ASSOCIATION OF ISSUING BODIES

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

Newsletter 12

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AIB Statistics

All figures 1MWh certificates

In 2010 (to mid-October):

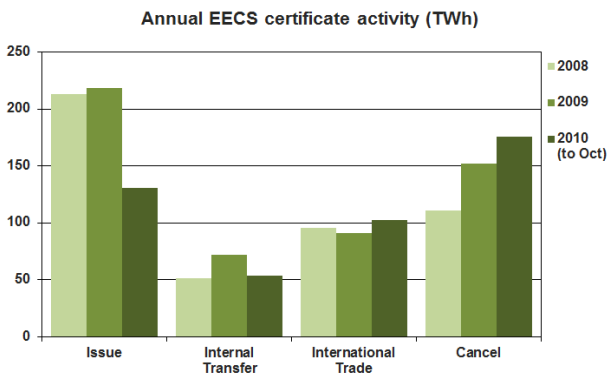
- ISSUED: 130 million
- TRANSFERRED: 102 million
- CANCELLED: 175 million

In 2009:

- ISSUED: 218 million
- TRANSFERRED: 91 million
- CANCELLED: 151 million

Since 2001:

- ISSUED: 890 million
- TRANSFERRED: 384 million
- CANCELLED: 604 million



Inside this issue:

Feedback from the marketplace

Recently, the AIB interviewed Francesco Carlini, Environmental Markets Director of A2A Trading, a multi-utility; and Matteo Calvi, Managing Director of Edelweiss Energia, an international trader of electricity, natural gas and environmental-related products .

Carlini and Calvi speak about the value of guarantees of origin (GOs) and international GO trading, with particular emphasis on Italy.

They also comment upon the growing awareness of environmental products among consumers.

HUB replacement

Marcel Doyer leads the HUB Task Force and writes about the new inter-registry HUB. The AIB has selected Atos to develop the HUB, which will facilitate the exchange of certificates between issuing bodies.

This is a more robust version of the existing hub, which will support the changing environment and support testing and the analysis of statistics. It will support old and new format RES GOs, CHP GOs, and voluntary certificates.

It is planned that the new HUB will go live in summer 2011.

Review of Croatian Electricity sector

The September 2010 AIB General Meeting was held in Dubrovnik, Croatia and in this, the first in a series of such articles, Dubravka Škrlec of the market operator (HROTE) discusses the Croatian electricity market.

The Croatian energy strategy is discussed; along with the structure of the market.

Market participants are outlined, along with the function of HROTE, both in the electricity market and as a major player in the renewable electricity and high-efficiency cogeneration support scheme.

Implementating RES Directive 2009/28/EC

The RES Directive is binding upon all member states of the EU; plus states bound to it by treaty (e.g. the EEA countries).

For this reason most European countries are preparing their GO schemes and systems, in order to meet the implementation deadline of 5th December 2010.

The progress of current and likely member countries of the AIB in meeting the deadline is outlined, along with estimates of expected enactment of necessary legislation; and the date of commencement of issuing of new format GOs.

New CEN/CENELEC standard for GOs

CEN/CENELEC is currently developing a new standard for guarantees of origin for electricity.

In this, it is being actively assisted by AIB, to the extent that the initial draft of the new standard leans heavily upon EECS.

In this article, the scope, purpose and expected benefits of the standard are presented; along with the history of and plans for its development.

Feedback from the Marketplace

**Recently, the AIB interviewed representatives of two energy companies:
Dott. Francesco Carlini, Environmental Markets Director of A2A Trading srl - Gruppo AsA Spa, a multi-utility; and
Matteo Calvi, Managing Director of Edelweiss Energia S.p.A., an international trader of electricity, natural gas and environmental-related products .**

***AIB**: What kind of effect are you expecting from the activation of the Disclosure mechanism and from the use of Renewable Electricity Guarantees of Origin (RES GO) in respect of green pricing offers?*

Carlini: Fuel Mix Disclosure in Italy represents important transparency and clarity for final consumers.

In fact, the enforcement of Disclosure of this information with the electricity bill will provide growing consciousness of the value of electricity supply, not only from an economic point of view, but also from an environmental perspective. This process will put consumers in a much stronger position concerning the different options for energy consumption offered by a supplier.

A2A is an energy supply company which has focused on these needs ever since its inception; and considers Disclosure as a key element of the maturity of the electricity market, and one which will reward quality suppliers such as A2A, 40% of whose production is from RES, mostly hydroelectricity.

Calvi: The activation of the fuel mix disclosure mechanism aims to improve transparency by introducing new information requirements which are not meant to rule "green energy offers": the communication concerning the mix of electricity sources that is sold to final consumers is produced and published on the web site, promotional materials and electricity bills; whereas "green energy offers" guarantee to final consumers the origin of the supplied energy.

***AIB:** Do you think that document DCO 23/10 (controlling the supply of electricity from RES to final consumers) of the Regulatory Authority for Electricity and Gas (AEEG) can have an impact on current commercial activities?*

Carlini: Considering that the AEEG consultation document has not yet been converted into a resolution, and in view of the short deadline for contract closure, I don't think that there will be significant impacts on current commercial activities.

