Rebuilding EECS for the Future

The AIB has thoroughly reviewed the EECS system and is implementing changes to fully support the RES Directive (2009/28/EC), improve support to the market, and open the door to other certificates besides electricity.

Key changes include merging all electricity schemes into one, and allowing members to hold and cancel all types of electricity certificate. There are improved rules for handling expiry dates, and tracking sustainability; and the list of attributes covered by a certificate has been expanded.

The structure of the document has also been modified.

A few issues remain to be clarified, and work has started on biogas GO. The next step is to clarify the text of the EECS rules (as the Principles and Rules of Operation will be known). The systems specialists are now planning the implementation of these changes throughout Europe.

Improving Disclosure: the EPED Platform and the RE-DISS Project

The EPED platform coordinate European Competent Bodies that wish to support reliable disclosure systems. It will help them:

- to develop their own regulations and best practice recommendations for guarantee of origin and disclosure systems
- to agree how to internationally account for imbalances between imports and exports of electricity and its attributes
- to create a European attribute mix, allowing countries to transfer surpluses to the mix; and to cover shortages from the mix.


In May, EPED and RE-DISS held a joint workshop in Brussels entitled: “Making Guarantees of Origin and Electricity Disclosure in Europe more reliable”, gathering 30 participants from 16 countries. A follow-up meeting will be in Brussels on 8th July.

Disclosure: expert opinion

Christof Timpe - who led the E-TRACK and E-TRACK II projects, and now leads the RE-DISS project (see previous page for details) has strong views about disclosure. But what are these?

We ask him what his views really are on the use of guarantees of origin (GOs) for tracking the source of electricity; and the use of GOs when calculating CO₂ footprints.

RECS Good Practice Standard

The RECS Good Practice standard is a tool for suppliers that wish to prove they supply electricity from renewable energy sources. It can be used by consumers, to prove that they have consumed renewable electricity. In each case, it provides assurance of the proper use of certificates.

Scandinavian Hydro

The Norwegian Water Resources and Energy Directorate says that Scandinavian reservoir levels are lower in 2010 than they were in the same period last year.

This is likely to influence the supply of certificates, as most of these currently come from Scandinavian hydro sources.
An update on the energy source disclosure platform (EPED) and the disclosure project (RE-DISS)


On 20th May, the EPED platform and the RE-DISS project held a joint workshop in Brussels entitled: “Making Guarantees of Origin and Electricity Disclosure in Europe more reliable”.

The workshop gathered 30 participants from 16 countries. Organisations responsible for Guarantees of Origin and/or disclosure were encouraged to participate in the EPED group of European Competent Bodies supporting reliable disclosure systems.

The reason for constituting such a group is that, in order to achieve reliable disclosure, a certain degree of coordination between Member States is needed.

Once constituted, this group of Competent Bodies will examine the relevance of the recommendations of the E-TRACK II project to their own Guarantee of Origin and disclosure systems. This will enable them to determine their own best practice recommendations, and so implement a reliable framework for the green power market and disclosure schemes, both nationally and across Europe.

These organisations will also help collect relevant data for the calculation of national residual mixes for the 27 Member States, Norway and Switzerland. These default disclosure mixes may be used by energy suppliers when the origin of supplied electricity is unknown.

The residual mix supplied by RE-DISS / EPED will be corrected using electricity attributes that are already tracked by means of GOs or other reliable tracking systems; and thus supports the prevention of double counting.

To avoid multiple counting of electricity attributes, requirements for the implementation of disclosure and Guarantees of Origin are introduced on a national level. In addition, it is also necessary for Member States to agree, on an international level, a common process to account for imbalances between imports and exports of physical electricity and imports and exports of electricity attributes based, for instance, on Guarantees of Origin.

Such coordination requires the creation of a European Attribute mix that will enable countries with a surplus of attributes to transfer excess attributes to the European mix. At the same time, countries with a shortage of attributes can cover their deficit of disclosure information with the composition of the European mix.

The following graph shows the first estimate of national residual mixes for the year 2009 as calculated by the RE-DISS project:

It is therefore good news for European electricity consumers that so many Competent Bodies were present at the workshop and, more important still, that they agreed to participate in a follow-up meeting which will be held, again in Brussels, on 8th July.

For more information on the next workshop, contact:

Liv Becker
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For more information on the project and platform and on the residual mixes calculated so far, see the websites of the RE-DISS project at www.reliable.disclosure.org; and that of EPED, at www.eped.eu.
DISCLOSURE: an expert opinion

It will come as no surprise to those who know him, to learn that Christof Timpe - who led the E-TRACK and E-TRACK II projects, and now leads to the RE-DISS project (see previous page for details) has strong views about disclosure. But what are these? We asked him what his views really were on the use of guarantees of origin (GOs) for tracking the source of electricity; and the use of GOs when calculating CO\textsubscript{2} footprints.

