ASSOCIATION OF ISSUING BODIES

The AIB is the leading enabler of international energy certificate schemes, and guarantees the European Energy Certificate System (EECS).

Geneva Market Committee

The Market Committee was constituted as a formal mechanism for raising and resolving issues of interest to market parties. The latest committee meeting was in Geneva at the end of September 2009.

At the meeting were the RECS User Group, representing market parties in dealings with AIB; and its natural counterpart, the AIB workgroup Internal Affairs (WGIA). The WGIA is simplifying and adapting the EECS PRO to address the requirements of the new RES Directive (2009/28/EC).

The first of two articles about the Market Committee discusses the proceedings.

In the second article, Diane Lescot (WGEA chairmen) speaks to Thomas Eccard (chairman of the RECS User Group), and asks him his opinion of the meeting.

Thomas takes this opportunity to give his views on the current consultation concerning the revisions to EECS; and his thoughts on areas where the two Associations might cooperate and how they can improve their cooperation.

New members

Domains

The Institut Luxembourgeois de Régulation (ILR) has gained membership of the AIB. Claude Hornick, Head of the Energy Department at the ILR, describes its national position and why the ILR joined the AIB. He then discusses the joining process.

Croatia is proceeding with drafting the domain protocol for a RES GO system compliant with EECS.

Schemes

The following scheme memberships were also approved by the Geneva General Meeting:

- Agen-RS joined the RES GO scheme
- CertiQ joined the Disclosure GO scheme
- ILR joined the RECS and RES GO schemes
- Swissgrid joined the Disclosure GO scheme.

Disclosure in Italy

Last August, the Italian ministerial decree concerning electricity source disclosure came into force, defining how electricity suppliers must inform consumers of the supplied mix of energy sources, and on its environmental impact.

Natascia Falcucci of GSE, the Italian issuing body for RES GO, describes the responsibilities of GSE, producers and suppliers.

Principles & Rules of Operation of EECS

Consultation

The AIB "Principles and Rules of Operation" (the PRO) of the "European Energy Certificate System" (EECS) is currently being restructured. This is in response to the new RES Directive (2009/28/EC), and to simplify both the PRO and EECS while expanding the scope of the latter and to increase market liquidity.

The timescales for putting the new PRO into place are tight: the new RES Directive (2009/28/EC) went into force on 25th June, and Member States are currently revising their legislation associated with guarantees of origin (GO), which needs to be completed by 5th December 2011.

There are two stages to the revision of the PRO: the structure must change as outlined above; and the changes to GO provided under the new Directive must be implemented.

The AIB has consulted stakeholders (the EU Commission, CEER, RECS International) and its own members concerning the issues that have been raised in the restructuring process, with the intention of implementing the restructured PRO during the first quarter of 2010.

The consultation has now closed: the AIB workgroup Internal Affairs is considering the responses it has received.

AIB Statistics

Statistics update

(All figures 1MWh certificates)

Since 2001:

- ISSUED: 654 million
- TRANSFERRED: 262 million
- CANCELLED: 393 million

In 2008:

- ISSUED: 185 million
- TRANSFERRED: 95 million
- CANCELLED: 111 million

In 2009:

- ISSUED: 140 million
- TRANSFERRED: 71 million
- CANCELLED: 116 million

Inside this issue:

ASSOCIATION OF ISSUING BODIES

The AIB is the leading enabler of international energy certificate schemes, and guarantees the European Energy Certificate System (EECS).

Geneva Market Committee

With the second Market Committee - held in Geneva on the 30th September - AIB and RECS International have started a new tradition of exchanging views with each other's members.

Hot topics

This year's event was chaired by AIB's president, Christof Timpe, and gave a good flavour of the current hot topics for the two associations.

Among the topics were (from AIB's side): the impact of the new RES Directive (2009/28/EC) on the EECS standard; and the restructuring of the Principles and Rules of Operation.

RECS International addressed such issues as carbon footprinting, additionality and sustainability in the disclosure market.

Changes to the PRO

The AIB is restructuring the Principles and Rules of Operation, also known as the PRO: this may be regrettable for those who have finally got used to it, but it is good news for the others, as AIB's Secretary General, Phil Moody, explained: the aim is to produce a more simple document, which will simplify the market and include the changes necessary to support the requirements of the new RES Directive.

Pierre-Yves Cornelis, chairman of the AIB working group Internal Affairs, presented several changes to the EECS standard which will have an impact on the day-to-day life of market players, and which result from the adaptation of the EECS standard to the provisions of the new RES Directive.

Impact of the new RES Directive (2009/28/EC)

Extent of support

The notion of knowing how to express the 'extent' to which support has been or is being granted to a plant, as is required by article 15.6.d, is quite tricky for issuing bodies as well as for market players.

Issuing bodies are not always able to check what support has been granted to the plant.

For old plants, the producers themselves do not always have the required information.

The AIB therefore proposes to distinguish between support received in the past; production support being received at present; both combination of investment support received in the past and production support received currently; and a category "unknown" when there is no information available.

RECS International members were invited to express their suggestions and comments.

Expiry of certificates

Another topic presented by Pierre-Yves Cornélis was the introduction of an expiry date on certificates to support compliance with the new RES Directive.

There was general consensus that in future EECS certificates should expire, but two questions must be solved: how will the expiry period be set; and what should be done with existing certificates?

Members warned the AIB of the legal problems that might be raised by introducing a validity date for certificates that did not currently have one. In some member states the introduction of a validity date may be considered illegal, as it may diminish the value of the commodity.

The AIB was invited to reflect on this issue in its decision-making process.

Carbon footprinting

Peter Niermeijer and Niels van der Linden presented the reflections of RECS International on carbon footprinting.

The issuance of Guarantees of Origin should reduce the specific CO2 emissions for a given company (calculated using the Life Cycle Analysis methodology), and should be deducted from the national residual mix.

Additionality & sustainability

The Secretary General of RECS International went on to dismiss the relevance of the notion of additionality for the disclosure market in the current context of national subsidies given to producers.

According to him, what is relevant in relation to green products is that suppliers should be able to prove that the volume of electricity sold as green matches the number of cancelled certificates.

The RECS Quality Standard proposes that this is audited by a third party, and disclosed on the RECS website.

Finally, Peter Niermeijer stated that it was necessary to take sustainability into account in information provided to electricity consumers.

So a lot of high-level thinking is going on in both associations.

For members who either missed the event or wish to take another look at the slides, the agenda and presentations are available on the members' pages of the Association's website, at *http://www.aib-net.org/portal/page/portal/AIB_HOME/AIB_MEM/MARKETS COMMITTEE/Market Committee 30-09-2009*.

Geneva Market Committee

Interview with Thomas Eccard, chair of the RECS International User Group

As chairman of the RECS User group, what did you think of the Geneva MC? What were the useful points of this meeting?

This was an important meeting, which shared with a wider audience information on the current activities of the AIB and RECS International.

The most important aspect was that members of RECS International should gain an understanding of the implications of the RES Directive for the EECS system; and realise the importance of PRO restructuring. This sets framework conditions for the European green certificate market over the next decade.

I very much appreciate the work of the AIB in defining the rules of the future EECS system, and bringing these into line with the legal requirements of the RES Directive.

To fully realise the benefits of this, it is vital that AIB joins forces with RECS International in jointly promoting the EECS PRO as a single, standardised system for European guarantees of origin (GO).

Such a standard will ultimately lead to market harmonisation, and signal a move away from the currently rather fragmented markets.

My wish is that such a standard may also gain the official backing of EU institutions such as the European Committee for Standardisation. This could make it easier for EU governments to adopt the principles of the new PRO.

Will you take up some of the AIB's questions to RECS International, and provide feedback on them? Which ones?

The RECS User Group is currently in the final stages of agreeing its response to the AIB consultation concerning the latest draft of the PRO. Its response to the consultation will take into account feedback that RECS International has received from the RECS Demand Side and User workgroups.

We have focused primarily on the main functions of the market. These include registration, issuance, transfer and cancellation of GO, as well as the setting of standards for certificate types.

Among other things, we believe that a number of issues need further clarification.

Re-registration of production facilities

It is not clear to us how this should be done, or why it is necessary to do so by 2nd March 2010. However, it is important that any re-registration should be handled efficiently.

Expiry of GO

From Article 15(3) of RES Directive, we understand that GO (which allocate production attributes to consumed electricity) should be "used" no later than 12 months after production of the associated electricity.

But does this mean that GO should expire (i.e. cease to be valid in the EECS register) 12 months after the date of production?

If the expiry date is handled this way, as is proposed by the current draft of the PRO, then it may be difficult to prepare the necessary documentation: most European countries have a fuel-mix disclosure period longer than 12 months.

We must clarify the relation between production, usage, expiry and the end of the life cycle.

> *"... we are on track to implement a standardised energy certificate system across Europe. To achieve this, there is still work ahead of us. But I am confident we can achieve this."*

The "future fate" of RECS certificates

Today, the RECS certificate is an EECS certificate type that is widely-accepted across Europe. The User Group agrees that RECS certificates should remain on the market for the time being, and be based on similar information standards to GO.

The current draft of the PRO differentiates CHP GO and RES GO by means of a simple code or earmark, and such an approach might also be adopted to differentiate RECS certificates from other forms of EECS certificates.

Besides feeding back to AIB our own response, the RECS User Group also has encouraged members of RECS International to provide direct feedback to the AIB consultation request.

How does the RECS User group operate when the AIB puts questions to the members of RECS International?

One of my tasks is to enhance communications between the RECS User Group and AIB on a bilateral level. Given the changing framework and the revision of the PRO, it is particularly important that we communicate well with the AIB workgroup Internal Affairs (WGIA).

From an operational perspective, it would be useful for the RECS User Group to receive all requests for change to the PRO as they are raised by the WGIA. This would enable us to decide whether the proposed change is of material interest to the members of RECS International. If this is the case, then we should make our views known to the WGIA.

I would also welcome harmonisation of the meeting agendas of the RECS User Group and the AIB WGIA, such that WGIA meetings follow RECS User Group meetings. As we are all tied up in daily business operations, it naturally takes more time to form an opinion.

On what themes do you think the AIB and RECS International should work especially closely together?

First of all, RECS International should actively participate in the restructuring of the PRO in order to finalise this standard as soon as possible.

The new PRO aims to set a standard for EECS certificates throughout Europe, and provide a possible linkage with third countries.

This work should be accomplished as soon as possible. The clock is ticking for the implementation of the RES-E Directive; and we have an ambitious time schedule ahead of us.

The AIB and RECS International may not achieve a common viewpoint on all pending issues of the PRO, but that's how it is. I can live with a somewhat imperfect standard as long as all stakeholders are in the same boat.

If the market requires change to the PRO down the road, I know that the AIB always has an open mind to change requests proposed by RECS International.

Do you have any suggestions for the next Committee meeting? On the contents, or on the organisation?

Well, I do not know when the next meeting takes place. If this is to be in one year's time, it would be hard to determine the agenda today.

If I could express a wish, then it would be this: we can look back and conclude that we are on track to implement a standardised energy certificate system across Europe. To achieve this, there is still work ahead of us. But I am confident we can achieve this.

For more information, please contact:
Thomas Eccard
GreenStream Network GmbH
Tel: +49 (40) 809063 102
Email: thomas.eccard@greenstream.net

New AIB member: Institut Luxembourgeois de Régulation (ILR)

AIB welcomes its newest member!

After joining several General Meetings of AIB as an observer, the Institut Luxembourgeois de Régulation (ILR) decided to apply for membership of the AIB by submitting a Domain Protocol for RES-GO and RECS certificates.

This Domain Protocol was accepted by the Geneva General Meeting in September.

Claude Hornick, Head of the Energy Department at ILR, and its representative to the AIB, describes ILR's national position: *"ILR is not only the national regulatory authority for telecommunication, postal services, electricity and natural gas markets, but it is also the national competent body for issuing guarantees of origin for electricity generated from renewable energy sources."*

Why join the AIB?

So, what made ILR decide to join the AIB? According to Claude: *"We observe a growing demand on the electricity retail market for electricity products generated from renewable energy sources. In order to facilitate monitoring and to improve the reliability of the electricity disclosure system, and especially its green attributes, we decided to join the EECS standard of the AIB.*

This is an important step towards fulfilling the requirements of the European Directives - that competent bodies like ourselves should put in place a mechanism that allows the electronic transfer and cancellation of guarantees of origin; while ensuring the utmost accurateness, reliability and fraud-resistance."

Furthermore, ILR considers that participation in the standardised system - promoted by the AIB and connecting with other registries via the Hub - offers an excellent tool to generators wanting to value their renewable generation attributes; and for suppliers wishing to improve the reliability and credibility of their electricity products, and thus to enable consumer choice.

What was the joining process like?

Claude explains: *"The process of joining the AIB was launched 15 months ago, by gaining observatory status in the AIB General Meeting.*

Regularly contacts with members of the AIB, along with public consultation on a national level, allowed fast progress with the establishment of the national domain protocol and registry."

The membership of ILR, together with its domain protocol and registry, gained the approval of the Geneva General Meeting in September 2009.

Claude adds: *"It was a lot of work, and I am glad that all documents were approved after an extensive review. Final work on the contractual framework and system localization is ongoing in order to allow the launch of the registry by January 2010."*

The opening of accounts and management of the national registry will be handled by the ILR Energy Department.

AIB helps new members

The AIB assists applicants to complete their domain protocols by a process of constructive review, first by two members and then by the General Meeting. Registry systems and services are available from members' software providers, and a mentoring scheme for new members is planned.