On the other hand, we do strongly believe that the DCO will increasingly raise supplier interest in "green pricing" matters as well as consumer attention, starting up a virtuous road map for the growth of renewable energies that will, in this way, be able to increase even more over the years.

We wish that the RECS system experience, of which A2A has been a member since 2005, will further develop with a more stringent certification mechanism.

Calvi: Document DCO 23/13 indicates clearly the principles behind the rules and resolutions which are intended to settle key elements such as avoiding double counting, and regulating additionality.

We agree the principles of transparency and control of green offers on which DCO 23/10 is based; and we agree that the above-mentioned measures will provide an effective measure for electricity supplied after 2012.

***AIB**: What is the role of the cross-border activity within the RECS certification system?*

Carlini: The statistical nature on which Disclosure is based allows the certification of Italian consumption using Guarantees of Origin from foreign countries, subject to physical import of the associated electricity.

We believe that consumers using the Disclosure mechanism are best informed of the country of origin of electricity production if this data is carried by a GO, which provides a transparent means of informing consumers where their electricity comes from.

Moreover, this information is already available at a detailed level to GSE for national and international operators of production devices.

Calvi: The European Electricity Market is progressing by leaps and bounds towards integration and coordination. We wish the same level of management also for electricity produced by from RES certification. We believe that standardized and liberally marketed products on a European level can also have a positive impact on the correct evaluation of green offers at a national level, and can also help RES power plants.

***AIB:** In the future, the adoption of a regulated green offer based on GO will require that the commercial year for the certification will have to correspond with the production year. RECS did not require this, as the lifetime of certificates was unlimited. Did you ever use "old" RECS related to past years production for "new" green offers?*

Carlini: In order to assure its consumers, A2A has always matched electricity with RECS issued in the same period, and has never used "old" RECS.

Calvi: Electricity is not storable, so a complementary market based on storable RECS does not make much sense. Furthermore, it would be complicated to communicate this to the consumer. Consequently, we propose to cancel sufficient related RECS certificates to reflect the corresponding energy sold.

***AIB:** Which mechanisms could be integrated into RECS in order to assure the traceability of "green offers" (e.g. Qualified Third Party, Process Certification, etc…)?*

Carlini: An internal procedure (organizational regulation) has been established which regulates the practices, the time schedule, and the traceability criteria related to the supply of RES.

While waiting to have a defined legislative framework, we are evaluating the pos-

*... continued on next **page***

Feedback from the Marketplace

(continued from last page)

sibility of a certification process through a Qualified Third Party.

Calvi: We think that the EECS system is already providing the necessary guarantees to assure traceability and avoid problems related to double counting.

AIB: *To what extent do you consider the "green pricing offer" a valid tool, capable of approaching consumers that are aware of environmental matters? Is it really an increasing market?*

Carlini: An increasing interest in environmental matters and sustainable energy products can be read clearly from the information in our records, especially by the mass market segment.

In particular, awareness is growing of RES production, support schemes and guarantees of origin.

Calvi: The figures provided by AIB concerning cancellation of RECS/GO certificates points out very clearly that consumers are very aware of the environmental protection achieved by the consumption of renewable energies.

We can reasonably envisage that the market will keep quickly growing as long as there is coordination and not too much fragmentation. Our forecast is that the Italian market will continue to grow faster than that of the rest of Continental Europe.

AIB: *Have you scheduled a diversification of the possible "green offers" depending on (e.g.) the final consumer's needs?*

Carlini: To this day, we have diversified the offer into two macro categories:

- **Mass market customers' package** offers (FIXED PRICE FOR GREEN SUPPLY for household customers; and CLEAN ENERGY for business customers), which include the same charging policy and two tailored possibilities: customised certification and window transparency for business customers; and a personalized welcome letter for household customers.
- **Big customers' offers,** which consist of an "add-on" decreasing price per supplied volume ratio. These clients benefit from: customised certification, which attests the renewable source of their consumption; a customised plate that can be put inside or outside their premises; and the ability to use the "ENERGIA A2A 100% RINNOVABILE" trademark (which is properly regulated) on their communication material or on their own products.

Calvi: Big industrial consumers and small private customers both place great emphasis on green energy consumption. Diversification is not so much on products as on communication.

Our firm commitment is to assure the reliability of the process under which energy products turn from grey to green. Precise rules and common modus operandi would help communication, and would provide the consumer with more guarantees.

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The HUB Replacement Project

What is the HUB?

Certificate trade is international. Besides EECS – the AIB International system and informal standard for energy certificate administration - AIB also provides a technical solution for exchanging certificates between members. All members communicate with each other by means of a simple connection to the HUB, which replaced the initial peer-to-peer network. The HUB is the fundamental means by which the AIB enables the international certificate market.

Why do we need a new HUB?

To gain experience in operating a HUB, a simple messaging prototype was put in place in 2007, and it has functioned satisfactorily. We have gained a lot of experience and thus also came up with new functional requirements such as more testing and reporting facilities. The new HUB can also handle the changes due to the recent RES Directive (2009/28/EC) and the improved EECS Rules. Following a European tender procedure, we have selected Atos Origin to develop and built our new HUB.

