assessing the validity of created renewable energy certificates.

Registration of persons

In 2001, the ORER registered 126 persons. By 31 December 2001, 2 of these registrations had been cancelled at the request of the registered person. The registrations covered a range of stakeholders, including individuals (natural persons) and companies seeking to claim renewable energy certificates for power stations, solar water heaters

and small generation units. The Act requires that a registry of registered persons must be maintained by the Regulator by electronic means. The registry of registered persons has been operational since 1 April 2001 and is available at www.rec-registry.com. There were no requests for the review of a decision to register a person submitted in 2001.

Accreditation of power stations

In 2001, 152 applications for accreditation of power stations were received by the Office of the Renewable Energy Regulator. The Regulator is required to maintain, by electronic means, a registry of applications for accreditation of power stations. The registry of applications for accreditation of power stations has been operational since 1 April 2001 and is available at www.rec-registry.com.

Of the applications received by the ORER, 131 were processed by 31 December 2001. Those applications not processed by 31 December 2001 required additional information to be provided before the accreditation could be completed. Of the 131 applications that were processed, 124 were accredited, three applications were rejected (combined with another power station), one application was withdrawn and three were awaiting the payment of the application fee prior to completing the accreditation process. The remaining 21 were pending accreditation as at 31 December 2001.

Of the 124 accredited power stations, a broad range of eligible renewable energy sources was proposed for use.

They included:

- Hydro—55;
- Photovoltaic—22;
- Landfill gas—18;
- Wind—10;
- Bagasse (sugar cane waste)—7;

- Sewage gas—4;
- Wood waste—4;
- Black liquor—1;
- Food and agricultural wet waste—1;
- Municipal solid waste—1; and
- Combined wind and photovoltaic—1.

The Regulator agreed to commence a power station's accreditation date from the date when a substantially complete application was lodged with the ORER. The following table outlines the number of power stations commencing accredited status for each month.

Month	Number of accreditations commencing in the month
April	92
May	3
June	11
July	1
August	6
September	7
October	4
November	0
December	0

Requests for review of decisions

The decision to accredit a power station is an appellable decision. In 2001, two companies submitted appeals covering the accreditation decisions of five power stations. Appeal reviews are conducted by a person or persons not involved with the original accreditation recommendation submitted to the Regulator and must be completed within 60 days of receipt of the request for review.

In two of the cases, the period by which time an appeal could be submitted for consideration by the Regulator had expired and the request to review the accreditation

decision was denied, in accordance with section 66 of the Act. The requests for review of a decision for the remaining three cases were submitted within the allowable timeframe and the appeals proceeded.

In all three cases submitted in 2001 and able to be reviewed, the reviews were finalised in 2002. In all cases the original decision of the Regulator was confirmed. Appellants remaining dissatisfied with a review decision can apply to the Administrative Appeals Tribunal.

Assessing the validity of created Renewable Energy Certificates

By 31 December 2001, 619,906 renewable energy certificates had been created in the rec-registry. Only valid, 2001 vintage RECs could be used to discharge a company's 2001 liability, in accordance with the legislation.

A wide range of fuel sources were used to generate electricity for which renewable energy certificates were created in 2001. Not all accredited power stations created renewable energy certificates for their eligible electricity in 2001 and some fuel sources, for which power stations had been accredited, are not represented in the graph on page seven (top).

The majority of the RECs created in 2001 were created in December. This reflects a number of factors:

- increasing numbers of accreditations being finalised as the end of the year approached;
- power stations passing their baselines in the November/December period and only at that time being eligible to create RECs; and
- delays in finalising meter readings.

The ORER recommended that companies create the majority of their RECs by 14 December 2001, to ensure that these RECs could be validated early in 2002 and be available for trading for liability compliance purposes.

By 31 December 2001, the ORER had audited and approved 294,346 of the 619,906 created RECs. Of these, 257,744 RECs were fully registered, with payment of the 8 cent creation fee having been received. Additionally, 21,579 RECs had been invalidated. The remaining RECs were scheduled for assessment prior to 14 January 2002. The large numbers of RECs not yet assessed as at 31 December 2001 reflects the very late creation of these in the internet based registry¹.

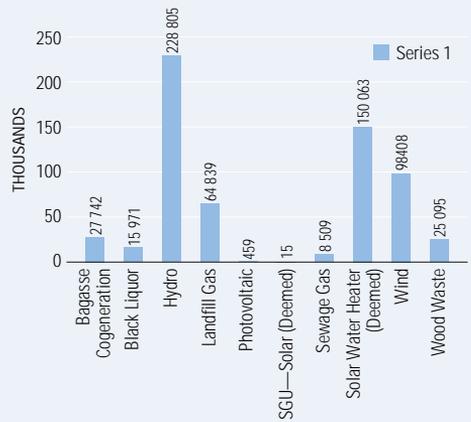
Appendix A outlines individual REC activity by fuel type and certificate status. It shows that as the year progressed and REC creation increased, validation errors were reduced as participants and ORER were able to identify and address salient issues as they arose.

