CONNECTING
ANNUAL REPORT
2015

AIB
association of issuing bodies

Connecting

Imagine our life as Issuing Bodies without the AIB Hub.

In order to facilitate the international exchange of energy certificates, the AIB operates an inter-registry telecommunications Hub to connect the registries of all its members. This saves the members a lot of effort and money by making their work easier. With a growing number of members, and traded volumes showing a steady increase, the AIB is investing in the future and setting up the next generation of the AIB Hub.

The new AIB Hub will be re-built from scratch, using new technology. Business rules will be included according to the EECS Factsheets, and operations will not be affected. The technical design will be more modular, to allow for easy future changes and extensions. The new AIB Hub will be designed to handle a huge increase in transfer activity, and security will be updated to the latest standards.

The AIB is confident that its new Hub will prepare the European GO market for the future. It will be dynamic, flexible and stable, and provide an ideal platform for the future of AIB and its members.

Contents

President's introduction

AIB President
Dirk van Evercooren
of VREG, Flanders

Dear reader of the AIB Annual Report,

Looking back on my first full year as President of the AIB and all the activities that follow, I have to say 'what a year!'. Never a dull moment… Indeed, it was a busy year for the AIB!

Right from the start we saw a potentially dangerous, but also very promising development. The European Commission announced a review of three Directives. This revision concerns no less than the three Directives that inspire our core activities: the Renewables Directive, in which the Guarantee of Origin for electricity from renewable sources is defined, the Energy Efficiency Directive, which does the same for High-Efficiency CoGen GOs and the Internal Energy Markets Directive, which does not mention GOs, but requires that end consumers of electricity need to be informed about the origin of their electricity. In other words, it defines the purpose of GOs.

The AIB feels that the Guarantee of Origin is to the benefit of Europe, its electricity consumers and its internal energy market. So, we feel the European Directives need to be revised in such a way that the Guarantee of Origin (GO) is not only confirmed, but strengthened as an instrument to empower Europe's energy consumers and make them accountable for the environmental effects of their choices! Abandoning the GO would not only 'kill' the purpose of AIB's existence it would indeed be a major setback for European energy customers! So we expressed this concern to the European Commission…

And the European Commission listened and invited us to share our views on how the European legislative framework should evolve. So within the AIB, Working Group Internal Affairs developed a vision of where we want the GO and the disclosure system to go. This vision became the Reflection Paper (we didn't want to call it a Position Paper, as we want to stay humble and not force our views upon the European policy makers…).

To spread the word, AIB set out a strategy to convince European policy makers to secure the role of GOs. This became the Stakeholder Strategy (SHS). But this left us in a whole new game - and clearly we did not know what kind of game we had joined, as most of this was new to us!

The AIB talked to the European Commission, to BEUC (the European Consumer Association), to Eurelectric, to EFET, to NGOs like Greenpeace, and many more stakeholders… But we also investigated the European legislative process, we set up a visible AIB presence online, with a LinkedIn Company Page, YouTube channel with videos, a Twitter account @AIBSEC. AIB established contacts with journalists/media and we are working on a Joint Communication, for which we hope to find a lot of stakeholders willing to sign and support the message.

I am happy to say that in my view, the AIB's SHS has been rather successful. We have gained supporters for our views, we learned the main concerns that we need to address (double perception …), many more people now know the AIB, and even more are aware of GOs and what they contribute…

I can therefore say that the AIB has come a long way already, but we are still not sure that the GO will stay, and therefore that the message of AIB will prevail. We have learned a lot about how to influence the European legislative process, but there is still more to be done! We are counting on every one of our members to put in their efforts, to spread our message and to ensure that Europe's energy customers are informed in a cost-efficient and reliable way about the source of their energy.

After all, that's what AIB is about:
guaranteeing the origin of European energy!

Chair's Statement

Chair of the Board
Jan van der Lee of CertiQ, The Netherlands

Consumer choice or consumer protection?

When you buy a shirt you look on the label. Where is it made? Maybe you want to know under what conditions. Or, in the supermarket you look on a bottle of milk to see what's in it. Simple, valuable and part of our daily routines, is it not? Well then, I have a question for you. If this is common practice for clothing and food, then why not for energy?