**GO for tracking**

An instrument is needed to facilitate tracking of the source of all electricity - not just renewables, but also fossil and nuclear. The Guarantee of Origin (GO) proposed by the Renewable Energy Directive (2001/77/EC) and its replacement (2009/28/EC), and the CHP Directive (2004/8/EC) provide such an instrument, which offers greater accuracy and flexibility than contract tracking.

CT: “The use of GO to the exclusion of other tracking instruments is fine in principle, but it is simply not realistic within the next few years: less than half of all renewable electricity production is certificated, let alone fossil and nuclear.”

“In any case, you can’t use current legislation to force people to use GO; and there is also the administrative cost of accrediting fossil and nuclear power plant to consider - you would need some very good arguments to make producers and suppliers use GO voluntarily for all electricity.”

“As for contract tracking, there are three options:”

“You could track each contract individually from producer to final consumer. This will simply not work in a trading environment: how can you track blended electricity through a power exchange?”

“On the other hand, you could follow the UK in using declarations from generators to identify the source of the electricity they produce, and declaring this periodically where long-term contracts are in place. This model can actually work, but only for a share of the volumes.”

“A more comprehensive, but complex, approach is the German model. After the year-end, all parties net out energy trades with each of their counterparties. The large market participants then inform their buyers of the traded energy mix. This is followed by one or more iterations including smaller market participants. This seems to work quite well even for physical contracts traded in spot markets and power exchanges, and we estimate that it reduces the residual mix in Germany from 85% of electricity consumed to around 10%. Thus it adds valuable differentiation of suppliers’ energy mixes to the market. Unfortunately, there is a downside: market parties have to trade blind. That is, they don’t know the composition of the electricity they purchase until the end of the year:”

“So this is a pretty opaque market: for full transparency, you would have to use long-term electricity purchase contracts with power producers with generator declarations. On the plus side, contract tracking is used by most of the market, so ignoring it is simply misleading.”

“However, as all countries must link GO and disclosure, we believe that you must regulate contract-based tracking on long-term contracts, and perhaps employ a model similar to the German model.”

“Furthermore, the E-TRACK project recommended that all claims made in association with green or other electricity products must make use of GOs. Generator declarations, the German model of contract tracking and information from the residual mix should only be used for disclosing undifferentiated products for which no ex-ante claims about their origin have been made.”

**Use of GO when calculating CO\textsubscript{2} footprints**

The Greenhouse Gas protocol requires the emissions of consumed electricity to be specified as accurately as possible, or for the mix to be used. As GO are only used to track electricity, they are appropriate for this. Therefore, it can be argued that GO can be used GO for carbon footprinting.

CT: “Well, at first sight, this appears to be right. However, while the use of GOs affects the balance between consumers - you know, who gets what - it certainly does not of itself reduce carbon emissions. However, the message which gets through to the public is the claim of carbon reduction. Such a message does not differentiate real reductions by energy savings or new RES installations and such virtual reductions, which have no actual effect. This is misleading, and open to criticism from consumer organisations, environmental NGOs and competitors. Therefore, in order to entitle a company to claim a lower carbon footprint based on purchasing green energy, there needs to be some measure of ‘additionality’: buying a GO must guarantee that more renewable production is built.”

“Fundamentally, the steps you need to take to reduce a company’s carbon footprint are to: 1) Reduce energy consumption; 2) Source your energy from local renewable sources; and 3) buy renewable energy. Any actions should be in this order, as you simply squander the limited sources of renewable energy if you do it in the other way round:”
DIFFERENT DISCLOSURES (continued)

“Öko-Institut recommends the inclusion of zero carbon only for renewable plants up to 6 years old; grid average emissions for plants in excess of 12 years, and an average of the two for plants in between 6 and 12 years old. All plants claiming carbon reductions would have to be constructed and operated without public support. These definitions are in line with the additionality criteria of the German quality label “ok-power”. Obviously, it would be hard to justify why the 6- and 12-year periods were chosen; however, it just seemed sensible! Admittedly, these criteria will have to be revised in the future due to the encompassing RES targets in the new Renewable Energy Directive (2009/28/EC).”

“In the medium term, however, a common standard for the use of green power in carbon footprint calculations should be developed: a standard which supports true emission reductions through green power; and which creates a fair and level playing field for carbon claims.”

“The Greenhouse Gas protocol does, indeed, allow the use of zero emissions for any renewable electricity, while the UK PAS 2050 standard only allows the use of grid average emissions (even for green energy) to stop double-counting of low carbon energy. Öko-Institut’s proposal bridges the gaps between these two approaches, and aims to encourage companies to support the expansion of renewable energy.”