For more information, please contact:
ILR Energy Department
Claude Hornick
Tel: +352 45 88 45 58
Email: energie@ilr.lu

New AIB scheme members

RES GO

Institut Luxembourgeois de Régulation (ILR)

Following a review of its domain scheme by Agen-RS of Slovenia and REN of Portugal, the application of the ILR for membership of the RES GO scheme was approved by the Geneva General Meeting in September 2009. The ILR has been invited to join the Disclosure GO and multi-certificate RES GO schemes, for both of which it qualifies by virtue of its membership of the RES GO scheme.

Agen-RS - Slovenia

The review of the Slovenian domain scheme for RES GO was conducted by Observ'ER of France and Oeko-Institut of Germany. The review was successful, and the Geneva General Meeting approved the domain scheme.

RECS

Institut Luxembourgeois de Régulation (ILR)

As well as joining the RES GO scheme, the ILR has also joined the RECS scheme.

Disclosure GO

Swissgrid - Switzerland

Following a review of its domain scheme by Statnett of Norway and Energinet.dk of Denmark, the application of Swissgrid for membership of the RES GO scheme was approved by the Geneva General Meeting. Note that Swissgrid has also adjusted its RECS domain protocol to reflect its change of name (ETRANS to Swissgrid) and the new registry address.

CertiQ - Netherlands

The Disclosure GO domain scheme prepared by CertiQ for the Netherlands was reviewed by Swissgrid of Switzerland and E-Control of Austria. As a result of a successful review, the application of CertiQ for membership of the Disclosure GO scheme was approved by the Geneva General Meeting.

For more information, please contact:
Swissgrid ag
Lukas Groebke
Tel: +41 (0) 585802138
Email: lukas.groebke@swissgrid.ch

For more information, please contact:
Agen-RS
Ervin Seršen BSc
Tel: +386 (0) 2 234 03 00
Email: ervin.sersen@agen-rs.si

For more information, please contact:
CertiQ b.V.
Gineke van Dijk
Tel: +31 (26) 373 1754
Email: g.v.dijk@certiq.nl

Disclosure in Italy

The new Decree

Last August, the ministerial decree concerning electricity source disclosure came into force, defining the way in which, from 2011, electricity suppliers must provide final consumers with information on:

- the contribution of each energy source to the overall fuel mix supplied during the preceding year (and over the two preceding years, from 2012);
- the environmental impact resulting from the electricity produced by the overall fuel mix supplied over the preceding year.

GSE Responsibilities

In the "disclosure" process, GSE will be responsible for certifying electricity produced from renewable energy sources by means of the issuance of Guarantees of Origin (RES GO), being the tool used for RES disclosure purposes.

Such certificates may be issued, at the request of electricity producers, for each MWh produced and injected into the grid by power plants qualified as "renewable plants".

For GOs requested by operators known to GSE (e.g. responsible for power plants already qualified by GSE to receive feed-in tariffs), this procedure is streamlined: all the plant/operator's data, or a large part of it, will be automatically retrieved from the GSE database.

Following successful completion of the registration procedure, producers are entitled to receive RES GO and may request that these be issued. They may then transfer these RES GO to suppliers wishing to move towards a "*more renewable supply*". To do so, suppliers must open an account on the GSE System, to which they may transfer and cancel RES GO previously issued to producers.

Furthermore, GSE is responsible for:

- determining the national residual mix; and
- estimating the fuel mixes of other Member States and Third Countries on the basis of publicly available information.

Producer responsibilities

It is the responsibility of producers to communicate their "original fuel mix" to GSE, which will assess this on an annual basis.

Supplier responsibilities

The contribution of each energy source to the overall fuel mix supplied over the preceding year is calculated by electricity suppliers based on:

- the electricity purchased via bilateral contracts, depending on the producer's residual mix;
- the electricity purchased in the power exchange, depending on the national (Italian or foreign) fuel mix; and
- the GOs held by the supplier itself.

This new framework will be operational in Italy from 2011. Meanwhile, GSE is defining the new procedures for the qualification of renewable plants and the process of the issue, transfer and cancellation of GOs. These procedures will be published by 2010.

Original Producer fuel mix → **Total amount of electricity (% for each source)** based on a self declaration
+
Amount of renewable electricity (%) certified with GO

Producer Residual Mix (RM) = **Original fuel mix - RES GO transferred**

National Original fuel mix → **Total amount of electricity injected into the national electricity grid, including imports (% for each source)** determined by GSE
+
Amount of renewable electricity (%) certified with Italian GO

National Residual Mix = **National Original fuel mix - RES GO transferred - RES GO imported**

EECS CERTIFICATE STATISTICS (as of July 2009)

MEMBERSHIP

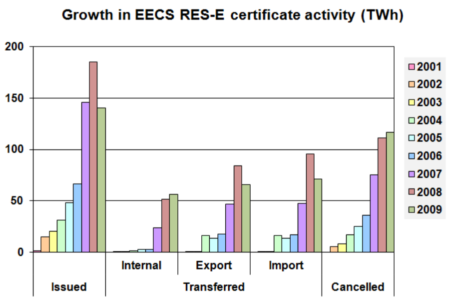
Croatia continues to develop an EECS-compliant GO system. Luxembourg having now joined AIB. Switzerland and the Netherlands have both joined the Disclosure GO scheme; while Slovenia and Luxembourg have joined the RES GO scheme; and Luxembourg has joined the RECS scheme.

MARKET ACTIVITY

National summary (2009)

The market continues to grow rapidly, although international trade seems to be slowing. The major certificate issuing countries remain Norway (which has issued 62% of all certificates this year), Sweden, the Netherlands and Finland. Regarding cancellations, Norway, Germany, the Netherlands and Sweden cancel the most certificates. The largest exporters are Norway, Sweden and Finland; while major importers are now Wallonia, Austria, Germany and the Netherlands.

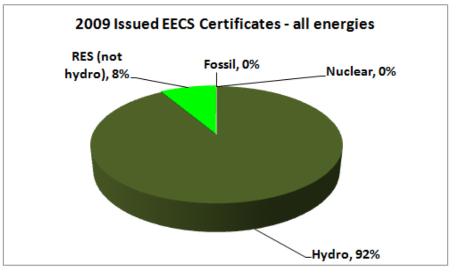
83% of certificates issued have been cancelled this year, and it seems that traders are using up certificates issued in previous years in anticipation of the limitation of the lifetime of GOs imposed by the new RES Directive. 60% of all certificates issued since 2002 have now been cancelled.



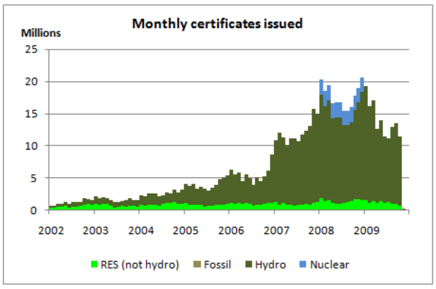
Technology / energy sources

Hydropower now provides 91% of issued RES certificates; while wind power contributes 4%. Most cancellations (91%) are for hydropower (and to a far lesser extent wind and biomass).

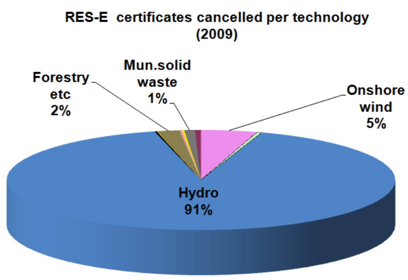
Since 2008, Disclosure-GO certificates have been issued for nuclear and fossil electricity, in the following proportions:



The growth of certificates issued for these technologies has been as follows:



Of these, the proportion cancelled was:



MEMBER ACTIVITY

BENELUX

Brussels has registered many auto-consumed PV production devices, producing about 100MWh per quarter and increasing, but has yet to commence certificate activity.

Flemish issuing activity has been similar to last year. However, imports and cancellation are substantially lower.

This quarter has seen **Wallonia** commence issuing certificates, with import and cancellation rising well above last year. There has also been limited export.

Luxembourg recently joined the AIB, and the RECS and RES GO schemes. It is likely to commence issuing activity in 2010.

Dutch issuing and cancellation continues to increase, while trading is down on previous years.

NORDIC / NORTH EUROPEAN

Norwegian trading activity continues at a higher rate than before.

Activity in **Finland** has slackened off since 2008, although the volumes concerned remain substantial.

Cancellation and import are now increasing to the extent **that Danish** activity in these areas is now running much higher than in previous years; while issuing continues at broadly the same rate, and export remains much lower.

Sweden more certificates than before. The statistics focus on renewable energy, and ignore nuclear electricity, for which Sweden now issues Disclosure-GO (to date, this has been in December). The increase in the scope of EECS to encompass non-renewable electricity will provide better statistics for calculation of the Swedish residual mix.

Ireland has not been active so far this year.

MEDITERRANEAN / SOUTH EUROPEAN

The **French** market continues to grow, with higher issued and cancelled certificates than in previous years, although international trade has dropped recently.

Italian issuing continues to grow at a slower rate than in previous years, but major growth in import and cancellation of RECS certificates makes Italy one of the larger importers.

Portugal continues to issue a small number of certificates , but has otherwise been inactive.

Since resuming operations at the start of 2009, the **Spanish** domain saw relatively high activity levels servicing domestic consumers, before activity flattened off in the last 6 months.

CENTRAL EUROPE

Austria has virtually ceased issuing, although it has recently started to trade more.

Issuing ceased last year in **Germany**. However, import, export and cancellation of certificates have continued at a much higher rate than previous years, making Germany a major importer.

Slovenia has cancelled a small number of certificates this year, but has otherwise been inactive for the past year or so. It was recently admitted to membership of the RES GO scheme in compliance with the EECS model.

Swiss RECS certificate activity has levelled off, while cancellation continues to rise. As Switzerland has been admitted to the Disclosure GO scheme, Swiss RES GO will also be eligible as Disclosure GO (but not vice versa).

THE RAW DATA - BY COUNTRY

Total	Issued	Transferred: Internal	Transferred: Export	Transferred: Import	Cancelled
Austria	13,815,402	2,982,587	2,190,456	28,476,676	19,982,655
Belgium Brussels					
Belgium Flanders	5,385,011	2,081,280	376,055	43,268,075	18,228,517
Belg & Lux RECS	113,390			2,031,496	2,048,355
Belgium Wallonia	169,537		74,894	7,715,182	4,214,497
Switzerland	3,125,041	102,015	2,643,114	3,417,440	3,436,564
Germany	65,612	7,488,954	972,349	38,235,380	28,453,242
Denmark	6,878,560	574,192	4,605,796	1,779,037	1,135,450
Spain	5,891,367		1,429,816	1	3,696,369
Finland	61,297,991	6,105,315	43,704,264	17,919,600	15,502,001
France	9,945,751	5,027,476	142,501	13,795,870	20,028,944
Greece					
Ireland	162,414		10,001		
Iceland					
Italy	13,444,954	2,349,805		116,102	9,522,176
Luxembourg					
Netherlands	40,288,767	21,650,654	2,176,382	74,189,047	97,681,217
Norway	333,055,273	83,542,425	135,672,748	4,658,222	76,030,253
Poland					
Portugal	575,072		1	7	11,156
Sweden	155,823,547	6,681,560	50,571,577	26,378,985	91,542,923
Slovenia	3,867,014		468,003	17,016	1,891,548
Turkey					
UK	90,158				
All countries	653,994,861	138,586,263	245,037,957	261,998,136	393,405,867
Percentage Cancelled					60%

2009	Issued	Transferred: Internal	Transferred: Export	Transferred: Import	Cancelled
Austria	1,130,107	2,479,656	1,150,107	3,485,002	1,948,056
Belgium Brussels					
Belgium Flanders	1,084,086	567,193		9,434,554	1,526,399
Belg & Lux RECS					
Belgium Wallonia	169,537		9,384	4,994,247	3,384,990
Switzerland	942,114		472,172	1,265,848	1,722,885
Germany		6,866,594	746,881	15,660,704	14,322,195
Denmark	1,565,206	492,467	896,209	1,291,328	626,708
Spain	765,776		1	1	1,090,857
Finland	5,010,923	934,435	7,082,725	6,010,831	2,899,794
France	2,833,352	989,271	52,287	1,636,510	4,668,632
Greece					
Ireland					
Iceland					
Italy	3,058,200	371,310		116,102	3,931,175
Luxembourg					
Netherlands	7,460,164	8,291,424	252,020	15,560,327	22,989,318
Norway	87,473,102	29,852,469	42,508,239	2,153,217	27,506,456
Poland					
Portugal	117,790				5,906
Sweden	28,680,590	5,207,546	12,795,858	9,831,402	29,932,434
Slovenia					35,681
Turkey					
UK					
All countries	140,290,947	56,052,365	65,965,883	71,440,073	116,591,486
Percentage Cancelled					83%

2008	Issued	Transferred: Internal	Transferred: Export	Transferred: Import	Cancelled
Austria	694,994		30,011	1,505,007	324,932
Belgium Brussels					
Belgium Flanders	1,674,707	566,367	69,364	24,989,678	13,099,146
Belg & Lux RECS				431,750	431,750
Belgium Wallonia			65,510	2,720,935	829,507
Switzerland	295,902	15,278	1,047,572	1,156,997	697,087
Germany	17,261	108,780	225,443	14,616,494	8,150,988
Denmark	2,112,608	34,733	2,947,890	324,677	291,502
Spain					
Finland	10,928,537	1,813,069	13,448,873	11,427,659	1,421,081
France	2,654,304	951,419	79,221	2,845,724	3,630,351
Greece					
Ireland	151,251				
Iceland					
Italy	7,047,084	681,242			3,759,063
Luxembourg					
Netherlands	8,554,244	7,019,181	1,475,914	18,923,984	21,528,965
Norway	111,080,954	39,576,843	50,537,408	2,318,511	28,062,028
Poland					
Portugal	109,641		1	7	
Sweden	39,776,431	446,209	14,165,120	14,104,488	28,749,478
Slovenia	35,681				31,570
Turkey					
UK					
All countries	185,133,599	51,213,121	84,092,327	95,365,911	111,007,448
Percentage Cancelled					60%

2007	Issued	Transferred: Internal	Transferred: Export	Transferred: Import	Cancelled
Austria	4,811,693			9,186,919	2,851,824
Belgium Brussels					
Belgium Flanders	1,389,626	583,243	306,691	6,150,528	3,393,274
Belg & Lux RECS				671,224	671,224
Belgium Wallonia					
Switzerland	118,242	6,010	643,817	751,219	162,986
Germany				6,429,485	5,289,723
Denmark	1,009,548	39,063	440,001	162,621	192,062
Spain	1,771,213				1,719,744
Finland	8,298,621	869,127	4,917,854	315,010	682,821
France	2,241,296	2,729,264	5,992	9,287,635	10,356,326
Greece					
Ireland	11,163		10,001		
Iceland					
Italy	1,288,221	464,654			928,675
Luxembourg					
Netherlands	6,801,863	6,340,049	369,179	12,271,088	16,619,566
Norway	83,289,057	12,597,127	33,114,164	184,500	12,636,718
Poland					
Portugal	123,583				5,250
Sweden	34,358,895		6,845,721	1,946,004	19,732,466
Slovenia	31,570				31,653
Turkey					
UK					
All countries	145,544,591	23,628,537	46,653,420	47,356,233	75,274,312
Percentage Cancelled					52%

NOTE

All certificates are 1MWh. As metering data is the basis for issuing certificates, there is always delay in gaining accurate statistics for a particular month, so the most recent quarter is understated and corresponding information should be treated with care. International trade statistics continue to be misleading due to the practice of cancelling certificates in one country and transferring the renewable benefit over national borders by means of cancellation statements rather than via electronic certificate transfer.