It is possible, already for renewable electricity at least. One-on-one clear cut information on the source of the energy. You want energy from that windfarm around the corner? You can, you know. Or maybe you want green power from new installations only. No problem. Instruct your supplier of choice to provide you with the matching Guarantees of Origin. However, this is for green energy consumers only, remember. For other forms of energy like fossil or nuclear, there is a widespread of means and methods available to display the whereabouts of your energy.

Dear reader, now I would like you to meet my friend Kristian, a Norwegian consumer. Kristian likes renewables. He sees a lot of green power in his country but he knows that electricity is exported. What does he get then: Hydro? Coal? Nuclear? Kristian is confused. Kristian recently met Angelika, from Berlin. Angelika too likes renewable electricity. And natural gas. But she doesn't like coal. And she certainly doesn't like nuclear. That's going to be a bit difficult! But it becomes even more difficult. The next day, Kristian met Sophie, from the UK. Sophie likes renewable electricity. And she likes nuclear as well, which she calls "low carbon".

Protecting green consumers means we must create: reliable, trustworthy and understandable ways of finding the source of all electricity - even coal and nuclear electricity. For this, accurate and reliable disclosure is vital, so that consumers can make credible claims about the environmental impact of their use of electricity. This is why strong disclosure regulation is essential to ensure that suppliers provide reliable information to consumers.

Since the European energy market is international, bringing energy from the source to the consumer, practical access to this information is key. That's why AIB has decided to provide the 2015 European residual mix calculations this year. Countries will for the next two years still be able to use harmonised disclosure information showing the effects from import and export of energy within our internal market. But being available is not enough. It is crucial for consumer protection that the relation between GOs and disclosure in the directive becomes explicit, that would be a major improvement.

So, it is about protection then? Not just that. Consumers – large and small – are articulate. The European consumers take up a responsible and self-aware position in the market now that they realise they have the power to choose. More and more they become active, meaning that they do not just want renewable power; they have a list of demands, e.g. on the specific source of the energy or that it has to come from a new plant. And what is more: a substantial number is translating their redeemed GOs into a carbon statement. Obviously, the consumer is in the driver's seat.

Therefore it is consumer choice and consumer protection, it is consumer empowerment. We applaud that and it inspires us to give our utmost in setting the stage for optimal transparency and reliability on energy. Its origin and its environmental impact.

