250 million certificates issued

Newsletter 6

Volume 2, Issue 2

30 August 2007

Association of Issuing Bodies

Editorial

A sound Guarantee of Origin (GO) market is key to a well-functioning competitive Internal Energy Market; and the wide experience of the AIB leads us to suggest that in order to achieve this, certain points should be addressed in the new RES Directive:

- There should be coordinated international standards for GO, based upon an electronic system. This will support not only a number of Directives, but the best interests of the Internal Energy Market, leading to economies of scales and low costs
- Physical (energy) and virtual (GO) markets should be separate, to protect market liquidity & inflexible generation, overcome the limitations of physical flow of individual energy source electricity and avoid the associated administrative nightmare
- GO should be redeemed to provide evidence of consumption of the associated energy, so that their value can be realised and to prevent double selling
- The role and use of GO to facilitate disclosure, enable support schemes and perhaps facilitate target counting should be clarified and
- Clarification of the definition of national targets.

The energy package, due at the end of 2007, offers an excellent opportunity for these issues (which are expanded later in this editorial) to be resolved. The AIB urges the Commission to consider them carefully, and looks forward to working with the Commission in delivering a well-running market for guarantees of origin.

(Continued on page 9)

Stockholm GM

Members are currently reviewing each other's implementations of EECS, with a view to learning from each other's experience, and correcting any weaknesses. These reviews will be conducted on an ongoing basis.

The domain protocols of Sweden (applying to implement a Disclosure certificate scheme), Wallonia (applying to implement RES GO and CHP GO schemes) and Switzerland (applying to implement a RES GP scheme) were presented. The consideration of these DPs is now under way.

Progress with HUB testing is drawing to a close: the HUB will go into operation later this summer.

A conference is being planned for Budapest this December: details will follow in the next newsletter.

Statistics update

(all figures 1MWh certificates)

Since 2001:

- **ISSUED: 250 million**
- **REDEEMED: 132 million**

In 2006:

- **ISSUED: 66 million**
- **REDEEMED: 39 million**

In 2007 (so far…):

- **ISSUED: 68 million**
- **REDEEMED: 48 million**

Inside this issue:

EC Update

Towards a European Charter on the Rights of Energy Consumers

AIB welcomes the initiative of the European Commission concerning the adoption of a Rights of Energy Consumers Charter that certainly will favour a more transparent framework for the final consumers choice. In this way, the EU is moving in the same direction as the AIB—the Association, in fact, provides certifications of energy production that represent good tools for giving clients clear and audited information.

From 1 July all electricity and gas consumers - in the EU Member States that have opened their markets - can choose their energy supplier. The future Charter, that should be adopted by the end the year, after a consultation process (that ends in September), will contribute to raising awareness among citizens of their rights as domestic consumers. They, in fact, representing less than a third of the total EU electricity consumption and do not have much influence on the energy market as individuals. Therefore it is necessary to create the conditions for them to exercise their choice, looking for the most advantageous offer and confident that their rights will be safeguarded, especially if they decide to switch suppliers.

The future Charter should be organised in the following areas:

- Increased information to obtain transparency of offers
- Reduced paper work when customers change supplier
- Protecting consumers against unfair selling practices
- More efficient protection of vulnerable consumers.

See European Energy Consumers' Charter: protecting the consumers' right to choose.

ASSOCIATION MATTERS

HUB

After a long period of technical implementation and testing, it is expected that the HUB will finally be ready to enter into operation during September. This will provide a single point of access for members' registries; so facilitating testing and the transfer of certificate information between AIB members across Europe. Eventually, the HUB will be enhanced to allow the Association to analyse trends and publicise information concerning the countries of origin and destination of cross-border trades.

CHP

A set of guidelines is currently being agreed between Member States which, when adopted, will support the implementation of the Directive for the promotion of high-efficiency combined heat and power generation (the CHP Directive - 2004/8/EC).

In preparation for the adoption of these guidelines (in accordance with the comitology procedure provided by Article 4 of the Directive), the AIB has developed a calculation model (available to members at the AIB web site). This model allows users to calculate the number and characteristics of CHP Guarantees of Origin (CHP-GO) which should be issued for CHP plant during any period; and complies with the legal interpretation of the Directive provided to the CHP Committee by the Commission on 6 March 2007. Those countries that have not already taken any initiative in this field are invited to adopt the proposed methodology. Issuing Bodies are reminded that all EU members are required to be able to issue CHP-GO by next 6th August.

The guidelines will not be approved and published until sometime in 2008, and the model may need to be adjusted to reflect the content of the agreed guidelines.

MEMBER ACTIVITY

The activity of members continues to grow, with issued volumes up 80% on last year: it is anticipated that in excess of 120 million guarantees of origin and RECS certificates will be issued during 2007.

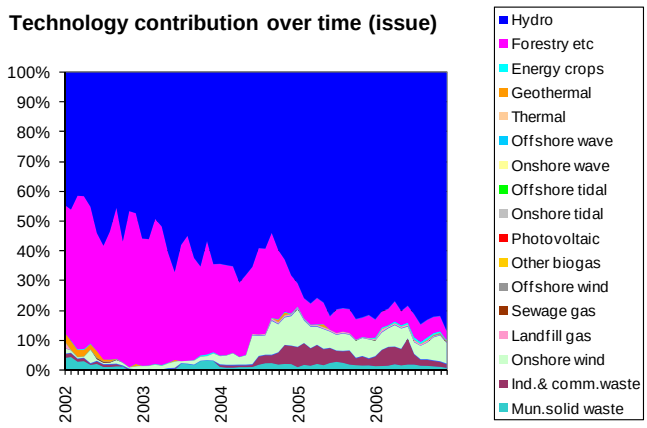
Of particular interest is the effect of the Nordic countries use of guarantees of origin as evidence for purposes of energy source disclosure, which has increased the use of guarantees of origin substantially.