THE RAW DATA - BY TECHNOLOGY

	Report for all countries					2009					2008					2007				
	Issue	Transfer			Cancel	Issue	Transfer			Cancel	Issue	Transfer			Cancel	Issue	Transfer			Cancel
		Internal	Export	Import			Internal	Export	Import			Internal	Export	Import			Internal	Export	Import	
Onshore wind	29,705,804	8,673,168	8,611,163	9,842,670	19,701,440	6,100,443	2,775,997	2,822,812	2,690,865	5,451,365	8,022,924	2,828,687	4,436,859	5,645,734	5,072,845	5,529,349	2,280,345	940,477	1,012,379	3,981,600
Offshore wind	1,597,827	462,329	80,329	40,527	826,930	557,625	143,535		24,855	481,230	607,037	168,042	26,758		253,908	340,711	150,682	48,109	10,210	76,266
Photovoltaic	43,153	1,215	10	3,622	18,823	15,464	456	10	3,622	4,392	10,798	344			4,694	5,006	415			3,729
Thermal	5				4	1				1	1				2	1				1
Hydropower	562,685,102	118,048,043	223,006,550	238,493,711	329,635,078	128,384,718	49,585,099	62,576,037	67,577,094	106,162,177	168,232,337	44,755,500	78,086,683	88,054,057	100,476,654	134,064,076	17,668,014	44,141,854	44,543,284	66,158,542
Onshore tidal																				
Offshore tidal																				
Onshore wave																				
Offshore wave																				
Geothermal	920,415	212,502			825,577					205,848	523,769				409,912	135,130				106,919
Energy crops	1,298,427	52,882	33,062	41,600	354,597	123,570	32,559	5,621	14,159	78,858	844,050	16,003			65,540	50,602	4,320			13,721
Forestry etc	39,123,878	6,795,264	12,282,509	12,388,018	30,205,444	2,407,666	1,797,691	418,012	762,149	2,132,790	3,454,860	2,222,046	828,055	1,121,688	2,578,295	2,596,432	2,196,839	1,509,956	1,685,856	2,921,557
Landfill gas	1,741,907	564,747	18,320	81,694	878,995	256,131	221,129	2,093	15,444	215,709	393,745	176,813	5,227	**2,339**	252,972	366,613	143,657	11,000	63,911	209,357
Sewage gas	42,428		3,393	3,393	35,577	6,223														
Other biogas	1,435,296	149,562	5,718	17,477	534,872	513,662	117,088		14,817	242,053	433,611	14,767	5,718	**2,660**	135,886	310,159	17,707			103,515
MSW	6,787,285	1,770,170	561,070	527,451	4,286,591	921,655	731,712	53,000	94,834	1,035,509	1,533,675	537,522	507,180	406,970	984,721	1,135,907	452,022	889	17,837	986,704
IB&CW	8,613,334	1,856,381	435,833	557,974	6,101,939	1,003,789	647,099	88,298	242,235	581,554	1,076,792	493,398	195,847	132,463	772,020	1,010,605	714,536	1,135	22,757	712,401
Total	653,994,861	138,586,263	245,037,957	261,998,136	393,405,867	140,290,947	56,052,365	65,965,883	71,440,073	116,591,486	185,133,599	51,213,121	84,092,327	95,365,911	111,007,448	145,544,591	23,628,537	46,653,420	47,356,233	75,274,312

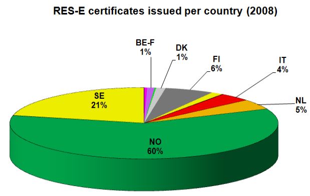
NOTE

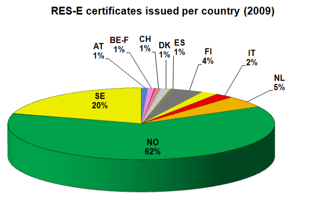
The tables above display issue and cancellation statistics for each year to date, and for 2001-9 in total. These, and the following charts, show that volumes issued, transferred and cancelled continue to increase at a greater rate than in previous years.

EUROPE: 2008-2009

Source of certificates: country

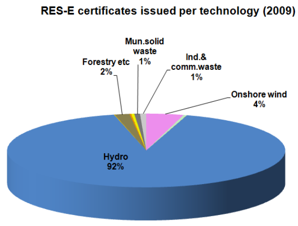
Comparing 2009 with 2008, the major certificate issuing countries remain Norway and Sweden, then Finland and the Netherlands. However, Italy, Finland and Sweden have marginally decreased their share with the arrival of new issuers, and Norway strengthening its performance.

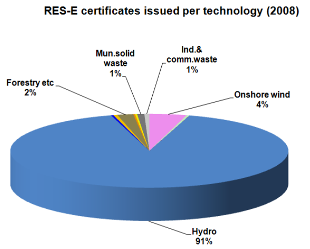




Source of certificates: technology

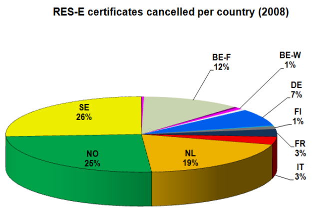
Hydropower retains its predominant position; most other technologies having virtually ceased to contribute except onshore wind power and biomass.

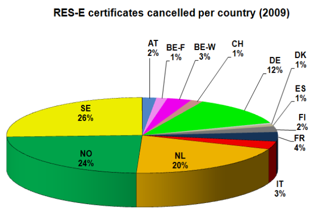




Destination of certificates: country

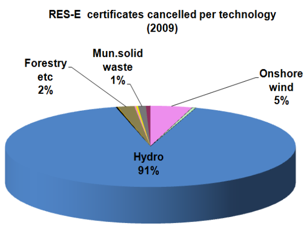
The major buyers remain Germany, the Netherlands, Sweden and Norway, with several new consuming countries entering the market. The large drop in the consumption of Belgium may be due to consumption tending to be higher than average in the last quarter of the year.

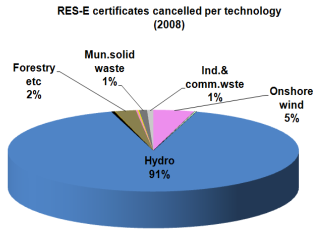




Cancelled certificates: technology

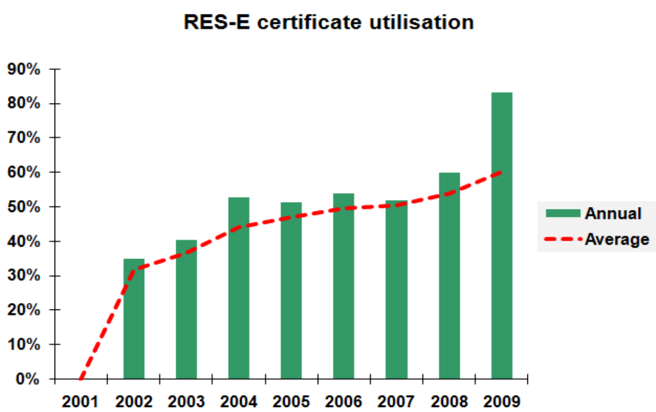
Again comparing 2008 with 2009, but this time for cancelled certificates by technology, hydro has held its market share along with wind.

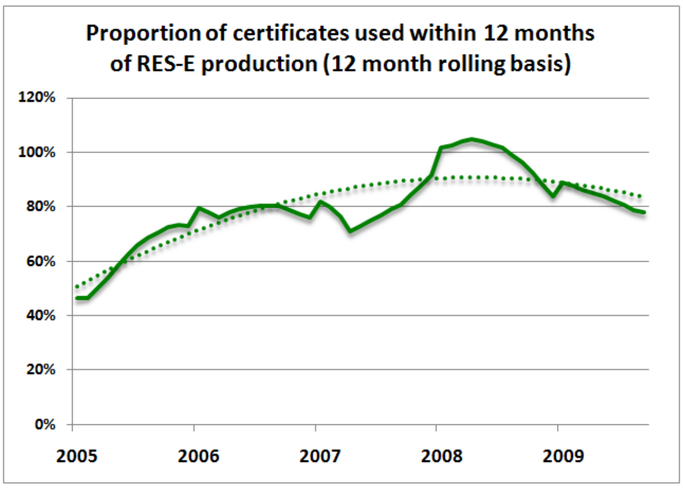




Realisation of value

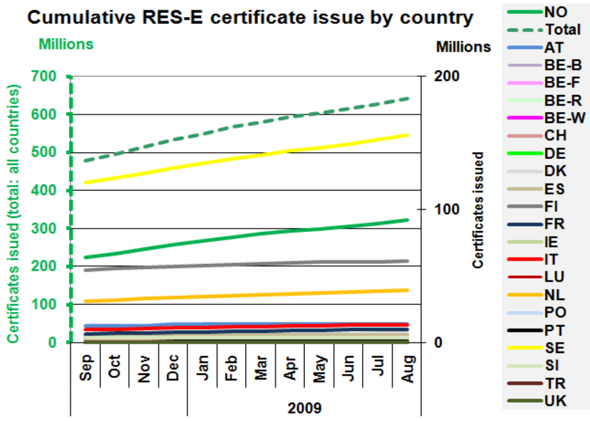
The proportion of certificates that were cancelled has stayed at 60% overall, but during 2009 it is more than 83% (up from 60% in 2008) - suggesting that stocks of certificates from previous years are now being used up, and that most certificates are now being cancelled within 12 months of the production of the associated electricity.

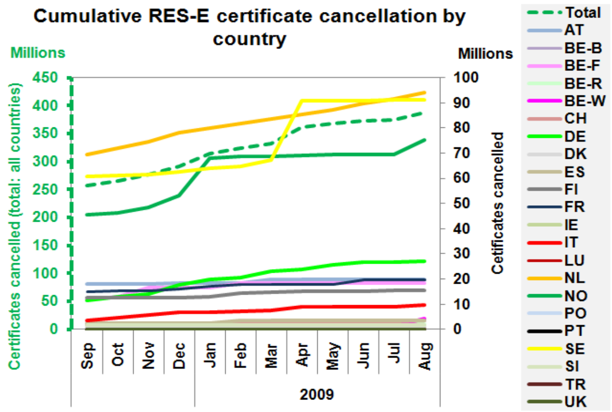


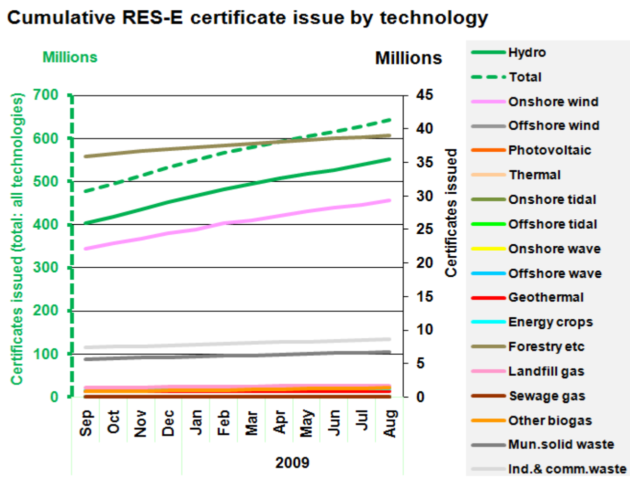


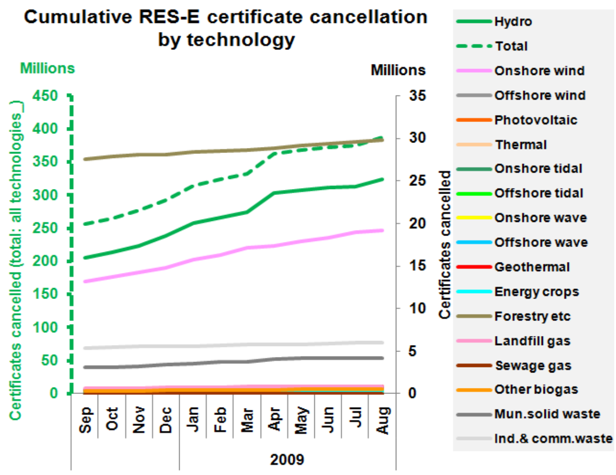
Cumulative issue and cancellation

Overall, issuing and cancellation continue to increase rapidly as GO are increasingly used for disclosure across Europe. The volume of hydro issued and cancelled continues to eclipse everything else (except wind and forestry). *[Note that the left-hand axis applies to overall totals, plus statistics for Norway and Hydro - the green lines.]*