Certificate activity for 2015

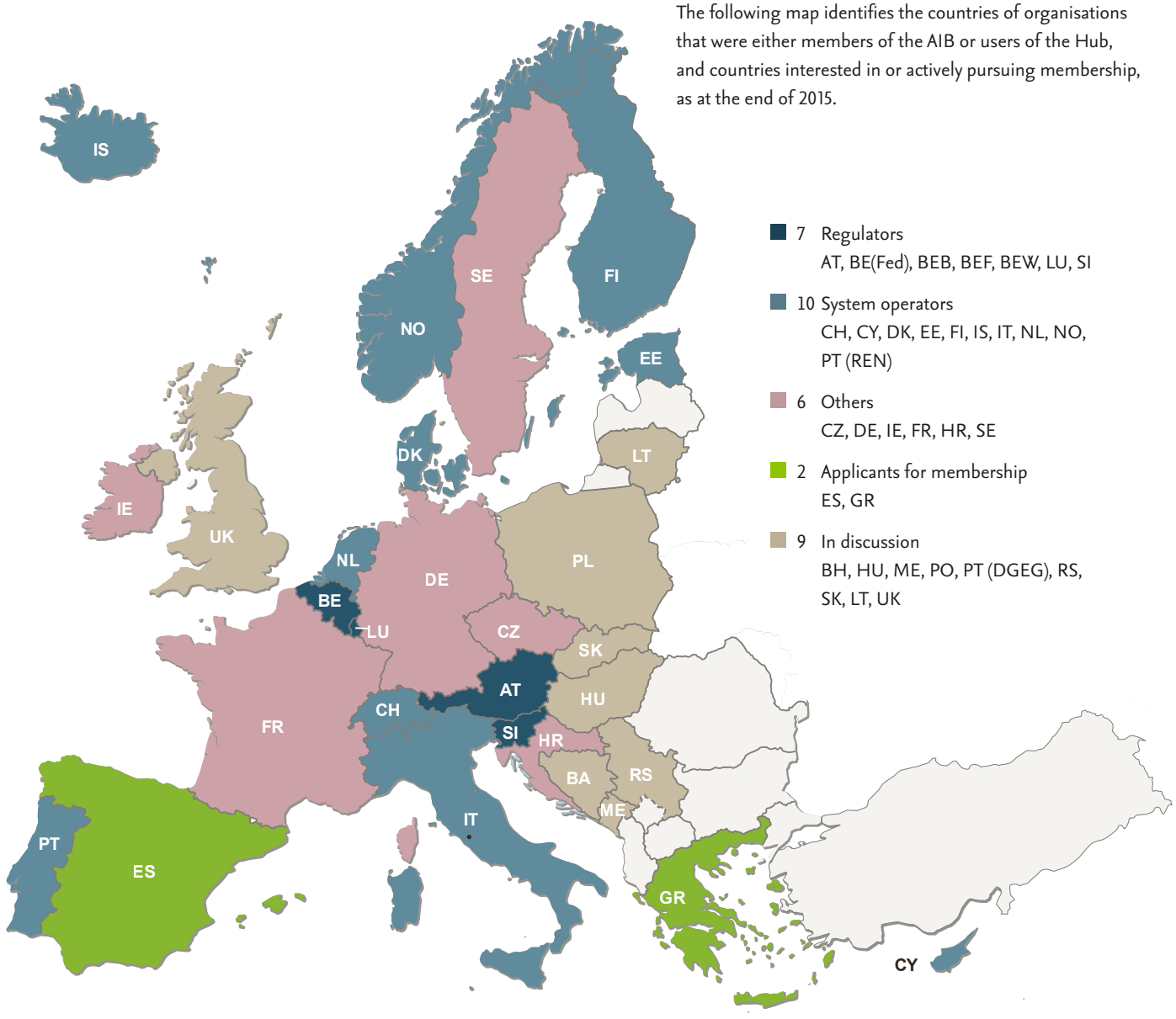
Membership

At the end of 2015, AIB had a total of 22 members, representing 19 countries (the Belgian regions of Brussels, Flanders and Wallonia each have their own issuing body, as has Federal Belgium, which has responsibility for offshore production); plus a non-member user of the Hub, UBA of Germany. CREG of Federal Belgium and SEM-O of Ireland joined the AIB; while REN of Portugal resigned its membership as from the end of 2015.

The issuers of guarantees of origin (GOs) for Spain (CNMC), Greece (LAGIE) and Sweden (Energimyndigheten) continued the membership application process, and UBA of Germany applied to change its status from Hub user to member.

Discussions progressed with interested parties in Bosnia (REERS), Federation of Bosnia and Herzegovina (RES Operator), Hungary (MEKH), Montenegro (ERA), Poland, Serbia (EMS), Slovakia (URSO), Turkey (Ministry of Energy and Natural Resources) and the UK (Ofgem).

The following map identifies the countries of organisations that were either members of the AIB or users of the Hub, and countries interested in or actively pursuing membership, as at the end of 2015.



Market Activity

New features of the statistics

Statistics are available for: certificate activity in a month; and certificate activity relating to electricity produced in a month. So it is possible to analyse the quantity of certificates which are issued, transferred and cancelled or expired in a month; as well as those which were issued, cancelled or expired for the electricity produced in a month. This makes it possible to see how many of each 'vintage' of certificate are still available on the market; and to review seasonal certificate activity.

Health warning: in reading these statistics, the reader should be aware that not all registries yet report:

1 certificates issued by date of issue; or
2 certificates cancelled or expired for electricity produced in a specific month.

The situation has improved this year, but this should be borne in mind when developing conclusions based upon these statistics.

Overview of activity

Market activity continues to increase, with continued growth in the quantity of certificates used by suppliers to prove the source of electricity. While internal transfers seem to have levelled off, there has been continued increase in external transfers and cancellations; with more and more certificates finding a value (distinguishing between cancellation and expiry in some registries was not always possible in the early days of the market, so cancellations may have been overstated).