IMPROVING EECS

In order to fully support the RES Directive 2009/28/EC and better fulfil market requirements (including opening the door to other certificates besides electricity), the AIB is finishing a thorough review of the EECS system. The General Meeting has charged the Work Group Internal Affairs (WGIA) to perform this review. This process is now coming to an end: the next General meeting in June is due to approve the major changes to the Procedures and Rules of Operations (EECS rules).

The key changes introduced were discussed during market consultations. Here are just a few. Merging all electricity schemes into one will allow all electricity certificates to be held by all members and potentially cancelled everywhere given the right conditions (obligation of reporting to competent body in charge of disclosure). At the same time issuing will remain reserved to those Members entitled to do so, either by public authorities or by private bodies (e.g. RECS-International). Rules for handling expiry dates within EECS were agreed while retaining the right of Member States to apply it in their own way. Tracking for sustainability was introduced by recognising the role of independent Criteria Schemes like the Forest Stewardship Council (FSC) and the like. The list of attributes covered by a certificate was expanded, as required by the RES Directive. The structure of the document has also been modified.

The work is not yet fully over yet however. A few issues still need to be clarified (definitions, length of retention of records, ...) but are not as challenging as the above changes; a few other necessary, but not critical, changes require input from systems specialists. Moreover, work has started on biogas GO following market developments. Interested parties have already recognised the new EECS rules as fully compatible with biogas, possibly without any refinements. This needs to be further analysed by gas specialists. Further work on the text of the Procedures and Rules of Operations (EECS rules) is expected to take place in 2010 in order to simplify and improve its readability.

After the Tallinn meeting (June), the systems specialists will be able to estimate properly how long the changes will take in order to implement these throughout Europe. The final implementation date for AIB will then be agreed on, probably in 2011.

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Email: pierre-yves.cornelis@cwape.be
What is RECS Good Practice?

The RECS Good Practice standard is a tool for suppliers that wish to prove that they supply electricity from renewable energy sources. From the perspective of consumers, the RECS Good Practice standard can be used as an instrument to prove that they have consumed renewable electricity. In both cases, the standard provides assurance that EECS certificates - which include guarantees of origin - have been both used, and used properly.

In the best case scenario, national governments have regulated that suppliers wishing to claim that they have delivered renewable electricity to their customers must prove that they have done so by means of cancelled GOs. This is currently the case in the Netherlands, Belgium, Norway and Austria; of course, we strongly urge other countries to follow this example by implementing clear and effective legislation.

Is it often used?

At this moment RECS International has 13 registered users of the RECS Good Practice standard.

Why should you choose for RECS Good Practice?

The RECS Good Practice standard regulates the use of renewable electricity certificates by consumers in countries where only suppliers are subject to regulations; and it regulates the use of such certificates, both for suppliers, and for consumers in countries where the use of renewable electricity certificates is not regulated. In this respect, it is important to determine who makes the renewable electricity claim; and whether or not this claim can be made and verified. In short, people should choose the RECS Good Practice standard because it assures the correct use of renewable electricity certificates by both suppliers and consumers.

How can you obtain details of the RECS Good Practice?

Currently, you will need to e-mail the RECS International Secretariat (at: secretariat@recs.org). Details of the RECS Good Practice standard pages will soon be published on the RECS International website, at: www.recs.org.

HYDRO SITUATION IN SCANDINAVIA

Will this influence the supply of EECS certificates in 2010?

According to the Norwegian Water Resources and Energy Directorate, reservoir levels in Scandinavia are lower in 2010, than they were in a corresponding period during 2009.

NordPool Spot, which represents 72% of the total consumption of electricity in the Nordic region, indicates that in the first quarter of 2010, reservoir levels in Scandinavia decreased by 15% compared to the same period during 2009.

The influence on the supply of EECS certificates is likely to be significant, as 80% - 90% of these came from Scandinavian hydro sources in 2008 and 2009. During 2010, this region is again expected to issue the majority of EECS certificates.

References

1. NordPool Spot reports on reservoir content for electrical exchange area by week (2008-2010) (English)
   http://www.nordpoolspot.com/reports/reservoir/Reservoir-content-Espot-exchange-area/

2. Norwegian Water Resources and Energy Directorate, “The Power Situation - week 16 2010” (English)

http://www.nve.no/en/Newarchive1/Situational-reports/The-power-situation-week-16-2010/

EUROPEAN ACTIVITY

The Raw Data - by Country

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<tr>
<th>Country</th>
<th>TOTAL</th>
<th>2010</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Issued</td>
<td>Transferred</td>
<td>Cancelled</td>
</tr>
<tr>
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<td>Internal</td>
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<td>Import</td>
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<td>UK</td>
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<td>Total</td>
<td>627,033.289</td>
<td>107,020.087</td>
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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.
<table>
<thead>
<tr>
<th>Energy Source</th>
<th>TOTAL</th>
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<th>2009</th>
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</thead>
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<td>Oil</td>
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<td>Natural gas</td>
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<tr>
<td>Nuclear</td>
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<td>650,000</td>
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<td>Hydroelectric</td>
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<tr>
<td>Bioenergy</td>
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</table>

**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 rise at a greater rate than in previous years.
Summary of Activity

The number of issued certificates has plateaued for the time being, but this is not expected to last forever: the new RES Directive will certainly incentivise new countries to join the AIB and existing members to make further use of guarantees of origin (GO), to enable them to disclose the source of energy to consumers.