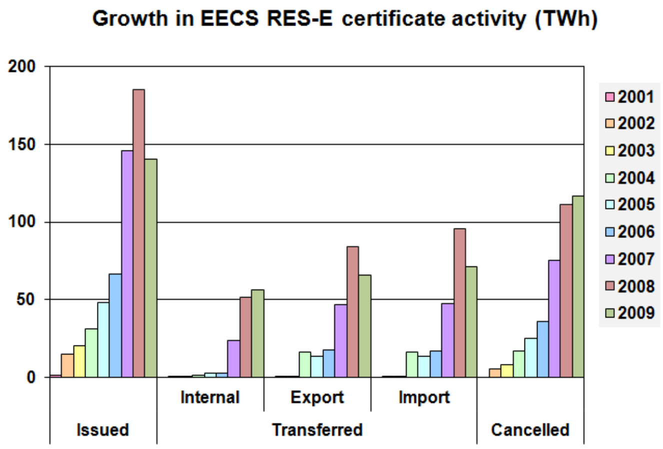


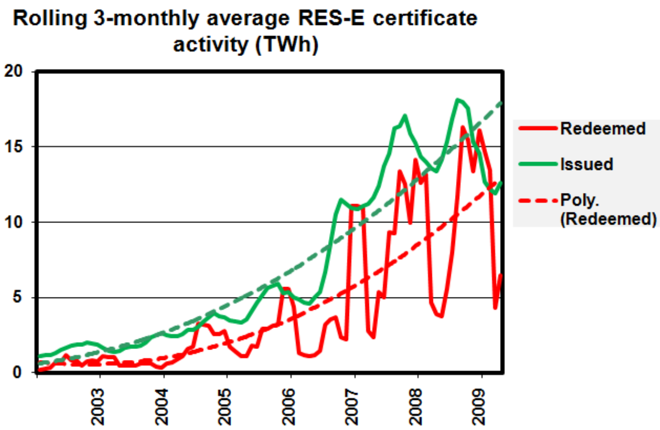




Growth

Last year, 185 million certificates were issued, of which 111 million were cancelled; and the figures for 2009 to date (140 and 116 million certificates respectively) suggest that the final figure might well be in excess of 170 million issued and 150 million cancelled.

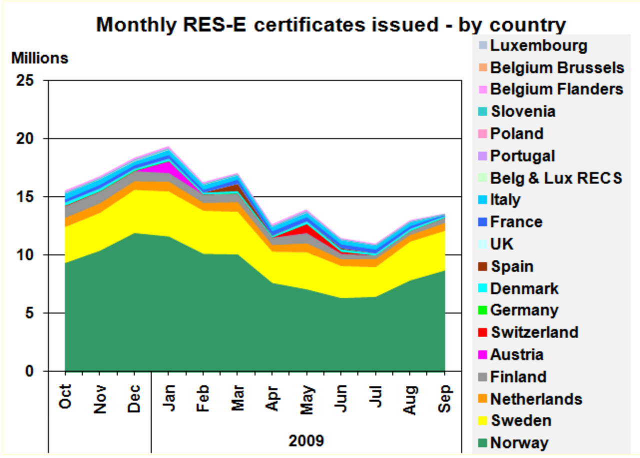


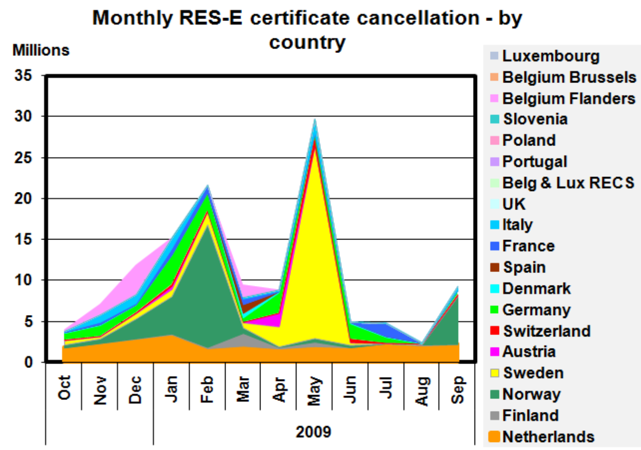


Rolling three month averages show that the market continues to grow at a cyclical and increasing rate.

TRADE

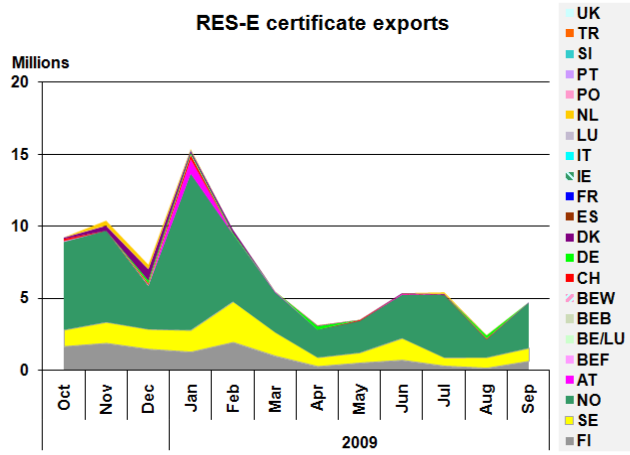
The following graphs summarise monthly issuing and cancellation, clearly showing the influence on international trade of the producing countries - most recently Norway, Sweden and the Netherlands; and of the consuming countries – most recently the Netherlands, Norway and Italy.

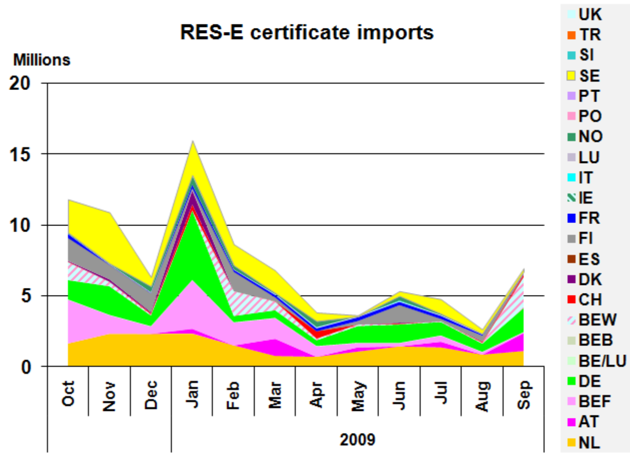




Exports and imports

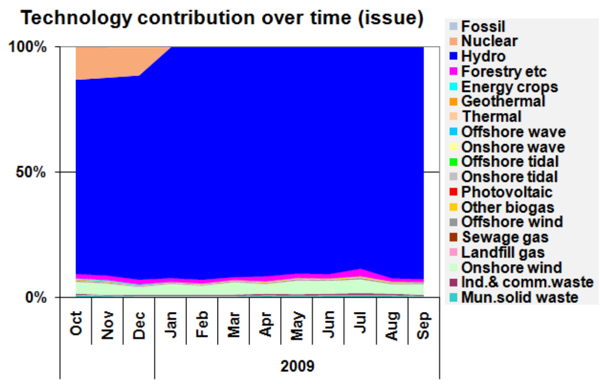
The largest exporters remain Norway (by far), then Sweden and Finland; while the Netherlands, Austria, Germany and Wallonia are currently the major importers.

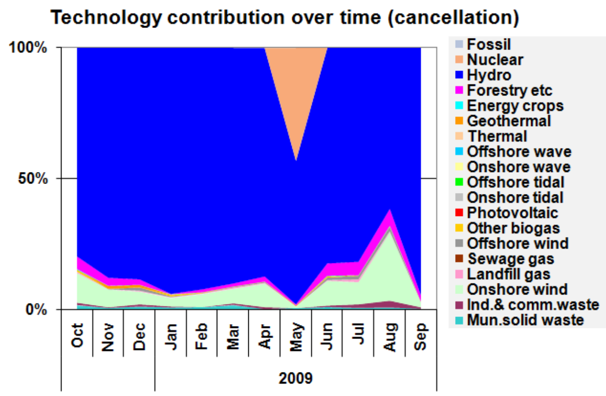


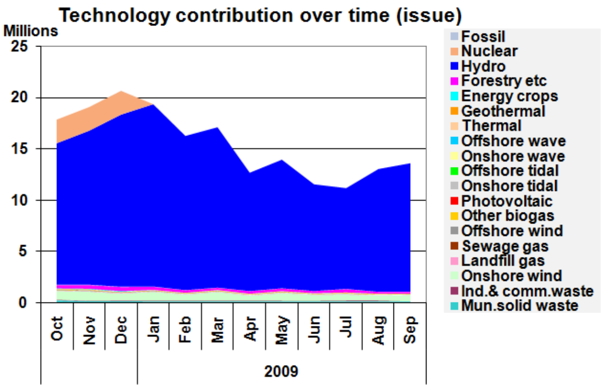


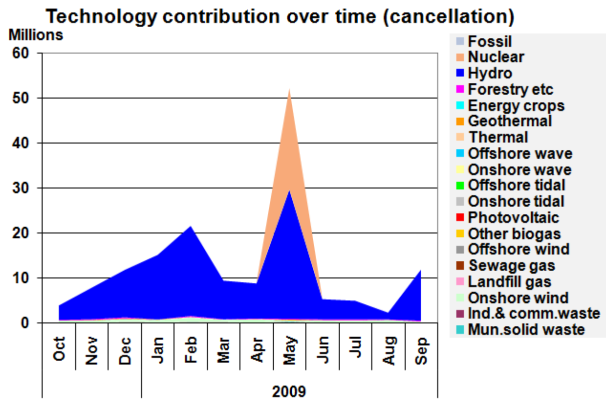
Technology Contribution

Analysis of energy sources shows that significant growth in hydropower certificates is now close to being matched by the market for these certificates – over 91% of certificates issued this year are for hydropower, and over 82% of these have been cancelled.

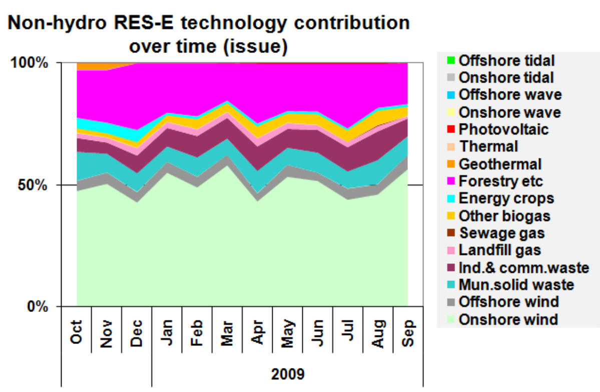


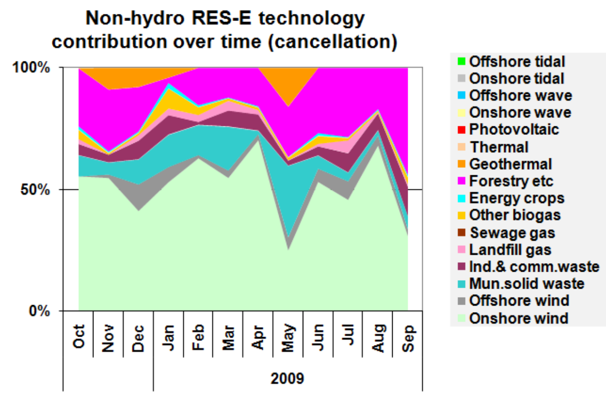


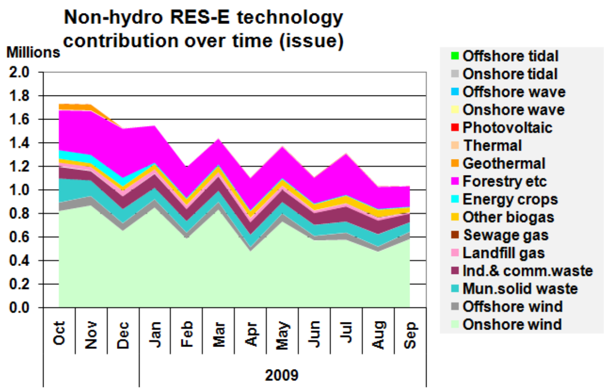


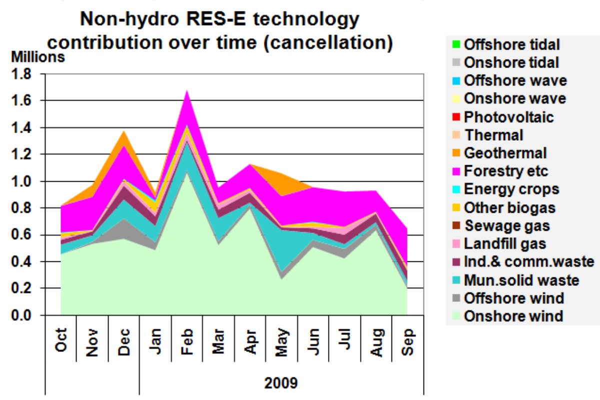


The predominance of hydro - and the emergence of nuclear - masks the growth of the non-hydro renewable electricity market: removing hydro and nuclear from the picture exposes the contribution of wind power and biomass.