By the end of 2015, 67% of certificates issued for electricity produced during 2014 and 19% of certificates issued for electricity produced in 2015 were reported as having been cancelled. About 8% of certificates issued for electricity produced in 2014 have now expired, slightly higher than the previous year.

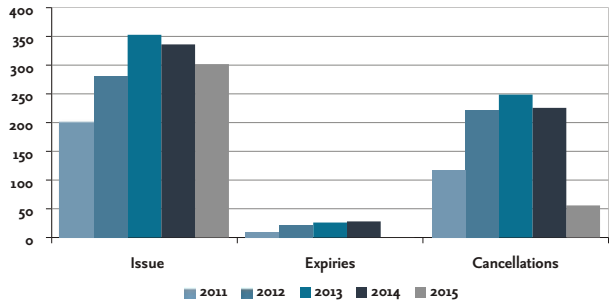
This again demonstrates that increasing numbers of competent bodies are expiring certificates, and that stocks of certificates more than 12 months old are rapidly depleting in response to the requirement under the EU Renewable Energy Directive (2009/28/EC) for certificates to expire within 12 months of production of the associated energy. This has led to increased demand for new sources of supply; and coincides well with the growth in member states seeking to comply with the Directive in a cost-efficient way by joining the AIB and/or using the Hub.

The number of issued certificates for electricity produced during 2015 will be finalised during the next few months, and we anticipate a higher final number of certificates issued for this production year than that reported in this article – historic trends suggest an increase of about 20%.

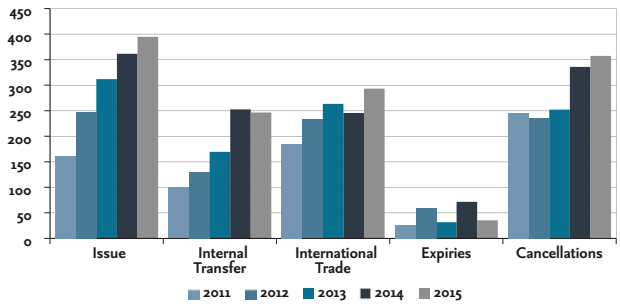
The following graphs show:

1 the annual quantity of certificates issued, cancelled and expired for production during that year; and
2 those that have been issued, transferred within a country, transferred internationally, and expired and/or cancelled during that year.

graph 1 **Annual EECS transactions by production date (TWh)**



graph 2 **Annual EECS transactions by transaction date (TWh)**



Source of certificates - technology / energy sources

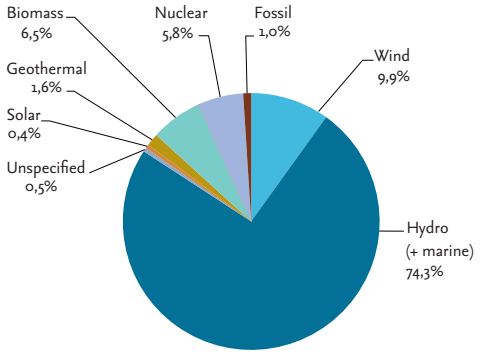
Hydropower continues to be the major source of electricity for which certificates are issued and cancelled, and remains similar to 2014, at 74.3%. The proportion of certificates issued has fallen from 7.2% to 5.8%, while it is broadly the same for biomass (6.5%), geothermal (1.6%) and solar (0.4%). However, it continues to increase for wind (8.4 to 9.9%) and fossil (0.7 to 1.0%). A new entrant is "unspecified", which accounts for 0.5%.

At the same time, the cancellation of hydro remains similar to 2014 (77%), while wind has increased (8.2 to 10%) and nuclear has been reduced (6.1 to 4.5%).