The Office of the Renewable Energy Regulator manually checked nearly 100 per cent of the claims for renewable energy certificates in 2001.

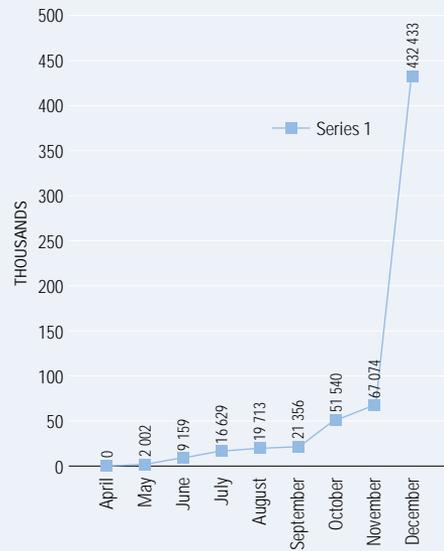
The ORER paid particular attention to RECs being created by agents for solar water heaters as a large number of the RECs that were invalidated came from this group. Processes to correctly record the model type and serial number of the system being installed, the type of system being replaced and owner contact details and assignment forms were the focus of audit action in 2001. The accuracy of claims for RECs from this group is generally improving although 100 per cent manual audits occurred throughout most of 2001 prior to any solar water heater RECs being validated.

The ORER also worked closely with companies creating RECs for the first time. This involved pre-creation audits where requested and an in depth manual check of the first claims for certificates from every power station.

Created RECs by fuel type



REC creations by month



¹ The ORER assessed the large majority of these by the 14 January 2002 target date, leaving at least one month for trading to occur before the compliance date of 14 February 2002. However, it is the responsibility of the creator of the REC to pay the registration fee before the REC can be transferred or used against a liability. A proportion of the RECs passing audit before 14 January 2002 may have remained pending registration until the fee was paid.

Other Activities

Amending the Regulations

The *Renewable Energy (Electricity) Regulations 2001* were made on 6 February 2001. The original regulations were amended once during 2001. The Act requires that any regulations must be made publicly available for a period of not less than 30 days prior to being made. The Office of the Renewable Energy Regulator released a set of proposed amendments on 5 and 6 June 2001. Public submissions closed on 6 July 2001. A total of 24 submissions were received. Public comments were taken into account and the amendment regulations were submitted to the Federal Executive Council on 16 August 2001. After approval by the Federal Executive Council, the amendment regulations were gazetted on 23 August 2001 and tabled in the House of Representatives on 27 August 2001 and in the Senate on 28 August 2001.

The amendment process was administrative in nature. The amendments related to clarifying the provisions surrounding the eligibility of solar water heaters, including new solar water heater models in the schedules to the regulations for eligibility purposes and replacing references to definitions in the National Forest Policy Statement, of plantations and native forests, with the actual text of the definitions.

A second amendment process commenced on 22 December 2001. However, the contents of the amendment regulations were later amended and the 30-day consultation process commenced again from the date of the change, early in 2002².

Advice to Industry

The ORER ran a number of public notices in 2001 to advise stakeholders of the implications of the commencement of the eligibility and liability provisions. This included an advice published in both early and late March advising of the commencement of the major provisions of the legislation and an advice which ran late November/early December (depending on the publication date of the newspaper) to remind stakeholders of the annual compliance requirements. This was supported by information published in two industry journals, the Electricity Supply Association of Australia and the Australian Ecogeneration Association magazines, published monthly and bimonthly respectively.

A wide range of information is contained on the ORER's website to advise industry of the framework surrounding, and processes for participating in, the MRET. Information was sent directly to all rec-registry users via the email on a number of occasions.

² This amendment process was completed in 2002.

Working with Industry

The ORER has dedicated substantial resources to working with industry to improve their understanding of the legislation and regulations, facilitate involvement in the scheme and provide support throughout the first year of the measure. As this was the first year of a new legislated measure, with an innovative tradeable certificate approach it was important to ensure all parties were familiar with their liabilities and entitlements under the legislation. ORER presented at numerous public fora, ran workshops, wrote to identified potential participants, provided phone/email assistance and visited or was visited by many stakeholders and interested parties. This extensive contact and feedback enabled ORER and participants to refine and develop systems where possible to better align projects with the requirements, and administration of, the Act.