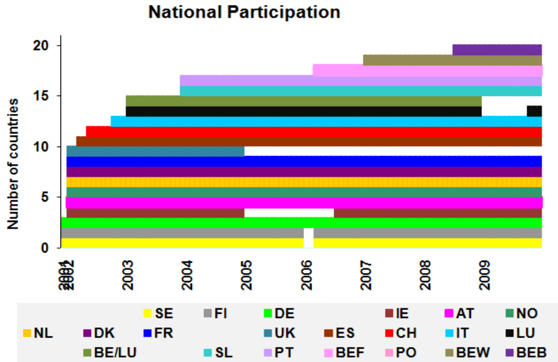




National Participation

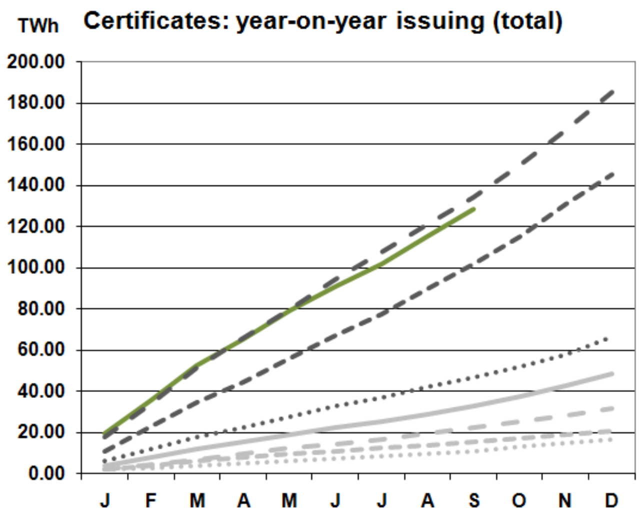
Membership continues to grow, Luxembourg having now joined the AIB, and the RES-GO and RECS schemes. Switzerland and Netherlands have both joined the Disclosure GO scheme; while Slovenia has joined the RES GO scheme.

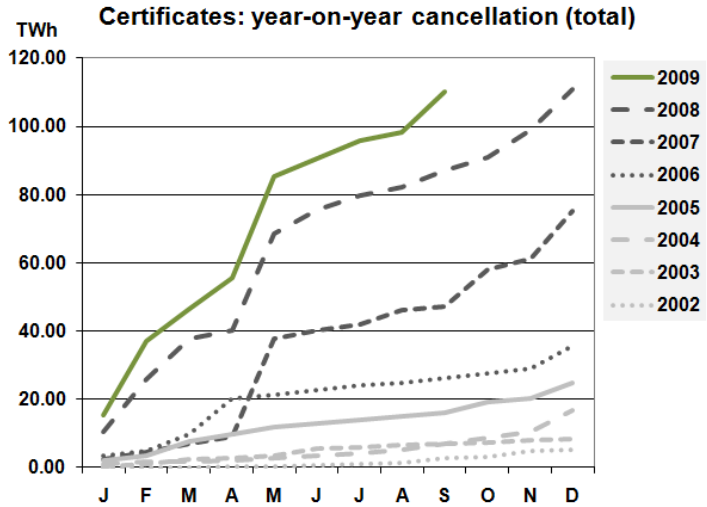
Membership of the GO RES-E scheme is now available to countries wishing to issue support certificates as well as GO RES-E; and countries issuing GO RES-E can export these into countries operating the Disclosure-GO scheme.

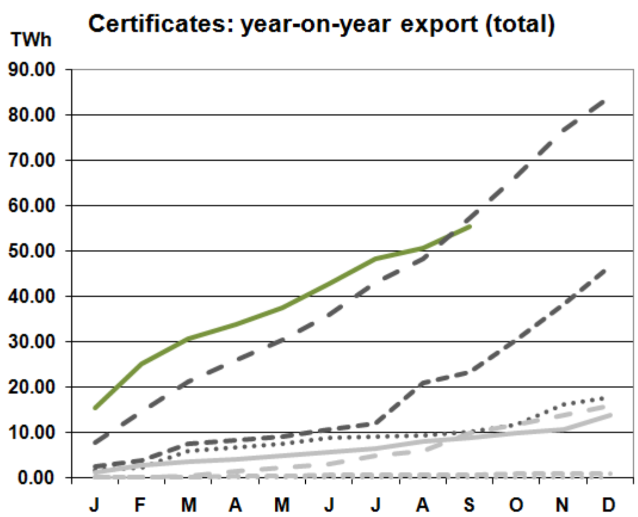


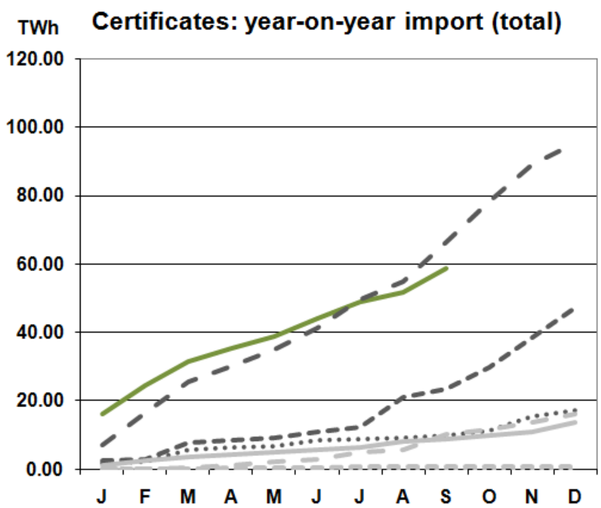
EUROPEAN ACTIVITY

While issuing continues to grow at roughly the same rate, cancellation is increasing rapidly, the growth in cancellation betraying the increasing demand for GO to provide evidence for disclosure purposes, due to government requiring cancellation of GO as evidence for disclosure purposes, and increased public awareness of the usefulness of this form of guarantee. However, international trade seems to be slowing.









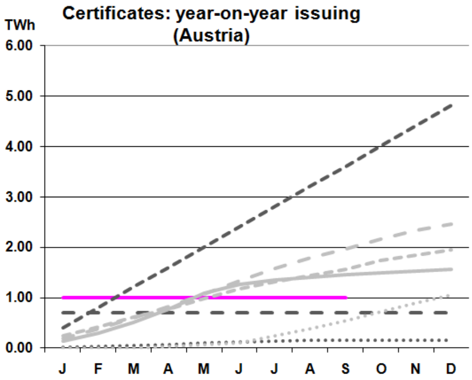
COUNTRY REPORTS

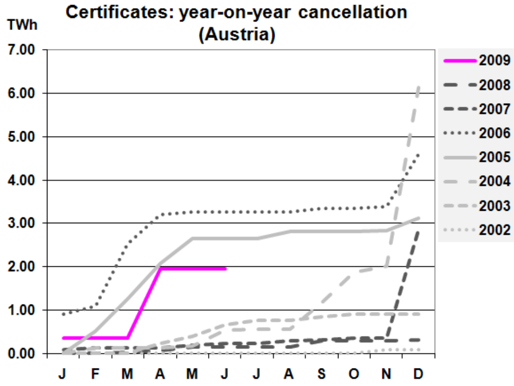
Austria

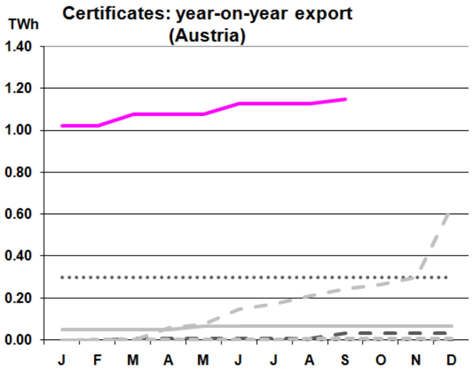
Austria has virtually ceased issuing, although it has recently started to trade more.

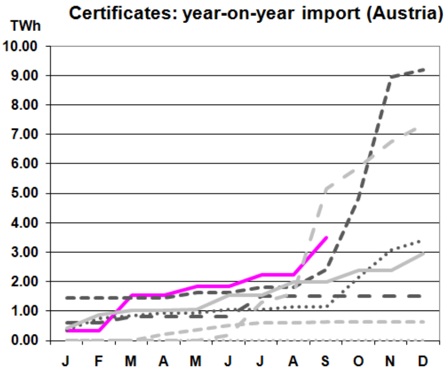
Cancellation remains much as in previous years.

For more information, contact:
Christian Schönbauer
E-Control (Issuing body for Austria)
Tel: +43 (1) 24724 707
Email: christian.schoenbauer@e-control.at





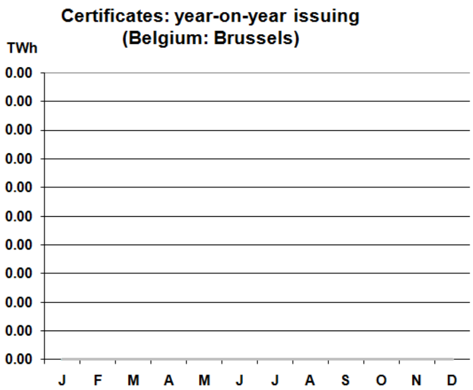


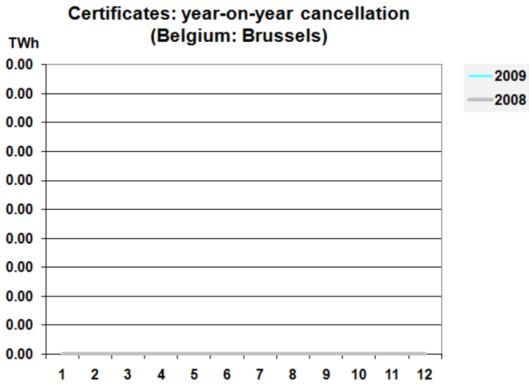


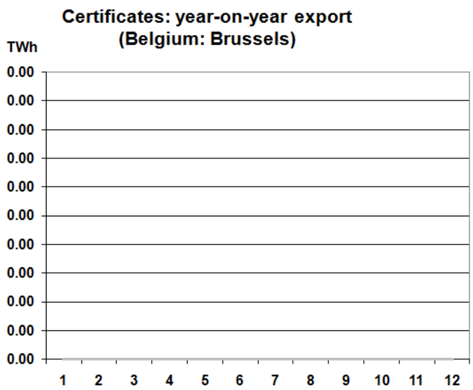
Belgium (Brussels)

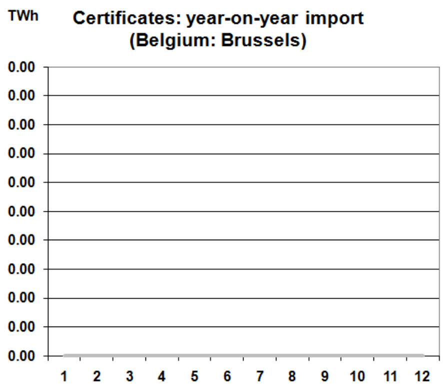
Brugel has registered a substantial number of accounts and production devices, most of which relate to photovoltaic production which is fully auto-consumed by producers, but has yet to commence certificate activity.

For more information, contact:
Pascal Misselyn
Brugel (Issuing body for Brussels)
Tel: +32 (2) 563 0202
Email: pmisselyn@brugel.irisnet.be





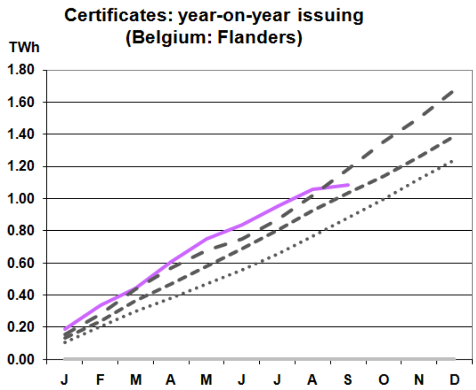


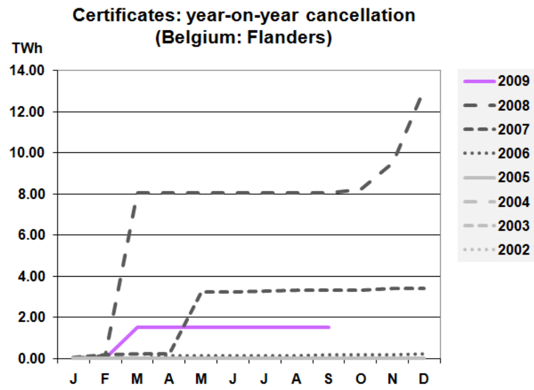


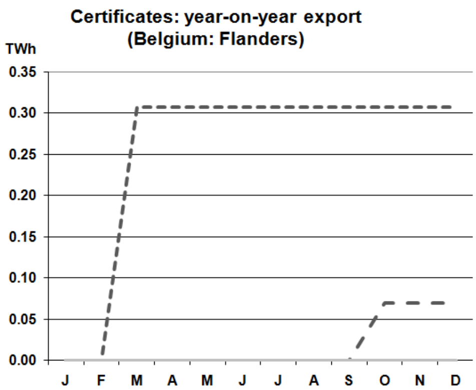
Belgium (Flanders)

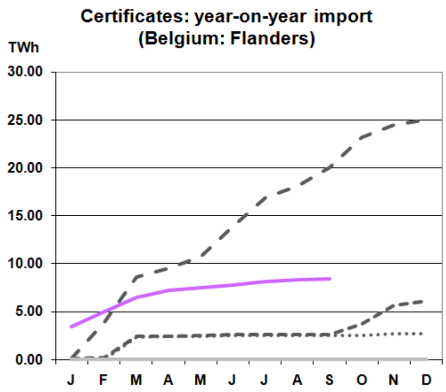
So far, issuing activity has been similar to last year.