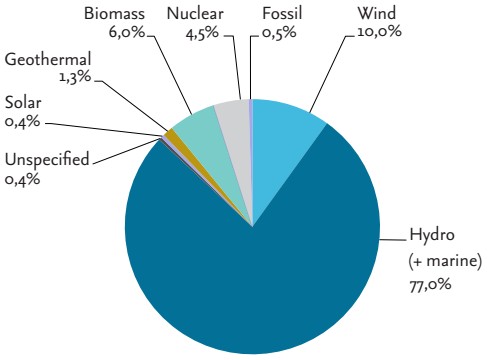
The following graphs show the annual quantity of certificates issued for a production period; along with those that have been cancelled during that period.

graphs 3 + 4

EECS certificates issued per technology (2015)



EECS certificates cancelled per technology (2015)



Source of certificates – country

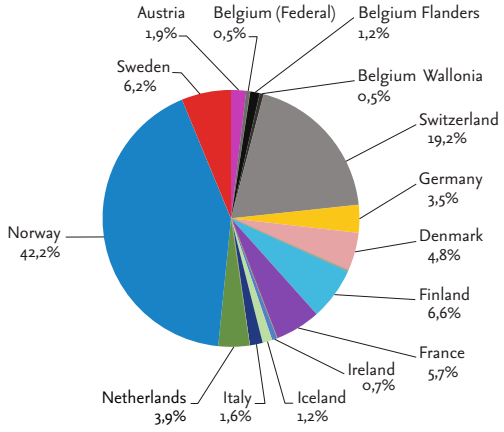
Regarding national activity, Norway and Switzerland remain far the major suppliers of certificates, supplying over 61% of all certificates issued, followed by Finland, Sweden, France and Denmark, which issued a further 23.3%.

Germany, Switzerland and the Netherlands are now the major consumers of certificates, cancelling 52.3% of all certificates between them; while Norway, Sweden, Italy, Finland and Austria collectively cancelled a further 36.3%.

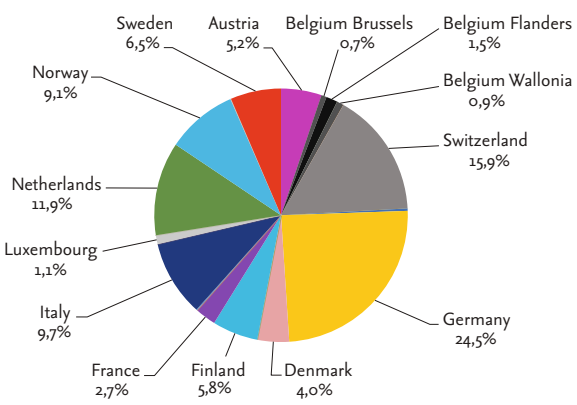
The following graphs show the annual quantity of certificates issued for a production period; along with those that have been cancelled during that period.

graphs 5 + 6

EECS certificates issued per country (2015)



EECS certificates cancelled per country (2015)