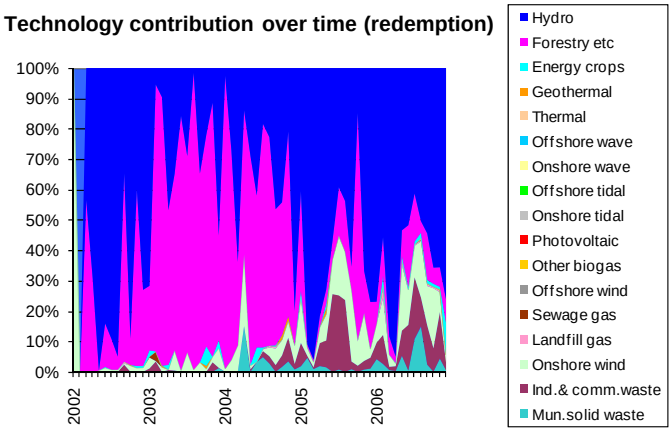
	Total					2007				
	Issued	Transferred			Redeemed	Issued	Transferred			Redeemed
		Internal	Export	Import			Internal	Export	Import	
Austria	7,458,961	502,931	1,010,338	15,921,748	15,091,116	120,695	0	0	1,622,000	233,273
Belgium Brussels	0	0	0	0	0	0	0	0	0	0
Belgium Flanders	1,719,615	543,590	306,691	5,495,292	3,535,370	485,218	179,113	306,691	2,615,523	94,259
Belg & Lux RECS	113,390	0	467,991	928,522	1,413,372	0	0	467,991	0	467,991
Belgium Wallonia	0	0	0	0	0	0	0	0	0	0
Switzerland	1,811,829	85,011	492,153	379,626	906,348	43,046	4,284	12,600	136,250	52,742
Germany	48,351	513,580	25	3,557,969	2,286,184	0	0	0	2,029,272	1,601,408
Denmark	2,536,688	25,740	341,697	2,411	194,553	345,490	17,811	20,001	2,000	169,375
Spain	3,579,245	0	1,429,815	0	1,099,827	224,867	0	0	0	214,059
Finland	40,591,048	2,982,422	21,724,873	228,600	11,003,625	3,624,625	493,738	3,470,061	62,500	505,320
France	2,998,209	405,990	9,285	36,701	1,944,760	798,267	48,468	4,284	10,700	571,125
Ireland	11,163	0	10,001	0	0	11,163	0	10,001	0	0
Italy	2,517,459	1,099,111	0	0	1,374,558	466,010	266,512	0	0	471,295
Netherlands	20,369,336	3,702,425	274,369	32,090,332	44,269,083	3,088,037	3,702,425	195,100	4,656,684	7,741,382
Norway	90,716,578	6,511,232	13,932,027	11,994	15,492,433	39,504,418	4,995,246	4,419,090	10,000	7,667,382
Poland	0	0	0	0	0	0	0	0	0	0
Portugal	328,302	0	0	0	250	104,244	0	0	0	250
Sweden	72,227,039	1,027,805	20,320,898	831,092	32,178,371	19,219,408	0	3,556,020	334,001	19,049,826
Slovenia	3,799,763	0	468,003	17,016	1,824,297	0	0	0	0	31,653
Turkey	0	0	0	0	0	0	0	0	0	0
UK	90,158	0	0	0	0	0	0	0	0	0
All countries	250,917,134	17,399,837	60,788,166	59,501,303	132,614,147	68,035,488	9,707,597	12,461,839	11,478,930	38,871,340

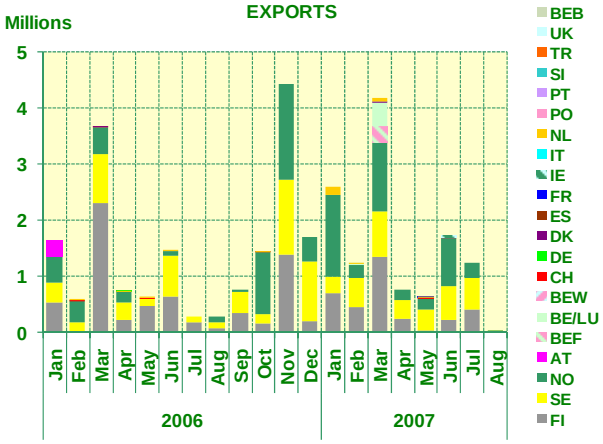
As can be seen on the facing page, the proportion of hydropower certificates issued have steadily increased, until hydropower is now the major source of certificates: the initially large volumes of certificates from energy from forestry and agricultural waste are slowly being replaced by wind power and combustion of waste. On the demand side, the picture is slightly different, with a higher proportion of wind, waste and forestry and agricultural waste being consumed in preference to hydropower certificates.

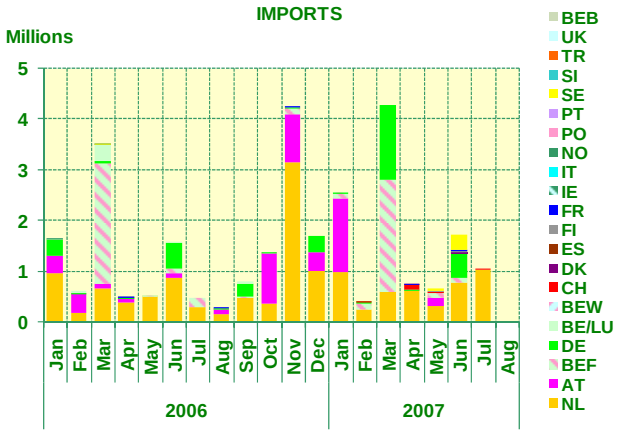
The general pattern of international trade remains similar to previous periods: the major suppliers are to be found in the Nordic countries (Norway, Finland, Sweden and Denmark); while the major consumers are to be found in the Netherlands, and increasingly Germany. Flanders consumes certificates each March, while Austria has temporarily ceased to issue certificates while it integrates its systems with the HUB.