However, imports and cancellation are substantially lower.





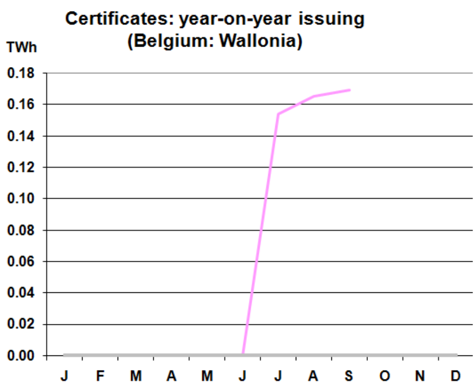


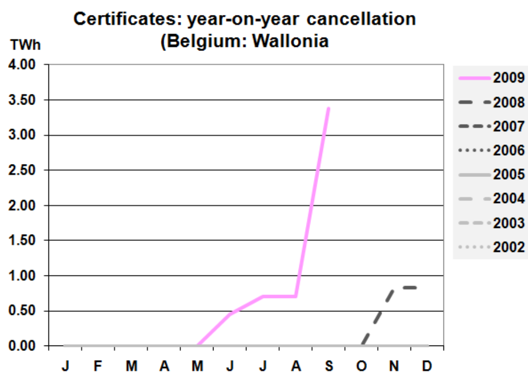


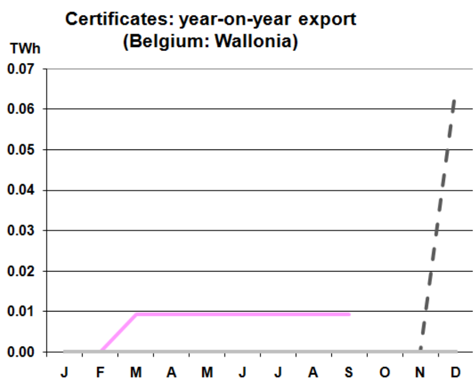
For more information, contact:
Thierry van Craenenbroeck
VREG (Issuing body for Flanders)
Tel: +32 (0) 2 553 13 59
Email: thierry.vancraenenbroeck@vreg.be

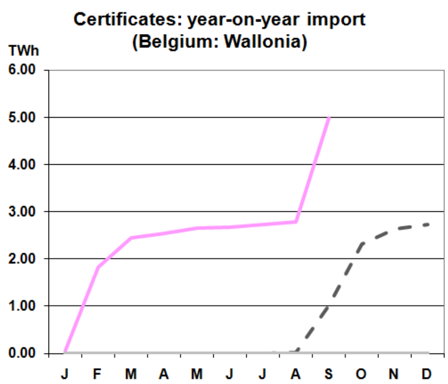
Belgium (Wallonia)

This quarter has seen Wallonia commence issuing certificates, with import and cancellation rising well above last year. There has also been limited export.





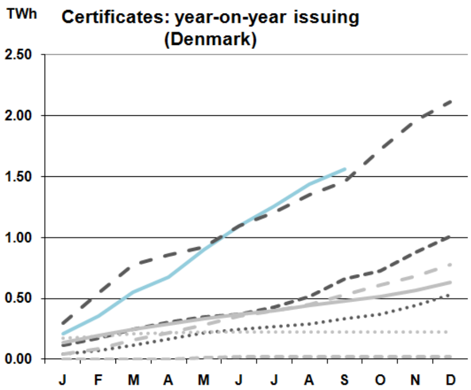


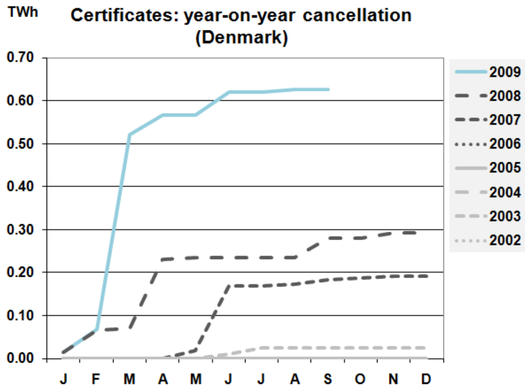


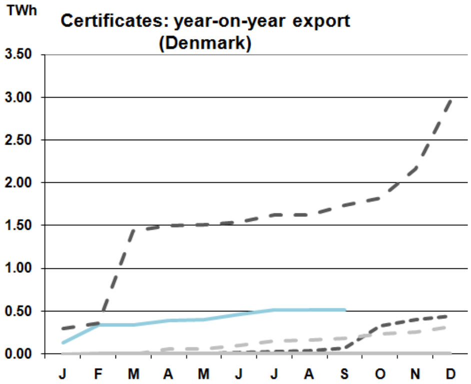
For more information, contact:
Pierre-Yves Cornélis
CWaPE (Issuing body for Wallonia)
Tel: +32 (0) 81 33 08 14
Email: pierre-yves.cornelis@cwape.be

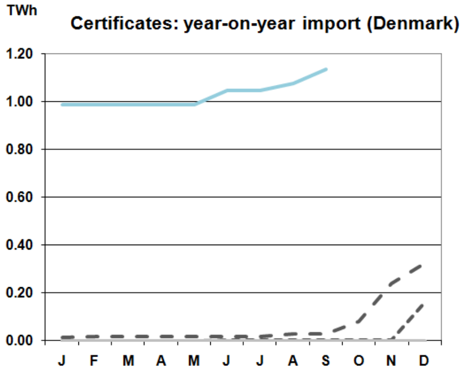
Denmark

Cancellation and import are now increasing to the extent that Danish activity in these areas is now running much higher than in previous years; while issuing continues at broadly the same rate and export remains much lower.





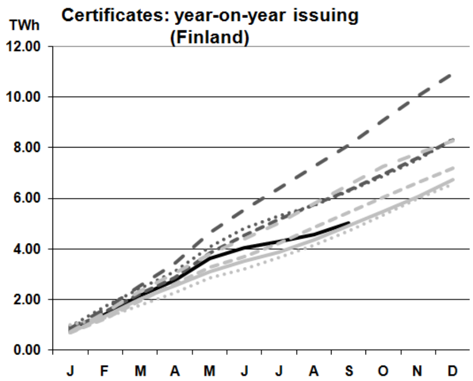


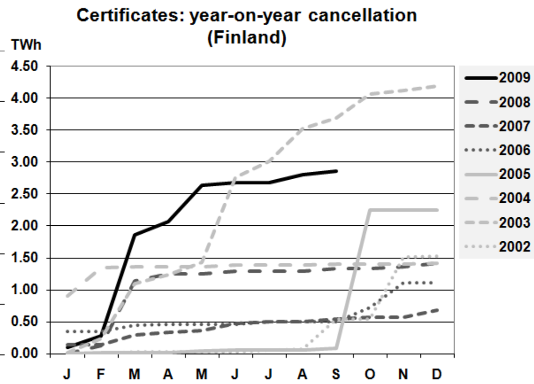


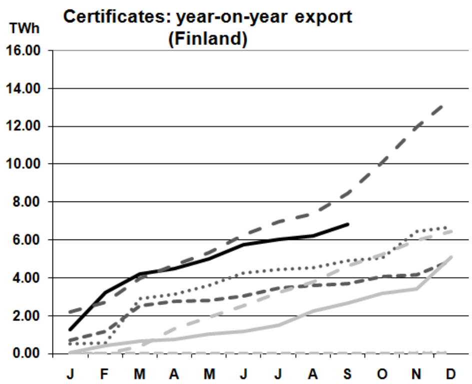
For more information, contact:
Louise Rønne Christensen
Energinet.dk (Issuing body for Denmark)
Tel: +45 7622 4439
Email: lro@energinet.dk

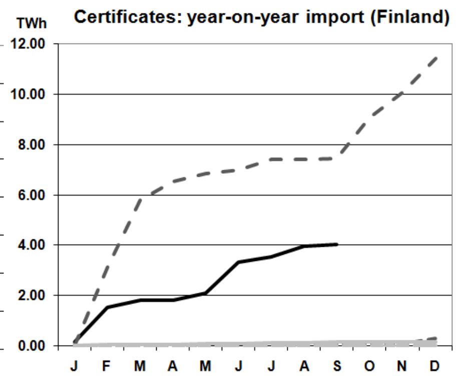
Finland

Activity in Finland has slackened off since 2008, although the volumes concerned remain substantial.





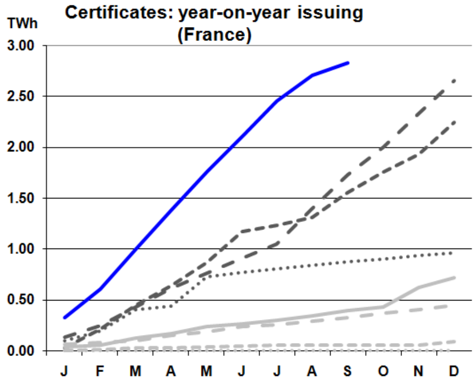


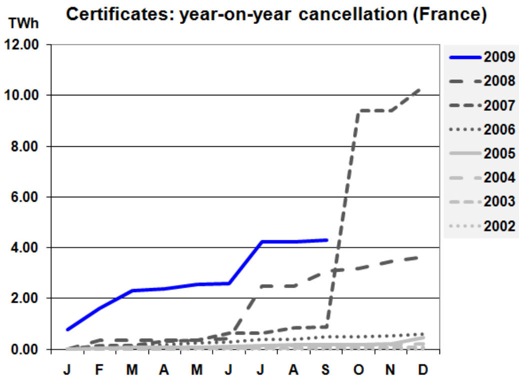


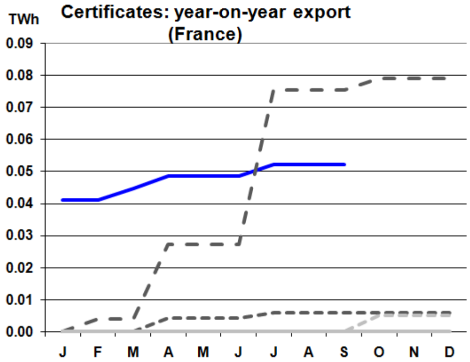
For more information, contact:
Marko Lehtovaara
Grexel (Issuing body for Finland)
Tel: +358 (9) 251 22211
Email: marko.lehtovaara@grexel.com

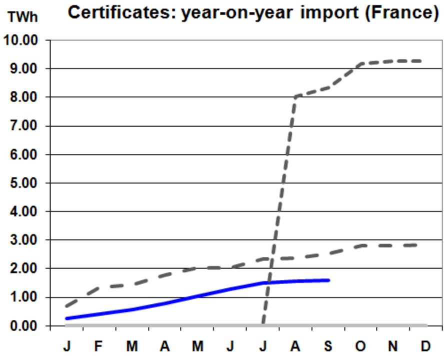
France

The French market continues to grow, with higher issued and cancelled certificates than in previous years, although international trade has dropped recently.







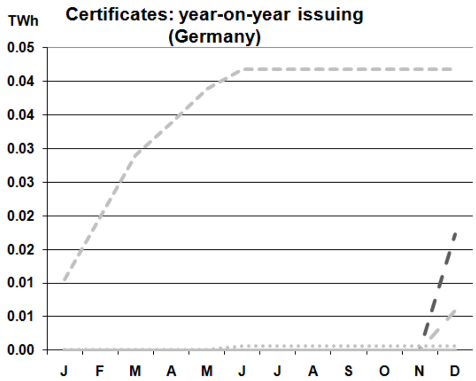


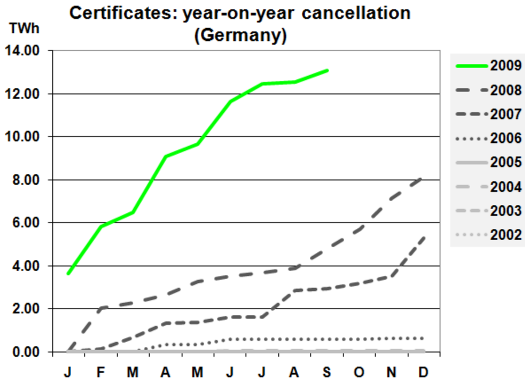
For more information, contact:
Diane Lescot
Observ'ER (Issuing body for France)
Tel: +33 1 44 18 0080
Email: diane.lescot@energies-renouvelables.org

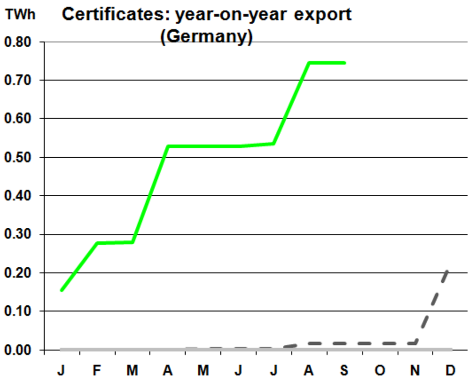
Germany

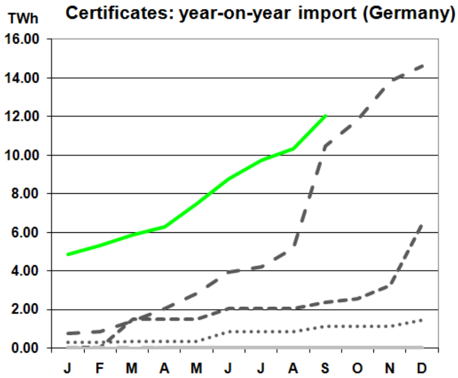
Since 2008, issuing has ceased. However, the import, export and cancellation of certificates have continued at a much higher rate than previous years: Germany is now one of the larger consumers of certificates.