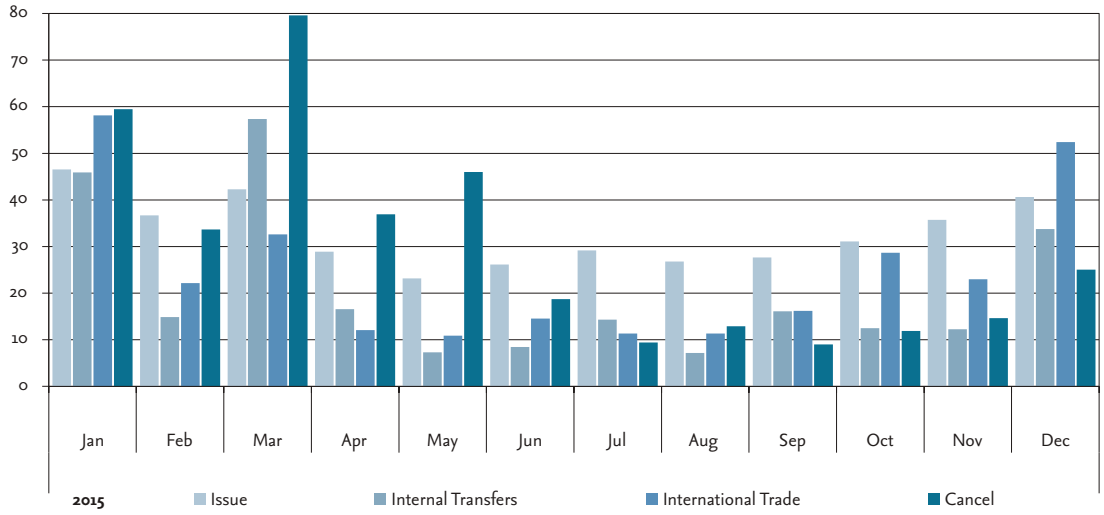


Annual activity

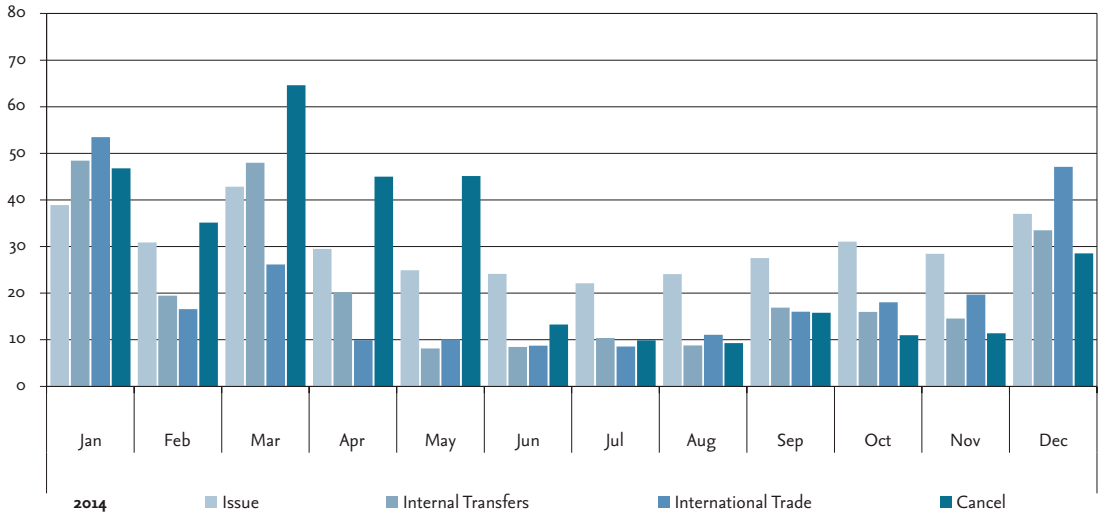
Activity has continued to increase since 2010, with most activities rising at the start of the year, and declining in the middle of the year.

The following graphs show, for the last two years, the annual quantity of certificates issued for a production period; along with those that have been transferred within a country, traded internationally and/or cancelled during that period.

graph 7 **EECS certificate activity 2015 (TWh)**



graph 8 **EECS certificate activity 2014 (TWh)**



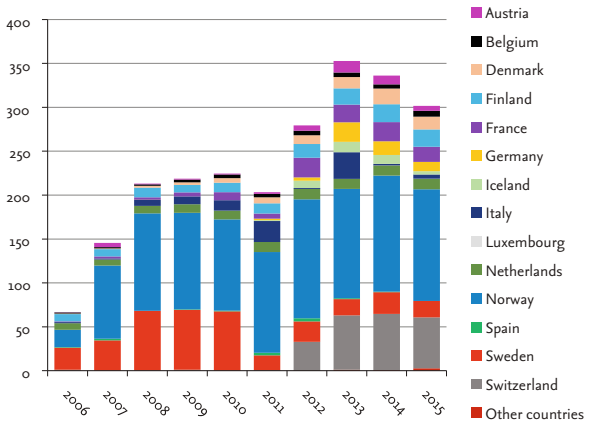
Cumulative activity - national

As the following graphs demonstrate, the growth in issuing continues (note that the issuance of certificates for the remaining 2015 production will continue into 2016; and that historically, a further 20% is possible, meaning the eventual total might be as high as 360 TWh). The following graph shows the annual quantity of certificates issued for production in each of the last 10 years.