What are the consequences for the market?

We foresee that the new HUB will be operational by next summer (2011). The AIB General Meeting has decided to connect all members to the new HUB at once, rather than to have a phased implementation. While we are changing from the old to the new HUB, it is possible that the services will be offline for a very short period. We will do our utmost to minimize this period as far as possible; and will inform the market beforehand of the exact date of implementation.

Once the new HUB is in place, it will be able to support the current certificate trade, disclosure certificates and certificates according to the new EECS Rules.

For more information, contact the chairman of AIB HUB Task Force:
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Review of the country hosting the latest AIB General Meeting

The latest AIB General Meeting was held in Dubrovnik, Croatia, in the period 29 – 30 September 2010, followed by the workshop: "***Perspectives on Certification of Electricity Generation and Disclosure in the light of the new EU Energy Policy***". This was mainly targeted for an audience from South-Eastern European countries.

HROTE

The host of this General Meeting was the Croatian Energy Market Operator (HROTE). HROTE has been involved in the process of implementation the System of Guarantees of Origin in Croatia as an observer member of the AIB since 2009, and was chosen by the authority's bodies to become issuing body for the domain of Croatia.

HROTE was established in 2005 as the state-owned company which performs the activities necessary to organise the electricity market as a public service, under the supervision of the Croatian Energy Regulatory Agency (HERA).

The main scope of these activities is electricity market organization and incentivisation of electricity production from renewables and cogeneration. However, it is foreseen that in 2011 the activities of gas market organization and incentivisation of the production of biofuels will be extended.

Croatian Electricity Market Structure

The bilateral market model, based on electricity trading via bilateral contracts, was chosen for the initial phase of the electricity market opening in Croatia. Contractual parties in bilateral contracts for electricity supply are eligible customers and suppliers. Bilateral contracts for the purchase/sale of electricity are concluded between suppliers, traders or producers.

Apart from supply contracts and electricity purchase/sale contracts, eligible customers and producers must also conclude contracts for use of the network with subsidiary companies of the parent energy utility Hrvatska elektroprivreda d.d. (the HEP Group), i.e. HEP-TSO or HEP-DSO (transmission/distribution system operator in Croatia respectively), depending on the voltage level to which they are connected; while eligible suppliers of customers must conclude balancing energy contracts with HEP-TSO.

HROTE keeps records of contractual commitments between market participants. Regarding supply activities in electricity markets in Croatia, temporarily there are only four market participants that perform the role of supplier.

Croatian Electricity Market Parties

More than half of the electricity production profile in Croatia is electricity from hydropower plant (52%).

Electricity production capacity mostly consists of the plants which belong to HEP Group (HPP with 2,088.22MW; TPP with 1,373MW; TPP Plomin Ltd. with 192MW, which is jointly owned by HEP-Group and RWE; and NPP Krško with 348MW, which is jointly owned by HEP-Group and a Slovenian company located in Slovenia). There is also a small amount of installed capacity from privately-owned industrial power plants that work in cogeneration mode.

Gross annual consumption in 2008 was approximately 16TWh, where almost 30% of overall Croatian needs for electricity are imported.

Croatian Energy Strategy

The new Energy Strategy was passed in 2009 and, according to the methodology from Directive 2009/28/EC, the new target was set at 20% (9,2% RES-E, 2,2% RES-T and 8,6% RES-H&C). The goals for three sectors are:

- 35% share of electricity production from renewable sources, including large hydropower plants, in the overall electricity production
- 10% share of biofuel in the consumption of gasoline and diesel fuel in traffic and
- 20% share of energy production for heating and cooling from renewable energy sources in the overall energy production for heating and cooling.

The role of HROTE in the Croatian support scheme

HROTE has the main role in renewable and highly-efficient cogeneration financial support. The model of subsidizing electricity produced from renewable energy sources and highly-efficient cogeneration in Croatia is based on the secondary legislation on RES and HE-CHP that was passed on 1 July 2007. The chosen model is a feed-in system.

HROTE is responsible for purchasing the electricity produced from RES plants and HE-CHP plants, which have obtained the status of eligibility from HERA, and selling it to the suppliers.

Every supplier in Croatia is obliged to pay the incentive fees, which are collected from all customers, and for taking over the electricity produced from RES and HE-CHP plants.

After all payments have been collected by suppliers, HROTE is in charge of paying the feed-in tariff price for every 1kWh produced by eligible producers.

Total incentivized electricity produced from installed capacity is temporarily approximately 40MW (28MW from wind power plants); however it is foreseen that this capacity will increase to 80MW in 2011.

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The new CEN/CENELEC standard
Guarantees of Origin related to Energy – Guarantees of Origin for Electricity

Scope of the standard

The proposed European Standard will:

- specify requirements for Guarantees of Origin (GOs) of electricity from all energy sources - such GOs may be traded and/or used for disclosure/labelling
- establish terminology and definitions, and requirements for registration, issuing, transferring and cancellation in line with the Renewable Energy Directive (2009/28/EC), the Internal Electricity Market Directive (2009/72/EC) and the Cogeneration Directive (2004/8/EC)
- address measuring methods and auditing procedures, but it will not establish sustainability criteria, which is addressed elsewhere.