The rapid increase in imports and cancellations seems to be due to increasing numbers of consumers and suppliers switching to supply of 100% renewable electricity.





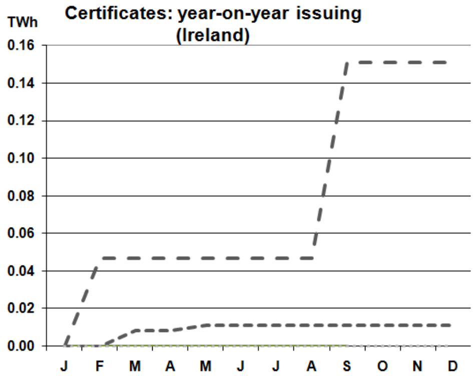


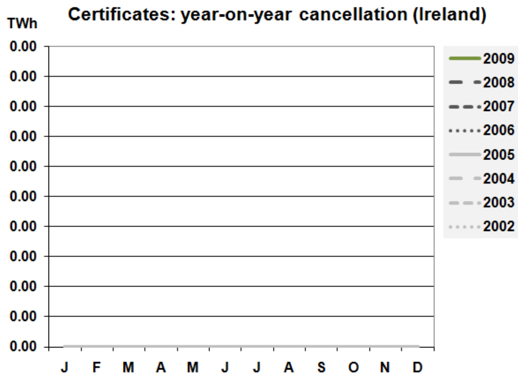


For more information, contact:
Christof Timpe
Oeko-Institut (Issuing body for Germany)
Tel: +49 (761) 452 95-25
Email: c.timpe@oeko.de

Ireland

Issuing ceased in autumn 2008, and no issuing, trade or cancellation has taken place since then.

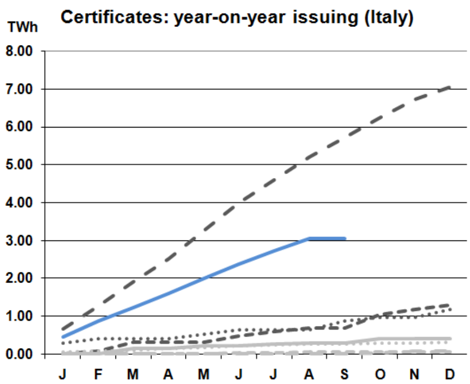


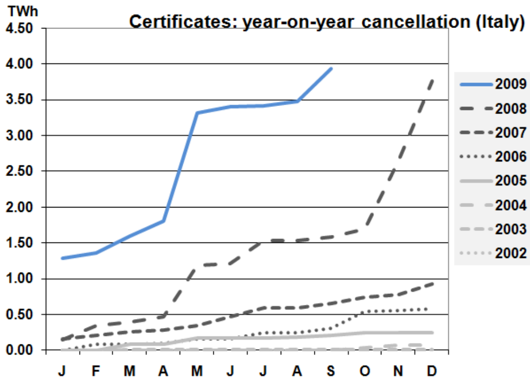


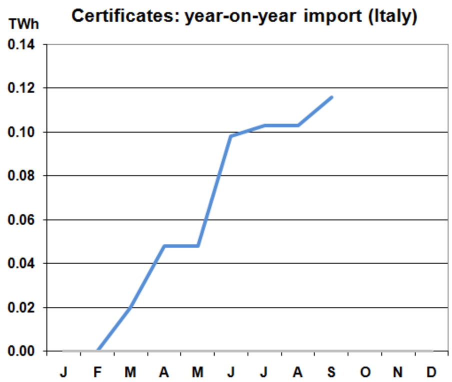
For more information, contact:
Edmund Everson
GCC (Issuing body for Ireland)
Tel: +44 7941 236053
Email: ed_everson@green-certificates.co.uk

Italy

Domestic issuing continues to grow at a slower rate than in previous years in Italy, but major growth has been experienced in import and cancellation of RECS certificates to the extent that Italy is now one of the larger importers.



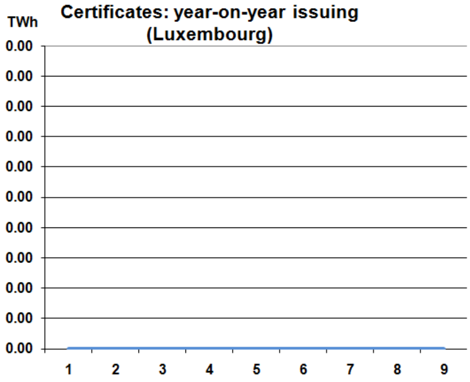


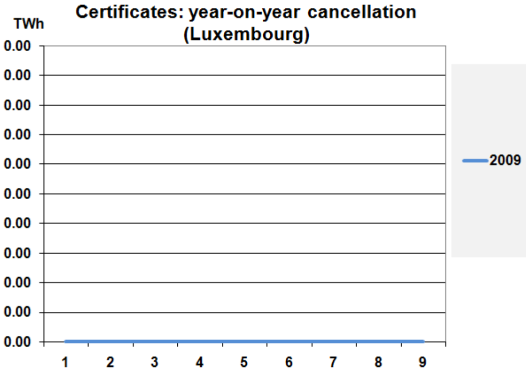


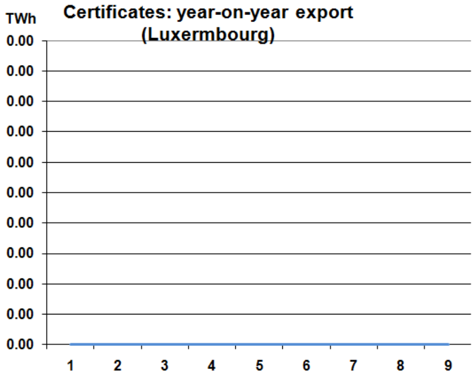
For more information, contact:
Natascia Falcucci
GSE (Issuing body for Italy)
Tel: +39 (06) 8011 4827
Email: natascia.falcucci@gse.it

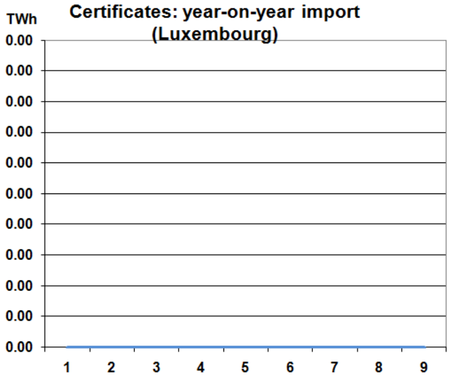
Luxembourg

The Institut Luxembourgeois de Regulation recently joined the AIB, and the RECS and RES GO schemes. It is likely to commence issuing activity in the new year.







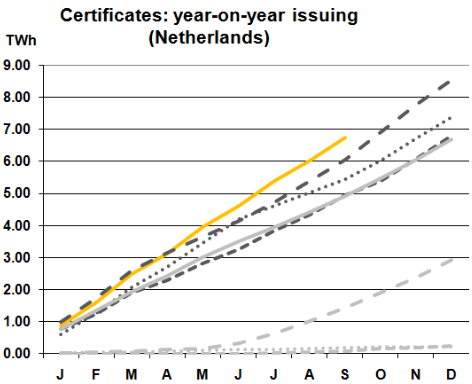


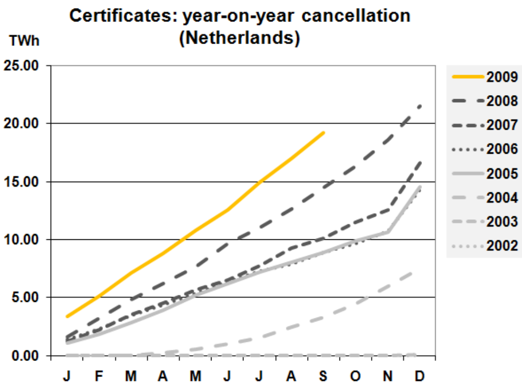
For more information, contact:
Claude Hornick
ILR (Issuing body for Luxembourg)
Tel: +352 (45) 88 45 58
Email: claude.hornick@ilr.lu

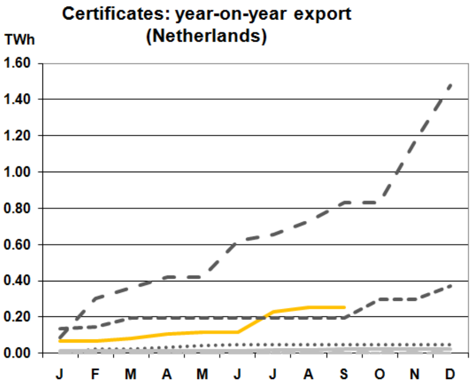
The Netherlands

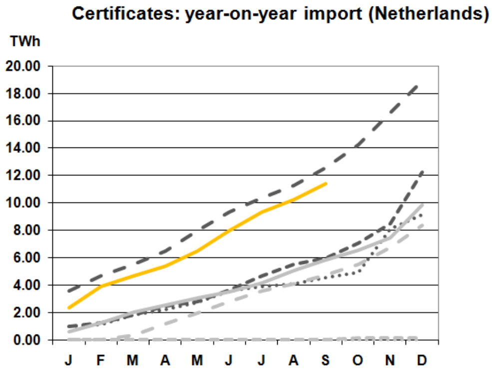
During 2009, all activity except international trade has continued to increase above the level of previous years.

The Netherlands continue to be one of the major markets for EECS certificates, which mostly originate from the Nordic countries.







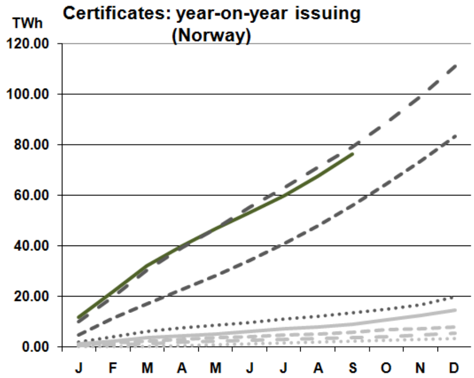


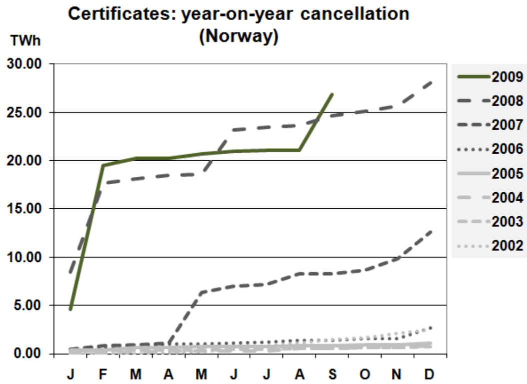
For more information, contact:
Gineke van Dijk
CertiQ (Issuing body for Netherlands)
Tel: +31 (26) 373 1754
Email: g.v.dijk@certiq.nl

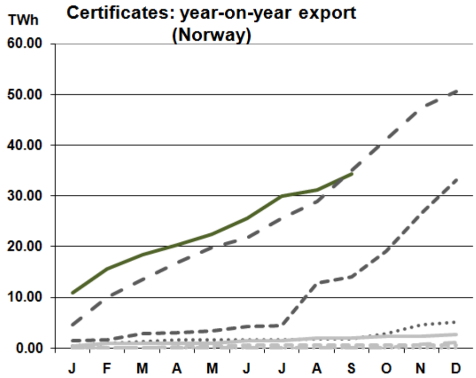
Norway

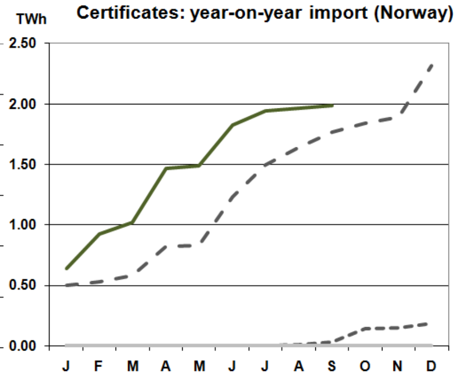
Norway has continued to issue and export, certificates at broadly the same rate; and to import and cancel certificates at a higher rate than ever before.

For more information, contact:
Tor Bjarne Heiberg
Statnett (Issuing body for Norway)
Tel: +47 (2252) 7573
Email: tor.heiberg@statnett.no





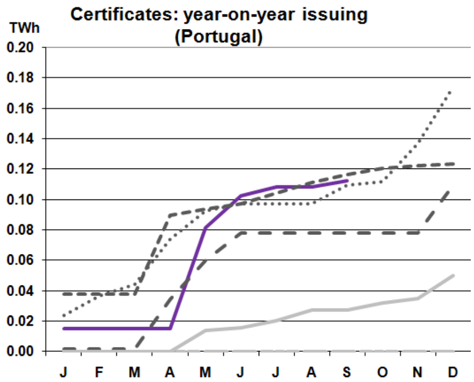


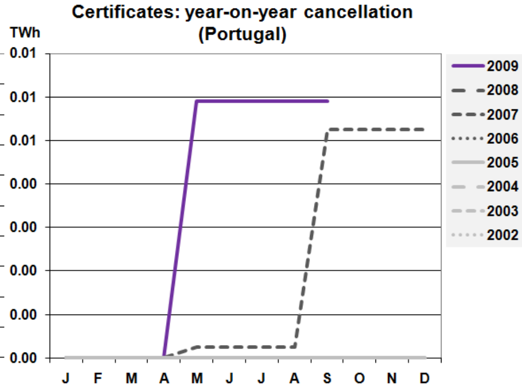


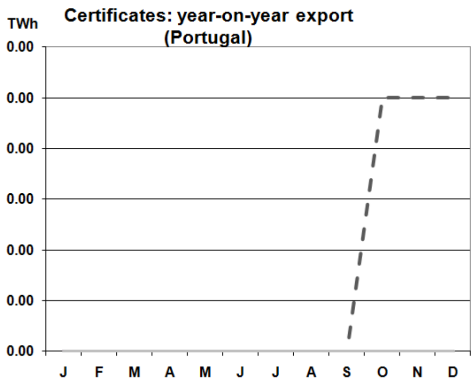
Portugal

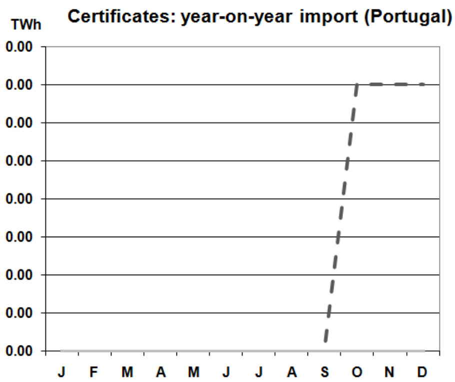
Portugal continues to issue a small number of certificates, but apart from that has been inactive.