Working with Government Agencies

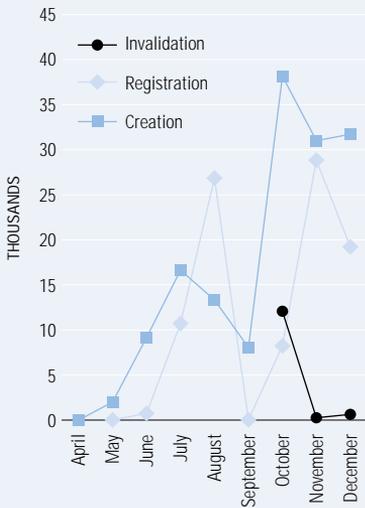
The ORER maintains strong links with the Australian Greenhouse Office, which has retained policy responsibility for the mandatory renewable energy target. The ORER also liaises with other interested Commonwealth and State Government Department and Agencies.

Working with the Community

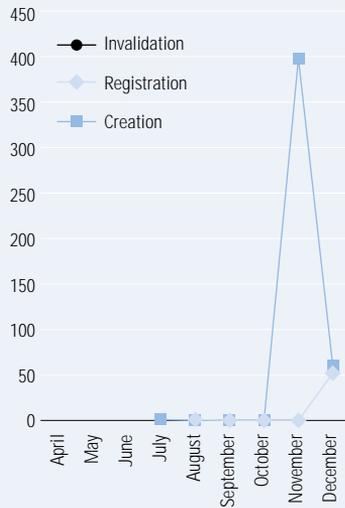
The ORER provides information to a variety of stakeholders, ranging from individuals wishing to claim renewable energy certificates for solar water heaters to special purpose interest groups.

Rec Creation, Registration and Invalidation by Fuel Type and Month

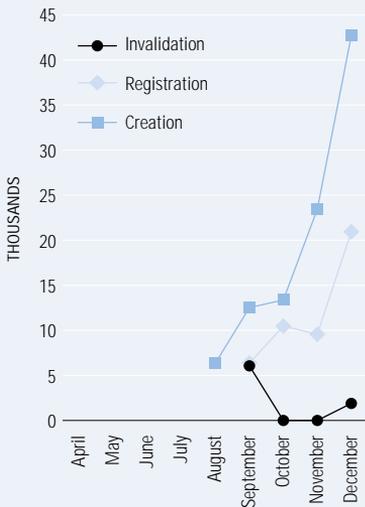
Solar water heaters



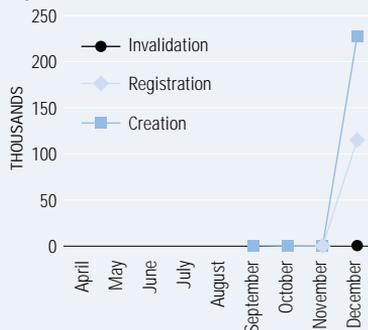
Photovoltaics



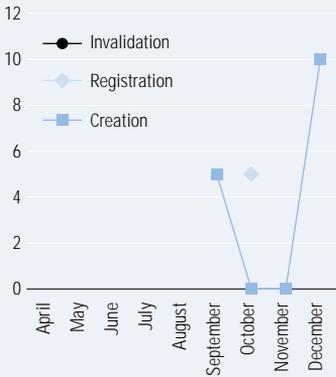
Wind



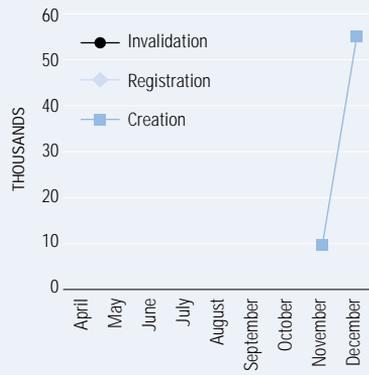
Hydro



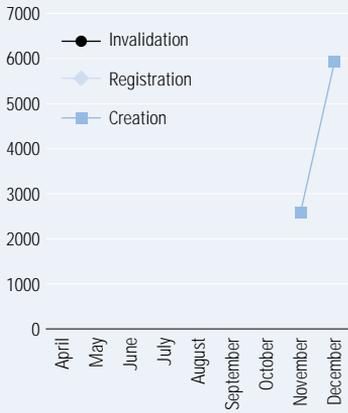
Small generation units—solar



Landfill gas



Sewage gas



Bagasse, Black liquor and Wood waste