The content of this standard can be modified to apply to (e.g.) heating, cooling, and gas (including biogas), but these modifications do not form part of this standard.

Purpose of the standard

A Joint Working Group (JWG2) was set up by CEN/CENELEC to develop a GO standard supporting the relevant Directives and existing voluntary schemes. It will address:

- terminology and definitions;
- concepts for registration, issuing, transferring and cancellation;
- measurement methods; and
- auditing methods.

A clear standard for issuing GO is vital, and rules must be created for:

- Registration (application, information required, qualification, validation, obligations of registrants and registration);
- Issuing (the process, and format of GOs);
- Transfers (rules for transferring GOs between accounts, and correction of erroneous transfers); and
- Cancellation (requesting cancellation, the process, and provision of evidence of cancellation).

Measurement of the produced electricity must be standardised; and similar methods must be created should this standard be applied to heating, cooling and gas.

Auditing methods need to be developed for the assessment process, auditing of production devices, compliance with appropriate legislation and operational practice.

Benefits expected from the standard

There is increasing demand from consumers for a reliable means of accounting for the origin of supplied energy. Also, there is an obligation on suppliers to disclosure reliable information to consumers concerning the source of their electricity. A standardised system of GOs supports realisation of these requirements and so provides a way of fullfilling the requirements of the RES, CHP and IEM Directives.

Member states are required under these Directives to recognise GOs issued by other member states. GO systems must be accurate, reliable and fraud-resistant, avoiding double-counting. The existence of a common standard for GOs across all member states promotes this.

CEN/CENELEC standards provide sturdy harmonised technical references. They rely on a validation process based on balanced national stakeholder representation and are published in the national standard collections of the 30 CEN/CENELEC members.

Development of the standard

The final report from CEN/CLC BT JWG Energy Management (March 2005, SFEM N06) prioritised white and green certificates.

The November 2006 meeting of the new CEN/CLC Sector Forum "Energy Management" (SFEM) discussed green and white certificates. It set up a temporary working group led by Inge Pierre of Sweden to investigate the need for standardisation work. This working group delivered its recommendations to the July 2007 meeting of SFEM, and incorporated the proposal from the Commission to use GOs for trading RES. A new recommendation to the SFEM was delivered in November 2007:

- **Guarantees of Origin.** Standardise GOs as a tool for future RES trade, as expected in the forthcoming RES Directive 2009/28/EC.
- **White Certificate System.** The need for standardisation is less urgent than RES GO so work should await clarification of the EU Commission's intentions.
- **Green Certificate System**
  Standardisation should await more countries introducing green certificate systems or the Commission asking CEN/CLC for such standardisation.

A CEN/CENELEC seminar in April 2008 in Brussels recommended:

- Harmonisation is needed so technical references and tools can be applied efficiently throughout Europe, allowing savings and RES use to increase, and political targets to be achieved.
- Such harmonisation will help countries that have yet to develope GO systems to do so more confidently: it will be easier and quicker for them to develop such systems with the benefit of relevant experience and standards.
- RES GOs should be standardised along with, in the medium term, white certificates; but standardisation of green certificates should be deferred.
- European standardisation of GOs should seek common understanding of at least:
  - terminology and definitions ;
  - issuing concepts;
  - measurement methods; and
  - audit methods.
- There should be close contact with the EU Commission to ensure the standard supports the policy objectives and timetable of the new RES Directive.
- European standards will allow certification bodies to develop their activities on recognised practices, thus increasing the credibility of GOs.

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National implementations of the RES Directive 2009/28/EC
in AIB current and probable member countries

Austria

In December 2010, the Electricity Act (implementing the Third Package) will be negotiated in the Parliament, which may lead to an amended green electricity act. However, it seems more likely that the legisaltion will be in place in February/ March 2011.

The first GO according to Directive 2009/28/EC could then be issued in April/ May 2011.

Belgium (Brussels)

Not known

Belgium (Flanders)

Delays in the legislative process mean that the law will probably be enacted during February 2011.

This will be reflected in corresponding delays to the issue of GOs under the new legislation.

Belgium (Wallonia)

The legislation should be agreed on or shortly after 5th December 2010.

GOs are expected to be issued under the new RES Directive from January 2011.

Croatia

In Croatia, HROTE will join AIB and start issuing GOs following the completion of the program of RES GO legislation, which is likely to be in the second half of 2011.

Denmark

Legislation will be enacted on 1st December 2010, and GOs will be issued from 1st January 2011. Energinet.dk will continue to be issuer for RES and CHP GOs, and will be responsible for disclosure.

In response to market demand, Energinet.dk has developed a domain protocol for Cogeneration GOs, which it intends to implement in December subject to the approval of the DP by AIB.

Finland

The new legislation will come into force in the autumn of 2011; with the first GOs under the new Directive being issued early in 2012.

France

Legislation will be enacted on 5th December 2010, and RES GOs will be issued under the new Directive from 1st January 2012.

Germany

The legal regulations are currently planned to be in place by 5th December 2010; while the new GO system has a deadline of late 2011, and a related consultancy project has been tendered.