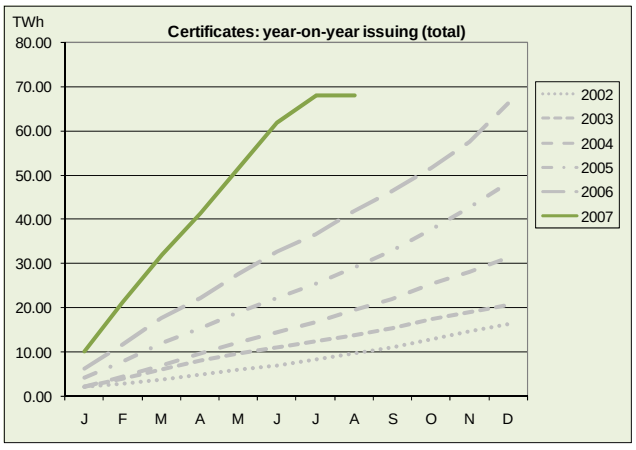
The final graph shows how volumes have increased year by year, and in particular issued certificates. The recent adoption of guarantees of origin by Nordic countries has significantly stimulated redemption of certificates, and also led to traditional exporters also importing certificates.

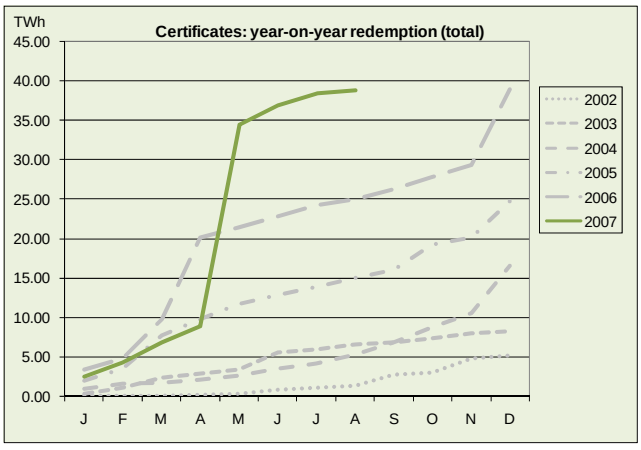

Technology contribution over time (issue)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2002
2003
2004
2005
2006
Hydro
Forestry etc
Energy crops
Geothermal
Thermal
Offshore wave
Onshore wave
Offshore tidal
Onshore tidal
Photovoltaic
Other biogas
Offshore wind
Sewage gas
Landfill gas
Onshore wind
Ind.& comm.waste
Mun.solid waste

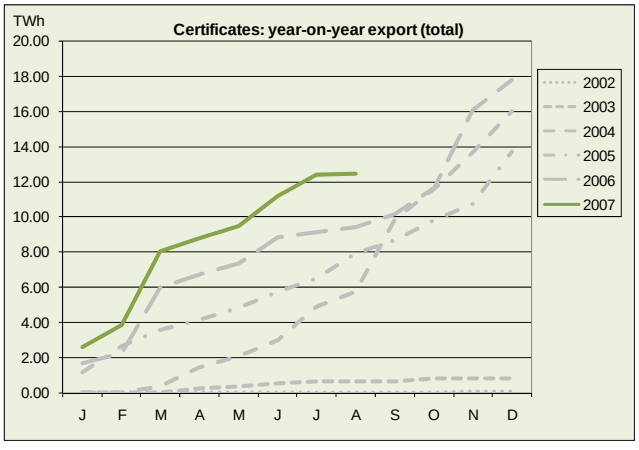

Technology contribution over time (redemption)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2002
2003
2004
2005
2006
Hydro
Forestry etc
Energy crops
Geothermal
Thermal
Offshore wave
Onshore wave
Offshore tidal
Onshore tidal
Photovoltaic
Other biogas
Offshore wind
Sewage gas
Landfill gas
Onshore wind
Ind.& comm.waste
Mun.solid waste

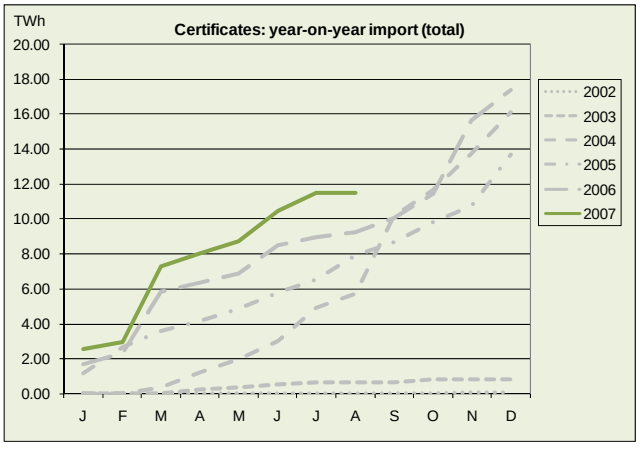

EXPORTS
Millions
5
4
3
2
1
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2006
2007
BEB
UK
TR
SI
PT
PO
NL
IT
IE
FR
ES
DK
DE
CH
BEW
BE/LU
BEF
AT
NO
SE
FI


IMPORTS
Millions
5
4
3
2
1
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2006
2007
BEB
UK
TR
SI
SE
PT
PO
NO
IT
IE
FR
FI
ES
DK
CH
BEW
BE/LU
DE
BEF
AT
NL


TWh
Certificates: year-on-year issuing (total)
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
J F M A M J J A S O N D
2002
2003
2004
2005
2006
2007


TWh
Certificates: year-on-year redemption (total)
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
J F M A M J J A S O N D
2002
2003
2004
2005
2006
2007


TWh
Certificates: year-on-year export (total)
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
J F M A M J J A S O N D
2002
2003
2004
2005
2006
2007


TWh
Certificates: year-on-year import (total)
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
J F M A M J J A S O N D
2002
2003
2004
2005
2006
2007

ASSOCIATION MATTERS (continued)

MEETING WITH EU COMMISSION

On 1st June, the AIB Board met with members of the Directorate General for Transport and Energy of the European Commission (DG-TREN) to share views about the new EU RES package and the activities of the AIB.