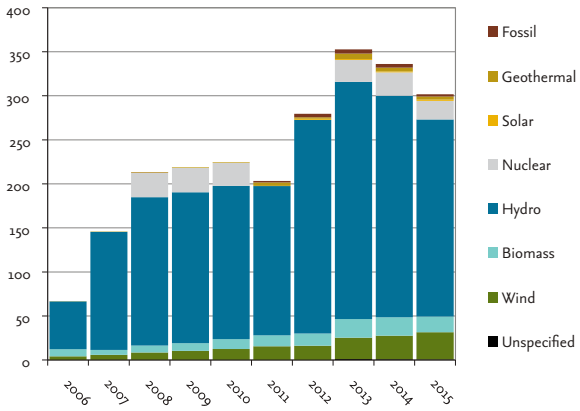
Norway is still the leading country supplying Guarantees of Origin; providing the market with approximately 127 TWh of Guarantees of Origin from Hydro in 2015. As the rest of the market keeps growing and developing, Norway's share of the total supply continues to decrease.

graph 9 + 10

Issued per year of production (TWh)



Issued per technology (TWh)



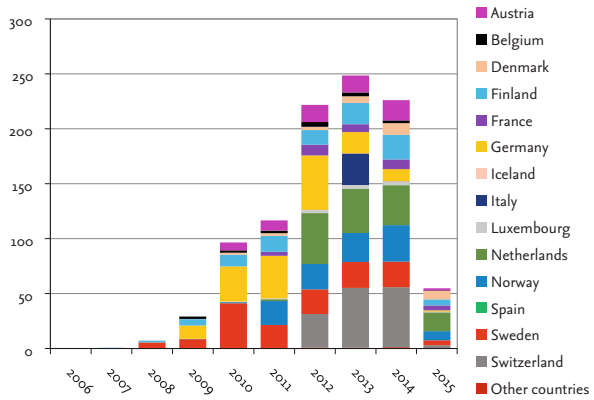
Cancellation continues to grow, reflecting growing consumption in a number of countries during 2015. The following graphs show the annual quantity of certificates that have been cancelled for production during each of the last ten years; along with the certificates that have been cancelled in each year for all production periods.

In reviewing these graphs, please note that – in line with the provisions of the RES Directive 2009/28/EC - certificates are increasingly expired one year after the date of production. However, this was not the case before 2011, when certificates that had not been cancelled remained in registries for an unlimited time. Also, until relatively recently, registry operators recorded the quantities of certificates issued for each production period and those transferred and cancelled during a year for production during any year – increasingly, registry operators now record both.

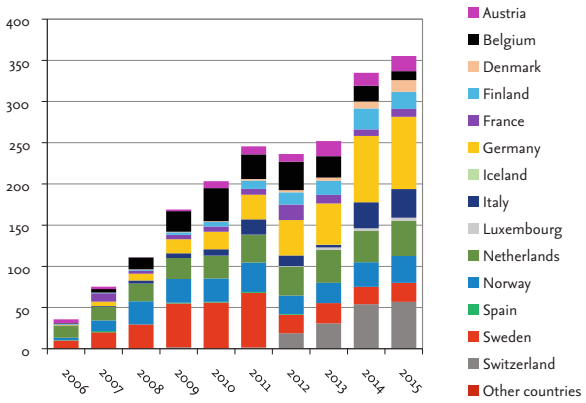
Each of the above issues impact the statistics: for example, certificates are normally cancelled late in their life, which explains why most certificates for 2015 production have yet to be cancelled. Also, the slight dip in certificates for all years that were cancelled during 2012 and 2013 may have been due to energy suppliers using up old stocks of certificates before they expired, as the RES Directive came into force; plus the impact of change of issuing body in Germany and France.

graphs 11 + 12

Cancelled per year of production (TWh)



Cancelled per year of transaction (TWh)



The continued rise in cancellations has led to demand of more than 357 TWh, over 10% of all European energy demand and 31% of all European RES electricity. The market continues to shorten.

Furthermore, considerable market activity in Slovenia, Spain and Sweden is currently unreported, as are the non-member countries. When this is eventually added, we expect to see a further rise in reported market demand – perhaps by a third.