During the interregnum between the old and new Directives, a separate ordination will ensure that the issuing of GO under the current version of the EEG (based on the old Directive 2001/77/EC) will continue until a new system is up and running.

Greece

A ministerial decision "***ΥΠΕΚΑ Δ6/Φ.1/8786/10 (ΦΕΚ-646 Β/14-5-10)***", entitled: "*Implementation of the Guarantees of Origin System for Electrical Energy from RES and CHP and its Assurance Mechanism*" was issued on 14th May 2010, and incorporates issues of Directive 2009/28/EC.

The law "***3851/2010–ΦΕΚΑ 85/04.06.2010***" was issued on 4th June 2010 regarding "*Accelerating the development of Renewable Energy Sources to deal with climate change and other regulations addressing issues under the authority of the Ministry of Environment, Energy and Climate Change*."

A preliminary version of HTSO's electronic GO registry has been implemented and the first producers have been registered and have an account for GOs. HTSO expects to issue the respective GOs in late November or early December 2010. HTSO intends to become a member of AIB in 2011, following completion of Greek GO legislation.

Iceland

Uncertainty in the market makes participant reluctant to commit, so it is not possible to define a timetable at the moment.

Ireland

Not known

Italy

Due to the concurrent transposition of the Directive with revision of Italy's support scheme, it seems likely that the Directive will be transposed shortly after 5th December 2010.

GSE hopes to commence issuing EECS RES GOs within 2011.

Luxembourg

The date for transposition is not known.

Netherlands

There will be a minor change in the electricity law (regarding the change of the definition of 'energy from renewable sources', which has changed slightly from that used in Directive 2001/77/EC). Other elements of the Dutch electricity law were already fully in line with the new Directive.

This amendment will be implemented together with new provisions for biofuels (related to Dutch Environment Protection Law).

Enabling regulations on GOs will probably be in place at the end of 2010.

CertiQ expects to commence issuing GOs

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National implementations of the RES Directive 2009/28/EC

in AIB current and probable member countries

(continued from last page)

under the new RES Directive as soon as the regulations are in place.

Norway

It seems likely that Norway will implement the new RES Directive, but it has yet to agree legislation or a timetable for this.

Portugal

Not known

Slovenia

The new Energy Act is currently being prepared by the Ministry, but the dates of its enactment and enablement have yet to be set.

Spain

Spain is currently in the process of transposing the new Directive.

Sweden

The legislative changes will come into force on 1st December 2010, and the issuing of GOs under the new RES Directive will commence shortly afterwards.

Switzerland

Switzerland is still negotiating with the EU on this matter.

The new CEN/CENELEC standard

(continued from page 5)

SFEM has repeatedly expressed its support for standardisation of GOs, and has held successful discussions with the EU Commission and the AIB regarding the need for and content of such a standard.

A proposal to standardise RES GO was developed by the Swedish Standards Institute in autumn 2009 and approved by the CEN/CENELEC Technical Boards in spring 2010. This resulted in the CEN/CLC workgroup JWG2 "Guarantees of Origin and Energy Certificates".

Role of the AIB and development plans for standard

The AIB has met and corresponded with JWG2 several times during the last 4 years, and is now liaison partner and a member of the resolution committee on JWG2.

Members of AIB are also represented in several "mirror committees", including Austria, Belgium, France, Germany, Italy, Netherlands and others.

The initial draft working document of the standard has been prepared by AIB based on EECS, and sent to the JWG2 secretariat. This will now be further developed prior to circulation within JWG2 for comment and adjustment prior to the formal five month CEN/CENELEC enquiry commencing September 2011.

JWG2 has met twice, on 23rd June and 10th September 2010. It will next meet on 30th November and 1st December, and has agreed a programme of meetings through to puiblication of the standard on 23rd June 2013.

For more information, contact the AIB Secretary General:
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Summary of Activity

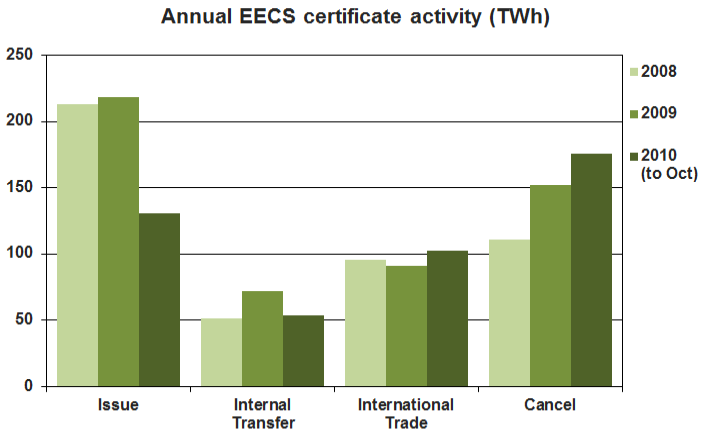
The number of issued certificates is likely to be around 20% lower than that last year, due to the preponderence of hydropower certificates, and the lower than usual levels in reservoirs.

The new RES Directive is incentivising new countries to join the AIB, and existing members will make further use of guarantees of origin (GO) to enable them to disclose the source of energy to consumers.