Regarding the first item, and in particular concerning RES electricity, the EU functionaries raised the potential introduction of the concepts of redemption and "earmarks" for GO; and the need to strengthen trade and achieve targets.

Other items for possible inclusion in the new legislative text are clarification of target calculation (i.e. whether based on production or consumption, and the effect of imports and exports of renewable electricity).

Positive impressions were expressed concerning AIB electronic certificates in terms of the transparency and robustness of the system.

The Board offered the services of the Association in offering an initial "light benchmark" for the implementation of RES-GO and CHP-GO within the European Union.

The current status of implementation is shown in the diagram on page 7.

ROUNDUP OF EUROPEAN EVENTS

SUMMER ENERGY COUNCIL

At the Energy Council on 6th June, Commissioner Andris Piebalgs welcomed the signature of a Memorandum of Understanding (MoU) for the coupling of the French, German, Belgian, Dutch and Luxembourg electricity markets into a single regional area that represents a founding stone of the largest integrated regional energy market in Europe.

"*Regional markets, in fact, are a positive step towards the creation of a single European energy market for lower prices for consumers, increased security of supply*" said Commissioner Piebalgs.

Furthermore, the harmonisation of the energy market represents an excellent opportunity for the deployment of RES generation.

NATIONAL UPDATE

AUSTRIA

INTRODUCTION OF HIGH-EFFICIENCY CHP-GO

Currently the Austrian certificate registry supports only AIB RES-GOs and RECS certificates.

According to the EC, member states must implement a CHP-GO system by August 2007 (6 months after publishing the reference values for separate heat & electricity production). E-Control, as the Austrian Issuing Body, is planning to introduce EECS CHP-GO within the coming months.

Apart from hydropower, electricity from fossil-fired CHP power plants is the second major factor in electricity generation in Austria. As all supplier have to document electricity supplied to end consumers, the main use for CHP-GO is going to be disclosure.

The entity (grid operator, or independent technical expert) which will be responsible for calculating CHP electricity, CO2 saving, primary energy saving, etc under the Austrian CHP-GO scheme is currently under discussion.

SPAIN

SPAIN INTRODUCES RES-GO AND CHP-GO

AIB welcomes the approval of the legislation that introduces RES-GO and CHP-GO in Spain. The regulator, CNE, is to be the body with responsibility for this activity.

The major points of the Royal Decree are:

- RES-GO and CHP-GO are to be issued
- The Regulator will be the issuing body and, for these activities (including administering the GO system) can with the approval of the Ministry of Industry use accredited bodies
- A central registry will be established for issuing and tracking transfer of GO
- GO will identify the source of the energy
- GO can be issued for periods of up to 1 year
- Producers must inform the Regulator of the destination of income from selling GO
- A mechanism for redemption is planned
- The system will be operational by 1st December 2007
- GO for 2004, 2005 and 2006 will be issued retrospectively, and simultaneously redeemed
- Only producers may export certificates;
- Plant that have received premiums or incentives for the generated electricity and wish to export the GO must refund the associated support.

SCANDINAVIA

New Electricity Source Disclosure Schemes in Scandinavia

Marko Lehtovaara, the Chairman of the AIB Board

Scandinavian Disclosure

This article provides the reader with a brief update on disclosure systems in Scandinavia – meaning Denmark, Finland, Sweden and Norway.

These countries have historically been the biggest Guarantee of Origin (GO) issuers and exporters. Exported GOs are usually used for disclosure by distribution companies and major consumers in the importing countries.

But how do the disclosure systems work in these exporting countries? Do Nordic consumers see worse fuel mixes due to exporting in their electricity bills, or are exported GOs double counted?

Scandinavian countries have different implementations of electricity source disclosure despite having a common electricity market. During the last year, the disclosure schemes in each of these countries were updated to better take into account the existence and use of guarantees of origin, and to prevent double counting of green attributes.

Electricity Disclosure and Guarantees of Origin (GO)

Electricity source disclosure, often called labelling, as introduced by the EU Electricity Directive 2003/54/EC, has been gradually adopted by most member states.

One problem in developing reliable disclosure schemes has been the weak link between that Directive and the Guarantees of Origin implemented by Directive 2001/77/EC.

The EU Commission later noted that information on Guarantees of Origin should be used, and that only the electricity supplier that owns the Guarantee of Origin should be able to use that attribute for disclosure of the source of the energy they supply.

However, detailed guidelines or standards for how to implement disclosure in a Member State have been missing. That has lead to a vast variety of implementations in different countries.

Recently, a Commission-funded project, E-Track, proposed a standard approach for disclosure implementation. The E-Track standard is based on a combination of explicit tracking, e.g. guarantees of origin, and a centrally calculated residual mix. No country has so far adopted the E-Track standard as such, but it has propelled discussion among regulators, issuing bodies and electricity suppliers.

Finland and Sweden

The method by which the origin of electricity is calculated is very similar in both Sweden and Finland.

The choice of a common Nordic area (excluding Iceland) is based on the fact that the markets are common, with a joint power exchange (Nord Pool) servicing the area. The residual mixes are calculated by EECS Issuing body, Grexel.

Initially a residual mix for the Nordic area is calculated. The residual mix is to be used by the market participants for disclosure of that part of the energy sold for which they do not have explicit evidence of the origin.