For more information, contact:
Pedro Cabral
REN (Issuing body for Portugal)
Tel: +351 (220) 012 416
Email: pedro.cabral@ren.pt





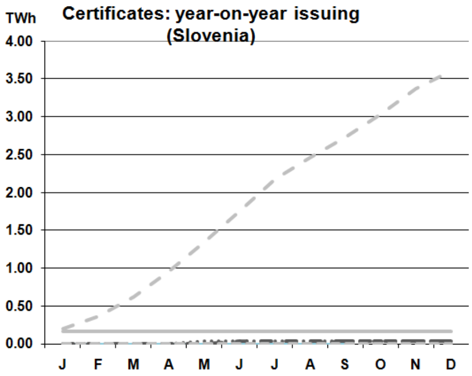


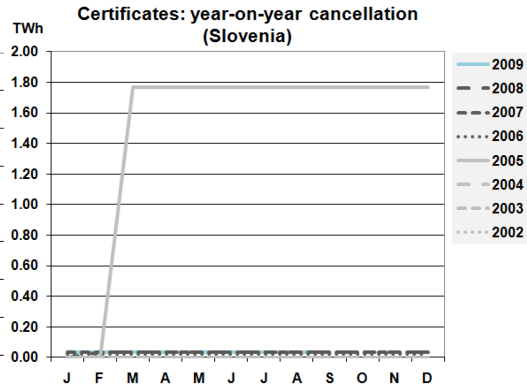


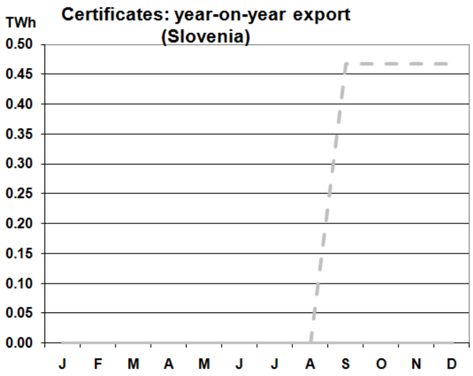
Slovenia

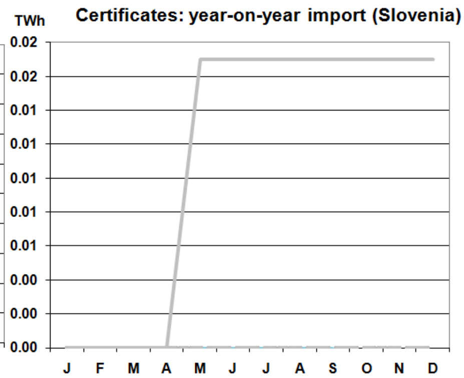
Slovenia has cancelled a small number of certificates this year, but has otherwise been inactive for the past year or so.

Slovenia was recently admitted to membership of the RES GO scheme in compliance with the EECS model.





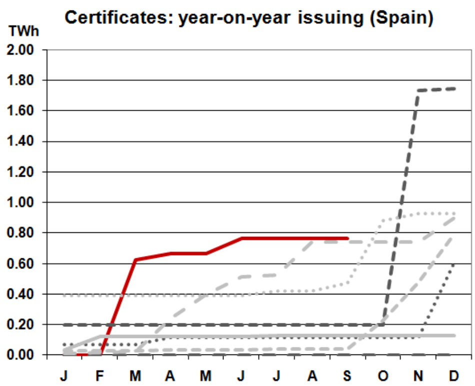


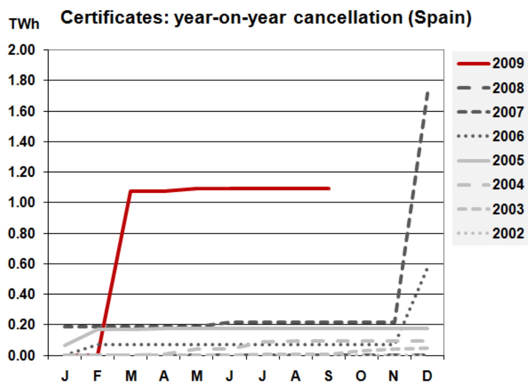


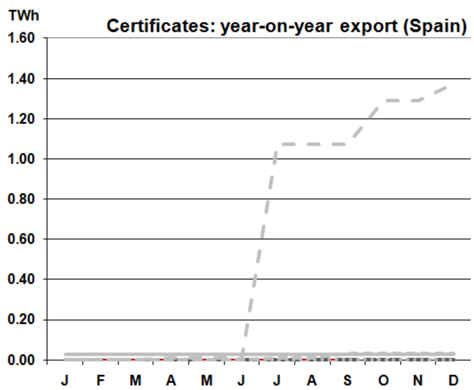
For more information, contact:
Ervin Seršen
Slovenian Energy Agency (Issuing body for Slovenia)
Tel: +386 (0) 2 234 03 00
Email: ervin.sersen@agen-rs.si

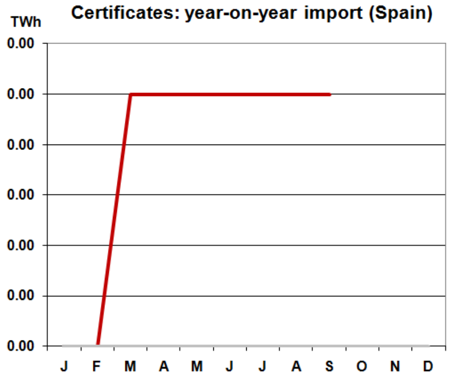
Spain

Since resuming operations at the start of 2009, the Spanish domain saw relatively high activity levels servicing domestic consumers, before activity flattened off in the last 6 months.









For more information, contact:
Edmund Everson
GCC (Issuing body for Spain)
Tel: +44 7941 236053
Email: ed_everson@green-certificates.co.uk

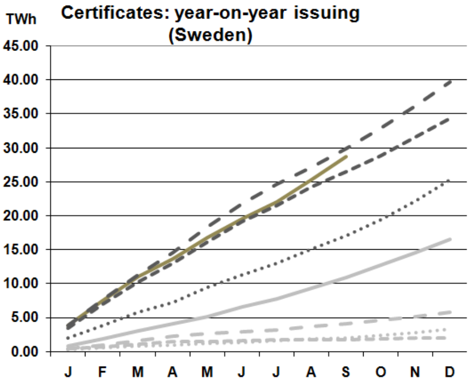
Sweden

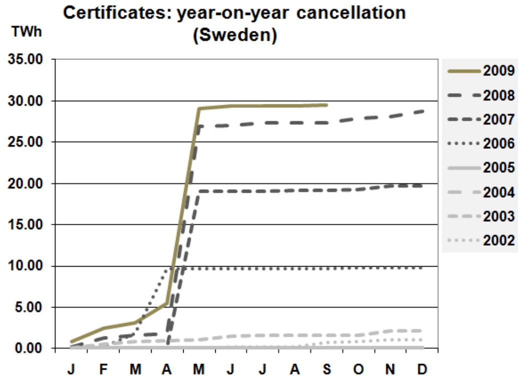
Sweden continues to import and export more than in previous years.

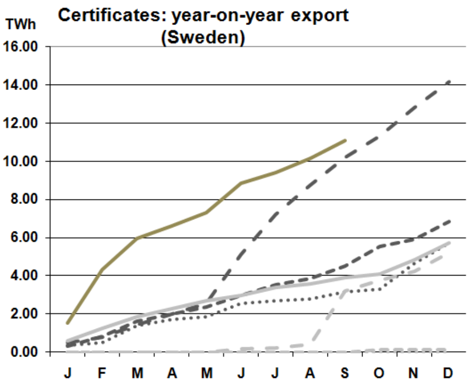
The above statistics focus on renewable energy, and ignore nuclear electricity, for which Sweden now issues Disclosure-GO (to date, this has been in December).

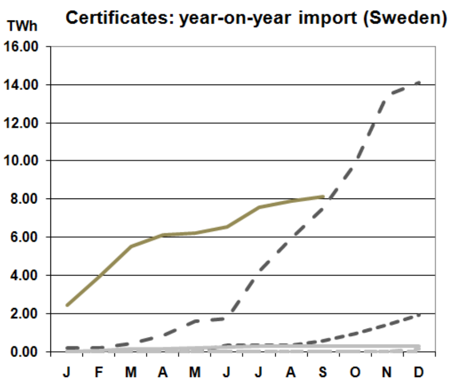
The increase in the scope of EECS to encompass non-renewable electricity will provide better statistics for calculation of the Swedish residual mix.

For more information, contact:
Marko Lehtovaara
Grexel (Issuing body for Sweden)
Tel: +358 (9) 251 22211
Email: marko.lehtovaara@grexel.com









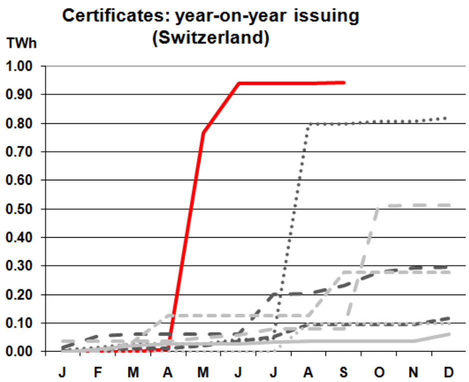
Switzerland

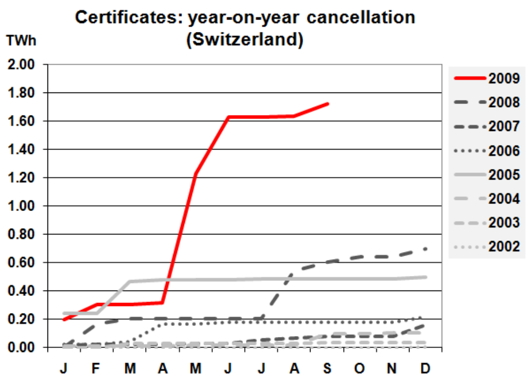
In the last quarter, Swiss RECS certificate activity has levelled off, while cancellation continues to rise.

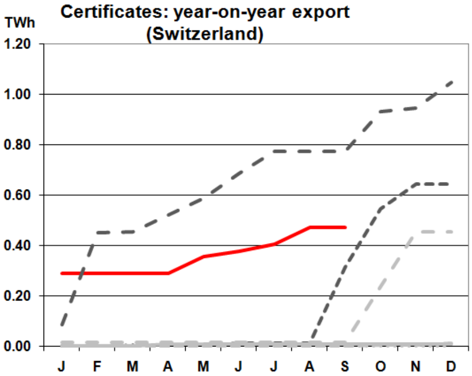
Switzerland has successfully applied for admission to the Disclosure GO scheme, so Swiss RES GO will also be eligible as Disclosure GO (but not vice versa).

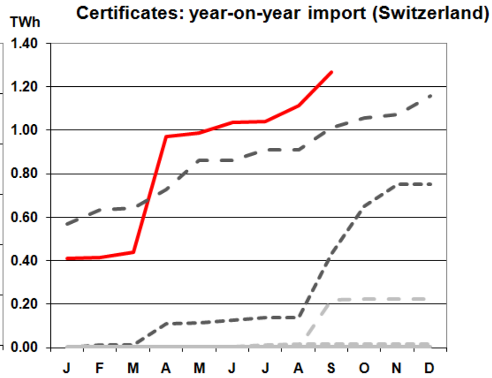
The current form of the forthcoming EU Renewables Directive includes provisions for the treatment of "third countries" outside of the EU such as Switzerland.

For more information, contact:
Lukas Groebke
swissgrid ag (Issuing body for Switzerland)
Tel: +41 (58) 580 2138
Email: lukas.groebke@swissgrid.ch









The leading enabler of
international energy certificate schemes

2010 : EVENTS

FORTHCOMING MEETINGS

February 24	Brussels	AIB General Meeting
April 13	Barcelona	AIB General Meeting
April 14-15	Barcelona	REXchange conference
June	TBA	AIB General Meeting
September	Dubrovnik	AIB General Meeting
December	Portugal	AIB General Meeting

Registered Office: Rue du Canal 61 | B-1000 Brussels | Belgium
Administrative Offices: 21-23 Station Road | Gerrards Cross | Bucks | SL9 8ES | United Kingdom

Tel: +44 (0)1494 681183
Fax: +44 (0)1494 681183
E-mail: info@aib-net.org
Web site: www.aib-net.org

Registered in Belgium – registration number (numero d' entreprise): 0.864.645.330