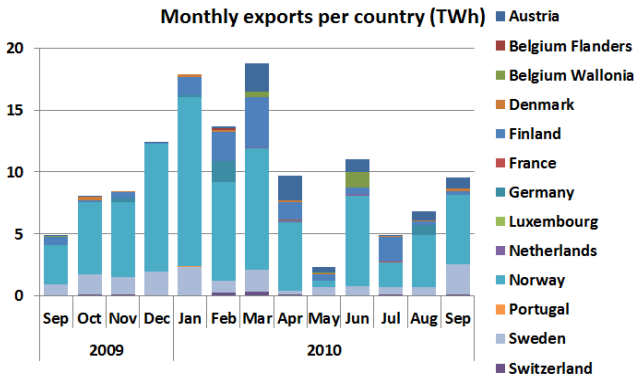
This is now demonstrable in 2010, where cancellation of GO (which is done at the point when GO are actually used to provide evidence of consumption of energy) has even now exceeded the total cancelled for the whole of last year - and there are more than three months of the year yet to go.

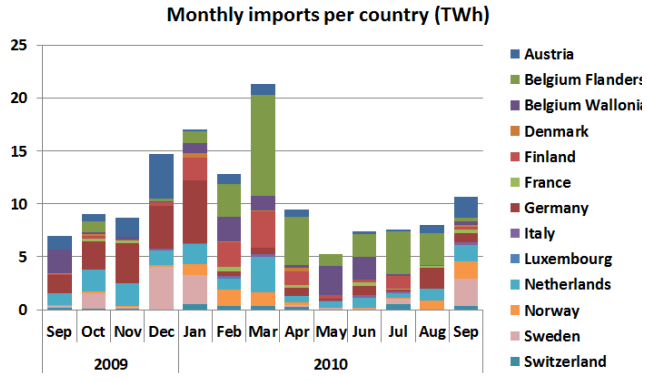
So far, international transfer and cancellation of GOs for the first three quarters of 2010 are up more than 70% and 30% respectively, compared with the same the three quarters of 2009. This demonstrates the increasing use of certificates, and in particular those from other countries.

In addition, it can be seen that certificates cancelled this year exceed those issued; from which we might conclude that the market is using up its stocks of guarantees of origin issued under the old RES Directive (2001/77/EC) in recognition of the requirement under the new RES Directive (2009/28/EC) for guarantees of origin to expire a year after the energy is produced.



International Trade





The monthly discrepancy between exports and imports is due to not all transfers being instantaneous, and hence trades which commence in one month can complete the following month.

Norway, Sweden and Finland - continue to be the major exporters, although Austria continues to make its presence felt.

Regarding imports, these continue to be Belgium, followed by Germany and the Netherlands; while other countries playing a lesser part.

Some countries (Norway, Denmark and Sweden) figures in both exports and imports, suggesting trading activity.

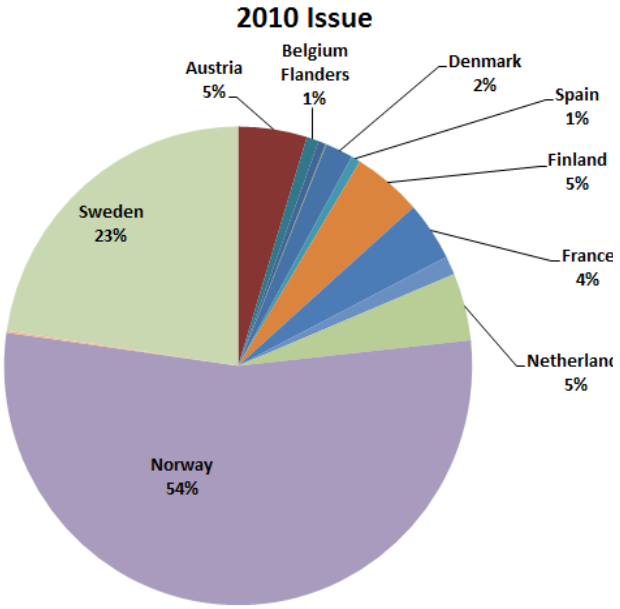
Other trade exists in the form of the cancellation of certificates in one country for use in another. Recent analysis by RECS International suggests that this accounts for about ten percent of cancellations, and is used where transfers to the receipient country are not possible. The introduction of the new EECS Rules will prevent this from happening (after a transitional period), unless a cancellation agreement is in place between the issuing bodies concerned.

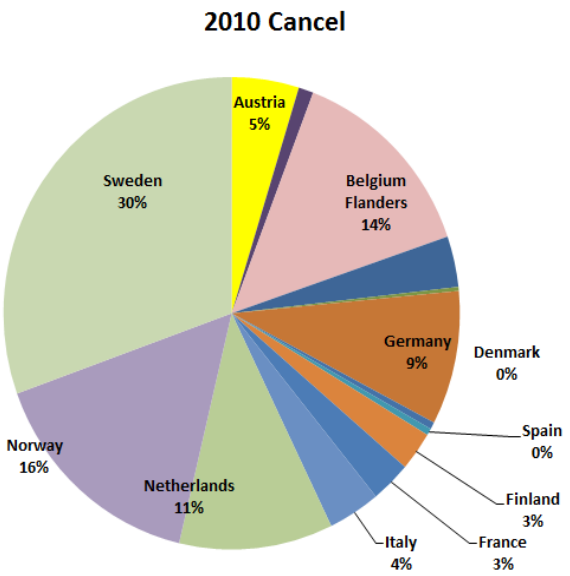
Analysis by Country

The pie charts on this page show the certificates issued and cancelled this last year, in summary.