> ***"the lack of coordination between the countries with common electricity markets leads to some inconsistencies ... A solution would either be for all countries to use national mixes, or that all countries use a Nordic mix. Or, even better, that all electricity would be tracked explicitly. "***

EECS GO & RECS, the green label products Norppa/Bra miljöval and bilateral contracts including disclosure information are accepted as sources of explicit evidence.

The calculation of the residual mix is based on the Nordic production mix, corrected for physical import and export from/to neighbouring areas.

In the case of Sweden, net exchange was used, while in Finland gross exchange (flows to both directions accounted separately) was applied. Import was calculated using the production mixes of Russia and UCTE.

Green products reduced from the remaining mix are EECS GO & RECS and sale of Norppa/Bra miljöval.

In the case of Sweden, redeemed GO certificates were deduced from the residual mix; while in Finland all issued certificates were considered to have been used (concerning Nordic production during 2006).

GOs exported to or redeemed in favour of customers outside the Nordic region were compensated for by importing an equal amount of UCTE mix into the residual mix.

Bilateral contracts with disclosure information were not at this point accounted for in the Finnish calculation, but are expected to be included in the future. In Sweden, a certain amount of bilateral contracts reported were accounted for.

Norway

Within Norway, while the use of Disclosure has been regulated since 1st January 2007, the content is not very detailed and discussions are now under way concerning the calculation of a residual mix, including the treatment of issued but unused GO and the impact of imports and exports.

However, it is already clear that a residual mix will be calculated for 2007; it will be based on Norwegian production mix and used guarantees of origin are accounted.

A hearing into the regulation of Norwegian GO has recently concluded, and the results are awaited. It is anticipated that the regulation will come into force from 1st January 2008.

A proposal for the regulation of the Norwegian support scheme will soon be issued, using EECS RES-GO. This is expected to conclude this autumn, as the regulation must be in force from 1st January 2008.

Detailed regulations for RES-GO are currently under discussion with government and early indications are that current practice will be more or less followed. That being said, there will be certain minor changes: for instance, the regulator may verify production devices on receipt of applications for concessions / license.

Denmark

Electricity trading companies in Denmark can either use a general electricity label (default), or an individual electricity label (used for explicit tracking):

General labels are used for average electricity supplies (without specific claims). The grid operator (Energinet.dk) prepares general labels for Eastern and Western Denmark respectively.

The general electricity label is not calculated as a residual mix, i.e. the general electricity label is not corrected for attributes tracked explicitly.

Companies can, on a voluntary basis, market individual electricity products (e.g. green power). Labels for these products are prepared and documented in accordance with guidelines provided by Energinet.dk.

ROUNDUP OF EUROPEAN EVENTS

SCANDINAVIA (continued)

Country	Centralized residual mix (RM) calculation	Residual mix area	Bilateral power trades (without GO) eligible for disclosure	Possible Double counting
Denmark	No, but centrally calculated general fuel mix	Two fuel mix areas: East and West	Not for renewable and CHP	very small: issued EECS-GOs are not removed from the fuel mix
Finland	Yes, all issued GOs and green products are deduced from the mix	Nordic area	Yes	very small: bilateral trades are not deduced from RM
Norway	Yes, but details are yet to be decided	Norway	No	very small: not clear whether exported LECs are counted in the RM
Sweden	Yes, redeemed and exported GOs, green products and bilateral trades are taken into account	Nordic area	Yes	very small: the use of GOs is only in an industry recommendation, not in a Law

Outlook for the Next Five Years

Predicting the outcome of initiatives taken by four governments, numerous industry associations and market participants will always be difficult. However, a few possible scenarios can be identified. Disclosure schemes have been evolving in all the Scandinavian countries during the last two years and the turmoil is expected to continue until one of the following (or possibly all of them) takes place:

- The EU Commission comes out with a strong and clear recommendation;
- The E-Track standard evolves and becomes widely accepted among the member states; and/or
- The Scandinavian countries agree on a disclosure standard for the market area.

The situation right now is that in Norway there is new legislation, based on Domestic production mix and the use of Guarantees of Origin as the sole document for providing evidence of one's mix. The next area of development is likely to be the calculation of residual mix, and the detailed regulations.

In Sweden, the industry recommendation has just been updated, and takes a major step towards the E-Track standard. At the same time, the Swedish ministry is preparing an analysis of the interaction of disclosure, Guarantees of Origin, national support certificates and the NGO labels.

In Finland, the industry recommendation is likely to be updated again next year to improve the residual mix calculation, but the government is likely to be passive in this area.

In Denmark, the long term goal is to follow the recommendations of the E-track project. The main task is therefore to calculate a single residual mix for the country.

In conclusion, the Scandinavian countries seem to have disclosure schemes which work reasonably well. However, it is clear that the lack of coordination between the countries with common electricity markets leads to some inconsistencies. For example, some not explicitly tracked Norwegian hydro power is double counted in the residual mixes, because Norway bases the residual mix calculation on national production mix, whereas Finland and Sweden use the Nordic mix. A solution would either be for all countries to use national mixes, or that all countries use a Nordic mix. Or, even better, that all electricity would be tracked explicitly.

For more information, contact:

Marko Lehtovaara

Grexel Systems Ltd., Fredrikinkatu 34 B 22, FIN-00100 HELSINKI, Finland

Tel: +358 (9) 251 22211
Fax: +358 (9) 251 22222
Email: marko.lehtovaara@grexel.com

NETHERLANDS

New Dutch CHP subsidy for 2007

On 13th August 2007, the Dutch CHP subsidy came into force. This subsidy is allocated on a "first come, first served" basis: the available budget will be awarded to eligible requests in order of receipt. The amount of subsidy available ranges from EUR 0.0209 - 0.0224 per kWh, and is available to CO2-free electricity that has been generated in a CHP installation. There is a total budget of EUR 36.7M available, which is split into two separate budgets for new and existing installations.