We can already see this in 2010, where cancellation of GO (which is done at the point when GO are actually used to provide evidence of consumption of energy) is close to reaching the total for the whole of last year - and there are more than six months of the year yet to go!

In fact, international transfer and cancellation of GOs for the first quarter of 2010 are up more than 60% compared with the same the first quarter of 2009.

International Trade

At first sight, exports seem to exceed imports. However, this is deceptive: not all transfers are instantaneous, and hence trades which commence in one month can complete the following month.

The Nordic countries - Norway, Sweden and Finland - continue to be the major exporters, although Austria seems to have returned to the scene recently.

Regarding imports, these continue to be Germany, the Netherlands and Belgium (both Flanders and Wallonia); with other countries playing a lesser part.
The pie charts on this page show the certificates issued and cancelled over the last two years, 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, both in 2009 and in 2010. They also demonstrate where certificates come from; and where they eventually end up: originating mostly in the Nordic region, they travel to the Netherlands, Belgium, Germany, France and Italy.

They also show how the position is changing over the last quarter months: either the role of Austria and Flanders as buyers is increasing; or these countries tend to cancel certificates in the early part of the year. As the market matures, such trends will become more self evident.
From the perspective of energy sources, a different picture emerges.

Hydropower remains by far the most prevalent renewable energy source, followed by onshore wind and biomass; while nuclear power provides the major contribution of the non-renewable energies.

One difference from previous years is that the proportion of certificates issued and cancelled representing the different energy sources is broadly the same; while in previous years consumers seemed to favour non-hydro. Is the market becoming less discriminating; or is hydro simply swamping the other energies?
National Activity - Benelux

The Netherlands, while continuing to issue and export certificates, continues to be one of the major consumers of certificates.

Brussels continues to cancel certificates issued in 2009, but has yet to issue this year, or to trade internationally.

Flanders continues to issue and import increasing numbers of certificates. It has cancelled a large number of certificates this year, although some of these undoubtedly relate to 2009.

Luxembourg, a relative newcomer to AIB, has commenced transferring certificates internationally, but has yet to issue or cancel.

Wallonia continues to import and cancel large numbers of certificates, but has yet to issue or export many.
National Activity - Nordic / North European

Denmark continues to issue and cancel more certificates in the past, and is also trading internationally more than ever.

Finland is issuing less, but cancelling more than before. International trade, too, increases.

Ireland has been inactive since 2008.

Norway continues to be the major producer, although lower reservoir levels than before will doubtless decrease production this year. Cancellation is already at the level of last year; while international trade continues to grow.
**National Activity - Mediterranean / South European**

France seems to be less active than in 2009, with cancellations appreciably down, although issuing is close to the same as last year. Imports are also down on last year.

Italy has issued few certificates so far this year, but has cancelled far more - and activity in this respect, and for imports, is close to last year. Italy is close to introducing an EECS RES GO scheme.

Portugal has issued slightly more certificates so far this year than last year, but cancelled none. It has, however, exported some certificates for the first time.

Spain has issued slightly more certificates so far this year than in the whole of 2009, and cancelled substantially more. It has, however, not traded internationally since 2005.
National Activity - Nordic / North European

Austria is now cancelling far more EECS certificates, as it includes with these certificates that were issued under its own national scheme, but transferred under EECS. Cancellations are far higher than last year, and international trade is substantially higher - importing and exporting having quadrupled.

Germany has not issued any certificates since 2008, but has established itself as a major importer and canceller of certificates. Cancellations are substantially up on last year, as is international trade, where exports are already double those achieved in 2009, and imports look to comfortably outstrip last year’s.

Slovenia has not issued any certificates for much of the past year, but has cancelled a few, as it progresses with the implementation of its RES GO scheme.

Swiss activity - both issuing and cancellation - is down on 2009, but international trade seems to have risen substantially, last year’s total already having been outstripped.
2010 : EVENTS

FORTHCOMING MEETINGS

30 September Dubrovnik AIB General Meeting
01 October Dubrovnik AIB workshop for SE Europe
03 December Lisbon AIB General Meeting