These charts clearly demonstrate the large role that the Nordic region had in this market, where it is mandatory to use GO as proof of renewable supply; and the rising interest in renewable products elsewhere in Europe, in particular Germany and Belgium.

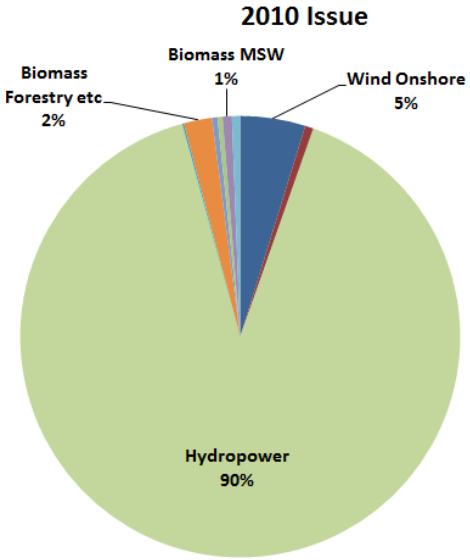
They also demonstrate where certificates come from; and where they eventually end up: originating mostly from the Nordic region, they travel to the Netherlands, Belgium, Germany, France and Italy.

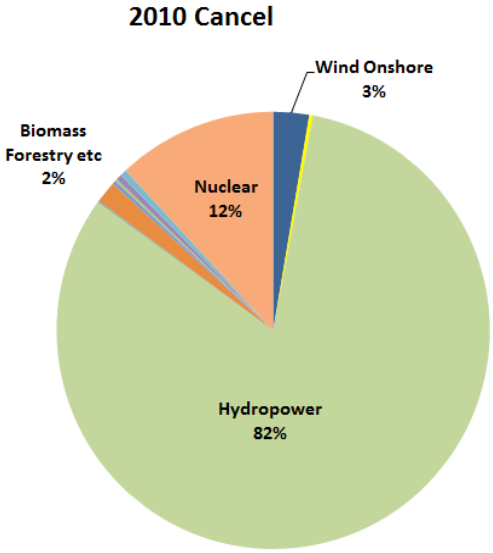




From the perspective of energy sources, a different picture emerges.

Hydropower remains by far the prevalent renewable energy source, followed by onshore wind and biomass; while nuclear power provides the major contribution of the non-renewable energies - note that these certificates were issued late in 2009 but cancelled in 2010: we expect a similar pattern this year.





Detailed national activity can be found by going to the AIB website at: www.aib-net.org, clicking OPERATIONS, then MARKET INFORMATION, and then MARKET ACTIVITY.

EUROPEAN ACTIVITY

The Raw Data - by Country - as at mid-October 2010

	TOTAL					2010					2009				
	Issued	Transferred			Cancelled	Issued	Transferred			Cancelled	Issued	Transferred			Cancelled
		Internal	Export	Import			Internal	Export	Import			Internal	Export	Import	
Austria	20,015,679	11,776,082	9,643,131	41,154,832	28,344,195	6,180,277	5,050,014	7,410,277	5,932,274	8,361,540	1,150,107	6,223,137	1,192,505	10,230,884	1,948,056
Belgium Flanders	7,636,519	3,796,562	638,439	73,035,781	43,616,057	1,102,341	1,540,061	162,383	29,477,633	24,440,037	2,227,038	742,412	100,001	9,724,621	2,473,902
Belg & Lux RECS	113,390			2,031,496	2,048,355										
Belgium Wallonia	1,497,161	3,160,192	1,985,205	18,750,220	12,155,376	676,746	1,217,481	1,812,447	10,535,670	6,097,751	819,463	1,880,209	107,248	5,493,614	5,228,118
Switzerland	3,245,087	102,015	3,659,972	6,020,531	3,936,054	76,336		834,858	2,432,236	485,980	985,824		654,172	1,436,703	1,736,395
Germany	69,252	13,515,654	4,078,693	57,014,298	47,295,425		4,773,039	2,787,930	11,981,533	16,085,445		8,120,255	1,065,295	22,458,089	17,078,933
Denmark	10,601,604	1,442,340	5,641,294	2,991,134	2,015,751	2,474,414	858,354	1,035,498	1,200,257	850,288	2,804,642	502,261	896,209	1,303,168	656,721
Spain	6,713,394		1,429,816	1	4,518,396	822,027				822,027	765,776		1	1	1,090,857
Finland	71,115,588	8,224,272	57,220,634	27,923,444	20,286,007	6,209,667	1,974,836	13,100,696	11,289,386	4,683,224	8,618,853	1,078,556	7,498,399	4,725,289	3,000,576
France	16,786,890	5,942,531	160,415	16,058,480	25,774,960	5,219,860	876,966	12,359	1,779,010	4,993,631	4,441,234	1,027,360	57,842	2,120,110	5,421,017
Croatia															
Ireland	162,414		10,001												
Italy	20,949,126	6,393,859		1,411,358	17,760,915	1,637,995	3,334,637		1,055,254	6,491,858	8,924,377	1,080,727		356,104	5,678,056
Luxembourg			19,916	213,707	1			19,916	213,707	1					
Netherlands	48,367,786	27,635,437	2,469,130	87,315,890	119,177,311	5,923,940	5,384,059	235,292	11,749,434	19,113,694	9,615,160	8,892,148	309,476	16,937,736	25,371,718
Norway	425,795,796	117,557,848	207,251,666	11,685,790	104,988,037	70,241,501	26,615,690	57,493,928	6,789,278	27,701,124	109,972,124	37,252,202	56,593,229	2,391,507	28,763,116
Portugal	774,929		25,001	7	19,712	177,408		25,000		8,556	140,239				5,906
Sweden	252,328,424	8,735,623	64,458,766	36,706,964	168,271,448	29,488,493	1,935,656	10,622,006	6,315,304	53,516,798	68,039,502	5,325,953	16,061,041	13,844,077	53,144,161
Slovenia	3,902,666		468,003	17,016	1,927,200					35,652	35,652				35,681
UK	90,158														
Total	890,168,413	208,282,796	359,160,082	384,336,650	604,074,489	130,231,005	53,561,174	95,552,590	102,658,813	175,529,031	218,542,541	72,125,220	84,535,418	91,119,767	151,731,077