For more information, contact:

Jan Vorrink

EnerQ B.V.
Utrechtseweg 310, PO Box 369, 6800 AJ Arnhem, Netherlands

Tel: +31 (26) 373 1378
Fax: +31 (26) 373 1440
Email: J.Vorrink@enerq.nl

RES Implementation Status

The status of the implementation of RES-GO by Member States is shown in tabular form below.

Note that countries that have legally ascribed to the RES Directive (2001/77/EC) - Norway, Iceland and Switzerland - are highlighted.

This diagram seeks to demonstrate the degree of implementation, according each country a tick in each category where it has complied, these being:

- **Law** drafted and enacted
- **Regulation** drafted and approved
- **Issuing body** appointed
- **Electronic** RES-GO, with no possibility of duplication by other forms (e.g. PDF or printed)
- **Operational** systems
- **Redemption** of RES-GO required on consumption of the associated energy
- **Transferable** RES-GO
- **EECS member**
- **Use for disclosure recommended**
- **Use for disclosure mandatory**
- RES-GO **Used for support.**

	Law	Regulations	Issuing Body	Electronic	Operational	Redemption	Transferrable	EECS member	Disclosure		Used for support
									Recommended	Mandatory	
Netherlands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Austria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Belgium (Flanders)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Belgium (Wallonia)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Norway	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Belgium (Brussels)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Slovenia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
UK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
Denmark	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Finland	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Germany	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Sweden	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Switzerland	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Poland	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓
Lithuania	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
Spain	✓	✓	✓	✓	✓	✓	✓	-	-	-	-
Italy	✓	✓	✓	✓	✓	✓	-	-	-	-	-
France	✓	✓	✓	✓	✓	-	-	-	-	-	-
Ireland	✓	✓	✓	✓	✓	-	-	-	-	-	✓
Czech Republic	✓	✓	✓	✓	✓	-	-	-	-	-	-
Slovakia	✓	✓	✓	✓	✓	-	-	-	-	-	-
Bulgaria	✓	✓	✓	✓	-	-	-	-	-	-	-
Luxembourg	✓	✓	✓	-	-	-	-	-	-	-	✓
Estonia	✓	✓	✓	-	-	-	-	-	-	-	-
Malta	✓	✓	✓	-	-	-	-	-	-	-	-
Portugal	✓	✓	✓	-	-	-	-	-	-	-	-
Romania	✓	✓	✓	-	-	-	-	-	-	-	-
Iceland	✓	✓	✓	-	-	-	-	-	-	-	-
Greece	✓	✓	-	-	-	-	-	-	-	-	-
Latvia	✓	✓	-	-	-	-	-	-	-	-	-
Cyprus	-	-	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-	-	-

ROUNDUP OF EUROPEAN EVENTS

GREEK INTRODUCTION OF RES-GO

Current focus in the Greek market is the development of small scale PVs (up to 100 kW) where there appears to be tremendous investment interest. Other than that, the Greek law 3468/2006 ("Generation of Electricity using Renewable Energy Sources and High-Efficiency Cogeneration of Electricity and Heat and Miscellaneous Provisions") was passed in October of last year.

This law transposes Directive 2001/77/EC (the RES Directive) and promotes RES generation and high-efficiency CHP; and creates a system of RES Guarantees of Origin.

Authorization of production is granted by the Minister of Development after an opinion from RAE (which may consult the system operator), the production authorisation recording: holder of the authorisation; location of the power plant; installed capacity and maximum generation output; technology; duration and owner of the project. RAE keeps a registry of electricity generation using RES or high-efficiency co-generation of electricity and heat, and notifies the relevant Operators and Minister of Development of this every two months.

Producers may prove the origin of electricity from renewable energy sources exclusively via Guarantees of Origin, which specify the source of the power generated and state the generation date and location and, for hydroelectric plants, their capacity. Guarantee of Origin are not issued for energy used in pumping for pumped storage plant or for non-biodegradable biomass, and may be issued for electricity from sources *other than* RES.

Guarantees of origin are issued by: the System Operator for electricity supplied to systems directly or through the Network; the Network Operator for islands not connected to the mainland's interconnected System; and the Centre for Renewable Energy Sources (CRES) for the electricity produced by autonomous stations that do not supply the System or the Network. RAE oversees the entire Guarantee of Origin procedure.

Guarantees of Origin relate to energy produced in a specific time-period, and contain: the specific time-period for which the guaranty is issued, the net amount of energy produced during that time, the kind of source employed for the generation, the location of the production facilities, the installed electric capacity of the relevant station, the producer and the issuing date.

Producers apply to the authority in charge for Guarantees of Origin to be issued. If the issuing authority has well-founded doubts about the validity and accuracy of the data supplied by the Producer, then it may refuse to issue them.

Guarantees of Origin certify the generation of electricity from renewable energy sources for a period of at least 30 days. The issuing authority may rescind or amend a Guaranty of Origin or issue a new one.

Every authority issuing Guarantees of Origin keeps them in a printed and electronic registry along with accompanying data, providing access to interested parties (at a fee, for Guarantees of Origin issued by CRES, proportionate to the cost of the work required for the relevant certification).

CROATIA

Croatia is still in the process of passing secondary legislation for support of renewables, the chosen model of incentivizing RES and CHP projects in Croatia being the feed-in system, similar to many others across the EU. However, there has not yet been an official government statement about GO for renewables or CHP, although there have been preliminary discussions between the regulator (HROTE) and the Ministry of Economy, Labour and Entrepreneurship concerning the preparation of a registry for GO.

More detailed information on the Croatian energy market, specifically renewables and cogeneration, can be found at www.hrote.hr.

CROATIAN LEGISLATION ON RES & CHP

To implement legislation on RES and CHP in Croatia the laws on energy, along with Directives 2001/77/EC and 2004/8/EC, were used to create 5 by-laws regulating the use of RES and CHP, and generation of electricity from RES and CHP. The Energy and Electricity Market Acts define the roles of and future relationships between market participants (transmission and distribution system operators, suppliers, energy market operator and eligible producers). System operators are obliged to take over from eligible producers the electricity produced from CHP and RES generation facilities.