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 Energy Source - as at mid-October 2010

	TOTAL					2010					2009				
	Issued	Transfer			Cancelled	Issued	Transfer			Cancelled	Issued	Transfer			Cancelled
		Internal	Export	Import			Internal	Export	Import			Internal	Export	Import	
Onshore wind	39,364,200	11,515,712	10,643,945	12,214,699	24,959,989	6,229,614	2,588,419	1,866,810	2,174,349	4,682,668	9,506,706	3,030,122	2,988,784	2,888,546	6,027,245
Offshore wind	2,634,609	735,741	92,329	27,672	1,341,915	784,331	244,201	12,000	12,000	501,537	810,076	172,746			494,678
Photovoltaic	119,635	2,421	136	15,020	33,357	64,656	1,081	88	11,287	13,669	27,185	581	48	3,733	5,257
Thermal	5				5					1	1				1
Hydropower	723,390,532	180,241,014	334,247,107	357,529,161	484,745,499	117,620,638	46,806,448	92,954,365	99,129,835	144,024,068	171,469,699	64,909,119	80,862,229	87,482,706	117,248,530
Onshore tidal															
Offshore tidal															
Onshore wave															
Offshore wave															
Geothermal	1,598,104	212,502			889,319					63,742	676,539				205,848
Energy crops	1,656,639	405,590	38,596	30,823	468,974	170,653	152,708	2,506	3,382	93,512	311,129	232,559	8,649		99,723
Forestry etc	43,741,477	9,327,705	13,063,812	12,669,354	33,257,806	2,684,211	2,343,545	672,527	642,637	2,817,294	4,340,726	1,986,588	526,788	400,846	2,367,857
Landfill gas	2,433,305	1,133,269	27,003	133,922	1,417,338	533,130	561,211	7,575	51,753	496,707	413,958	228,440	3,201	15,919	257,345
Sewage gas	36,205		3,393	3,393	35,577										
Other biogas	2,112,621	197,366	22,777	70,124	898,690	471,806	45,272	16,902	52,191	297,925	713,916	119,620	157	15,273	307,946
MSW	8,104,081	2,100,587	561,913	536,527	5,392,380	895,330	288,060	716	38,505	740,060	1,343,121	774,069	53,128	65,404	1,401,238
IB&CW	9,783,726	2,410,889	459,069	1,105,953	7,067,322	776,636	530,229	19,099	542,872	853,167	1,397,323	671,376	92,434	247,340	693,772
Nuclear	55,189,634		2	2	43,562,678			2	2	20,944,681	27,532,162				22,617,997
Fossil	3,640				3,640										3,640
Total	890,168,413	208,282,796	359,160,082	384,336,650	604,074,489	130,231,005	53,561,174	95,552,590	102,658,813	175,529,031	218,542,541	72,125,220	84,535,418	91,119,767	151,731,077

NOTE

The tables above display issue and cancellation statistics for the last two years, and for 2008-10 in total. These, and the following charts, show that volumes issued have creased to grow recently, but that volumes transferred and cancelled continue to increase at a greater rate than in previous years.

The leading enabler of
international energy certificate systems

2011 : EVENTS

FORTHCOMING MEETINGS

30-31 March	Brussels	RECS Market Meeting
31 March (pm)	Brussels	RECS Policy Forum
01 April	Brussels	AIB General Meeting
16-17 June	Oslo	AIB General Meeting
23 September	Frankfurt or Basel?	AIB General Meeting
08-09 December	Paris	AIB General Meeting

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