The **Ordinance on minimum share of electricity produced from renewable energy resources and cogeneration in electricity supply** defines the obligation of suppliers to take over the minimum share of electricity from RES and CHP according to their proportion of the whole electricity supply in Croatia.

The minimum share of RES-E was set so that in 2010 a target of 5.8% will be met. In the same manner, in 2010 the target of 2% will be met for electricity produced from CHP. However, these percentages refer only to RES from hydro plants with installed power under 10 MW. This is relevant because hydropower (including large hydro) contributes 52% of the electricity generation capacity of Croatia.

The **Rules of using RES and cogeneration** (this by-law has yet to be passed) define:

- the terms of using RES and CHP
- registration terms for RES & CHP projects
- the generation facilities' groups
- steps taken by eligible producers to get preliminary and final permission to build new generation facilities
- the terms for grid connecting, and the approach to a new generation facility.

According to the **Rules of acquiring the status of electricity eligible producer** (this by-law has also yet to be passed) and depending upon the feasibility of the generation facility, the Croatian Energy Regulatory Agency issues the decree of the status of electricity eligible producer.

The next step after confirming the eligibility of the producer is to agree a contract to buy back electricity produced from RES and CHP, which regulates payments for the buy-back of electricity generated by the eligible producer.

Contracts are signed between the eligible producer and Croatian Energy Market Operator, so the whole financial flow will be through the market operator.

Eligible producers, with the exception of hydro power stations exceeding 10 MW capacity, may claim an incentive price based on the **Tariff system for the generation of electricity from renewable energy resources and cogeneration**. The fee for incentivizing RES and CHP is to be collected from the suppliers of both tariff and eligible customers by the market operator according to the **Ordinance on fee for incentivizing renewable energy resources and cogeneration**.

The incentive price depends on the generation facilities' group, and varies from the lowest price for landfill gas plants and sewage treatments gas plants, to the highest price for solar power plants with capacity under 10 kW. The payment is the same throughout the contracting period, i.e. 12 years for RES-E and CHP facilities.

For more information, contact:

mr.sc. Dubravka Skrlec,dipl.ing.el

HROTE (CROATIAN ENERGY MARKET OPERATOR)
Renewables & Cogeneration,Miramarska 23/V, 10 000 ZAGREB, Croatia

Tel: +385 1 6306 706
Fax: +385 1 6306 777
Email: dubravka.skrlec@hrote.hr

NEWS FROM ROUND THE WORLD

REEEP

A project has been approved by the Renewable Energy and Energy Efficiency Partnership (REEEP), which will build on political support for piloting a Tradable Renewable Electricity Certificate (TREC), Voluntary Emission Reduction (VER) and/or Carbon Emission Reduction (CER) trade between Italy and North Africa. It will do so by identifying and establishing links to potential TREC and CER buyers in Italy, and piloting the trade in TRECs, VERs and/or CERs between the countries. This will support the growth in renewable energy development within Tunisia.

For several years the Italian Government has expressed its desire to import TRECs/VERs/CERs from North Africa. This project builds on existing initiatives in the Mediterranean region, such as MEDREP, which encourage private sector involvement and the use of financial instruments to achieve the aims of increasing the provision of sustainable energy services as well as mitigating the effects of climate change.

The main activities are to:

- Identify and seek support from Tunisian stakeholders and market players e.g. STEG (the national Tunisian electricity company) and the Tunisian Ministry for Industry & Energy (OME & ANME);
- Identify and seek support from Italian stakeholders and RE market players e.g. potential TREC/VER/CER buyers (Inergia & ISES Italy);
- Run an informal workshop between Italian and Tunisian key market players to discuss the pros and cons of TREC/VER/CER trade and identify main constraints (IT Power & ANME with input from AIB and OME);
- Identify potential projects that will trade TRECs/VERs/CERs. (IT Power, Inergia & ANME); and
- Organise a Capacity Building Workshop on TREC/VER/CER trading for Tunisian and other North African stakeholders (ISES Italy & OME).

The project will have the following outputs:

- Capacity Building for key stakeholders in Tunisia and Italy, and the identification of potential projects producing TRECs/VERs/CERs;
- Facilitate and establish a TREC/VER/CER trade between Tunisia and Italy; and
- A comprehensive report on the current opportunities and constraints towards larger scale TREC/VER/CER trade between Tunisia and Italy, including an outline of the way forward with clear recommendations.

The project is expected to:

- Be an important step towards TREC/VER/CER trading between North Africa and Europe;
- Contribute to better understanding of the financial advantages of trade of TRECs/VERs/CERs between developed and developing economies, thus encouraging an expansion of RE generating capacity; and
- as the financial benefits of generating TRECs/VERs/CERs become more apparent to market participants, this will lead as well as to an improvement of Tunisia's energy supply security in light of the country's burgeoning energy demand.

The only potential roadblock is the CEO of the Tunisian national electricity company, who needs to be convinced that certificate systems do not threaten the independence and survival of his company. Once we have his support (willing or unwilling), then we can progress.

There will be a meeting in November in Tunisia, on the back of the OME meeting, which will gain us the ears of the major players in Tunisia, and of the other Maghreb countries. We will subsequently meet there again in Spring 2008. The intention of the project is to prepare for certificate trading to the point of ***nearly*** issuing a RECS certificate, or a CER or a VER. Actually doing so is probably too far, too fast for Tunisia. AIB's role is to promote tradable certificates as a way forward.

Editorial (continued)

(*Continued from page 1)*

Coordinated international standards, based on an electronic GO system

Electronic GO systems remove opportunities for fraud and double counting, offering extra benefits relating to accuracy, reliability and transparency. International coordination of these promotes a standardised commodity, liquid markets and economies of scale.

Separation of physical (energy) and virtual (GO) markets

Coupling energy and GO fragments energy markets, and can act against liquid markets, leading to an administrative nightmare as market participants seek to identify the source of physical energy supplied to consumers. It complicates the transfer of specific energies (e.g. wind power) between market parties by needlessly requiring e.g. booking of interconnector capacity, hindering trade. Finally, there is particular negative impact on inflexible generation, which may constrain security of supply.

Redemption of GO as evidence of consumption of energy

The existence of GO as proof of energy source is only useful if they are transferrable between market parties, and may only be used once, as evidence of consumption. This requires that they be taken off the market (or "redeemed") when the associated energy is consumed.

Clarification of the role and usage of GO

Preamble 11 of the current RES Directive (2001/77/EC) states: "*It is important to distinguish guarantees of origin clearly from exchangeable green certificates*." This raises several questions: what happens if this distinction is not possible; and more importantly the definition and use of an exchangeable green certificate. We understand that the reference to exchangeable green certificates was intended to mean those associated with support schemes.

While the principle purpose of a GO seems to be to enable electricity suppliers to prove to consumers the source of electricity, GO could also provide evidence of compliance with indicative (or possibly future mandatory) targets for RES-E production; and to demonstrate compliance with an obligation.

Any new Directive should clarify the definition and role of GO.

Clarification of the definition of national targets

The current RES Directive proposes GO and national indicative targets for the consumption of renewable electricity. However, the extent to which GO were intended to be used for measuring achievement of national indicative targets was left to the communication from the Commission (*COM (2004) 366 final: The share of renewable energy in the EU*).

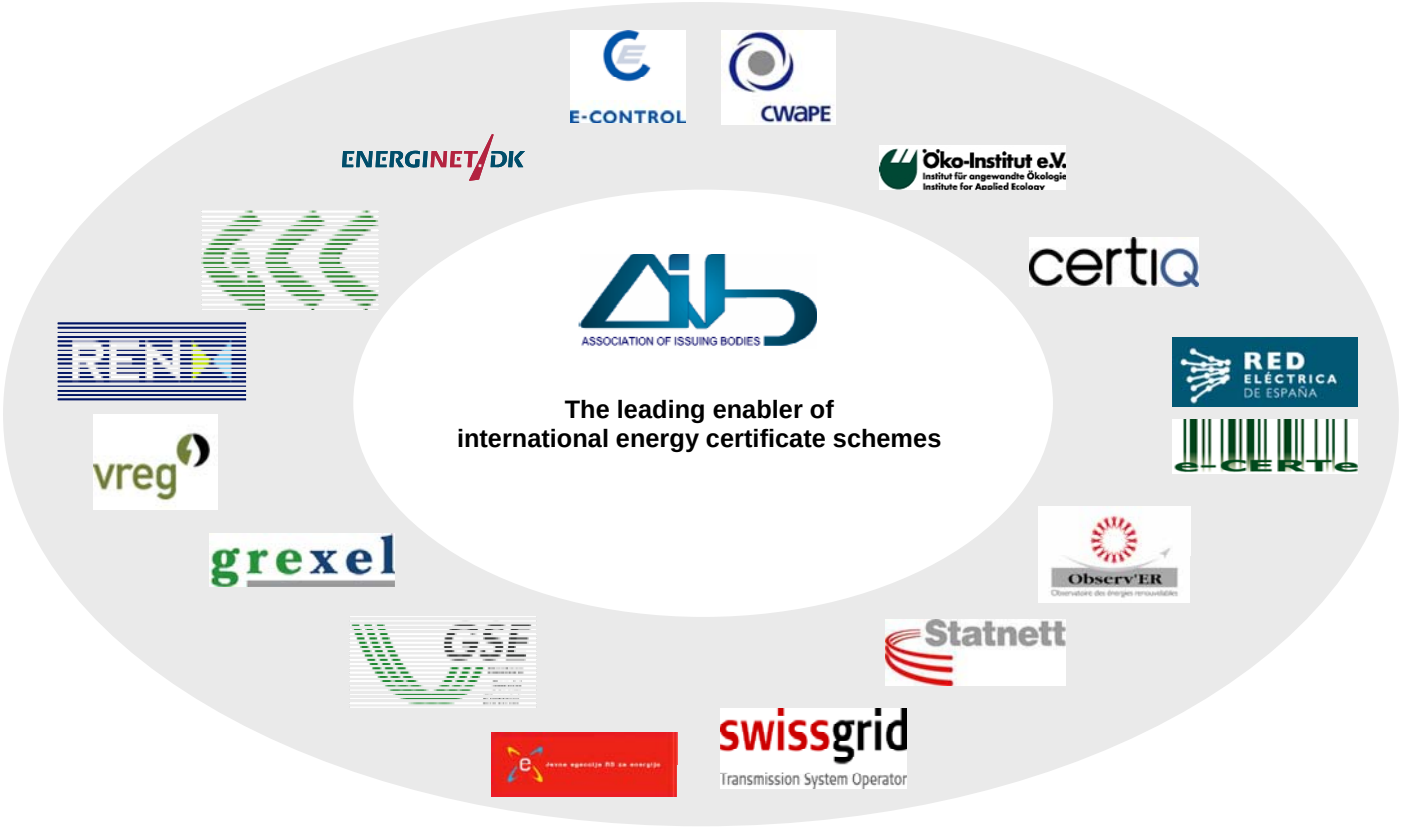
The AIB calls for the Directive to contain a clear definition of national targets; along with clarification of how GO should be used to support target counting.

The energy package, due at the end of 2007, offers an excellent opportunity for these issues to be resolved.

The AIB urges the Commission to consider them carefully, and looks forward to working with the Commission in delivering a well-running GO market.

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
Email: info@aib-net.org Website: www.aib-net.org



2007 : EVENTS

FORTHCOMING GENERAL MEETINGS	
11-12 September	**Lausanne**
December	**Budapest**