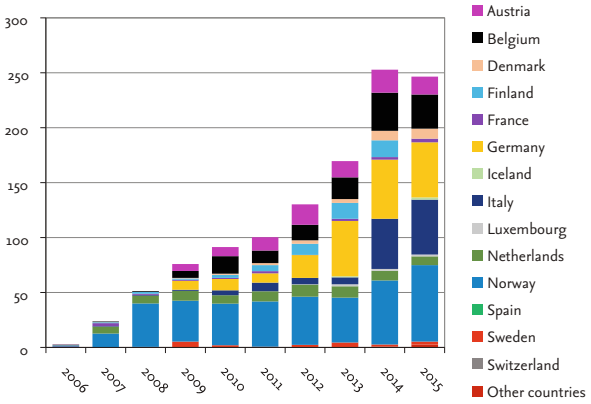
2015 saw one new country (Ireland) taking its first steps into the market: this will gradually take a greater part in the market in 2016.

Households, organisations and businesses all contribute to this impressive market growth; although it is clear that the corporate sector is the main driver. Global reporting initiatives like CDP (Carbon Disclosure Project) and the Greenhouse Gas Protocol, as well as the CSR Directive, emphasise that renewable energy is an important part of a broad corporate sustainability agenda. The Guarantee of Origin is the primary European tool for documenting the purchase of renewable energy.

Internal use of certificates continues to rise, with Norway, Germany, Italy and Belgium making a marked contribution. See the following graph.

graph 13

Transferred per year (TWh)



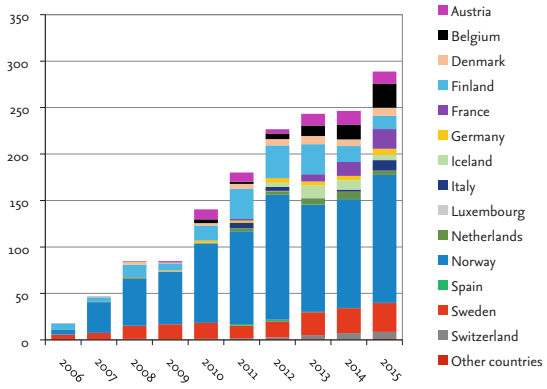
Externally, the exporting countries are predominantly Nordic plus France, Switzerland and Austria.

The contribution of individual importers continues to show Benelux and Germany as the major importers, followed by the Nordic countries and Austria.

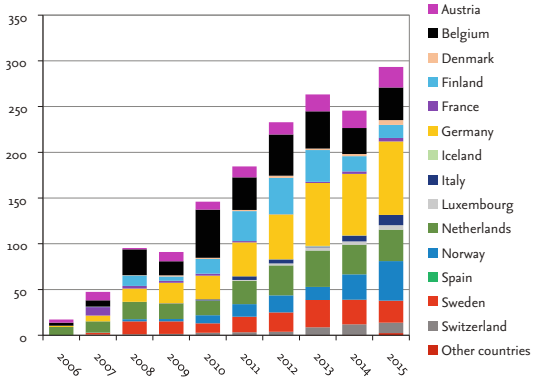
The following graphs show the annual quantity of certificates traded internationally during a period.

graphs 14 + 15

Exported per year (TWh)



Imported per year (TWh)



Cumulative activity – technology

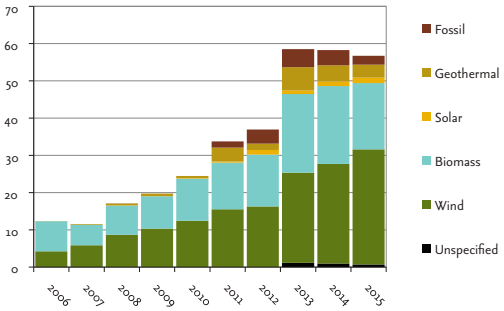
From the perspective of technology, production and transfer of electricity, hydropower remains predominant among energies, followed by nuclear, wind and biomass (nuclear certificates have been issued and cancelled for disclosure purposes by their producer, within Sweden and Switzerland); and a few have also been cancelled in the Netherlands.

Of the less predominant technologies, fossil is starting to make its presence felt; and 'unspecified' is precisely that: renewable energy for which the source was either unknown or was not specified when the certificate was issued.

The following graphs show the annual quantity of certificates issued for energy produced during a year, analysing these in more details for energy sources other than nuclear and hydro.

graph 16

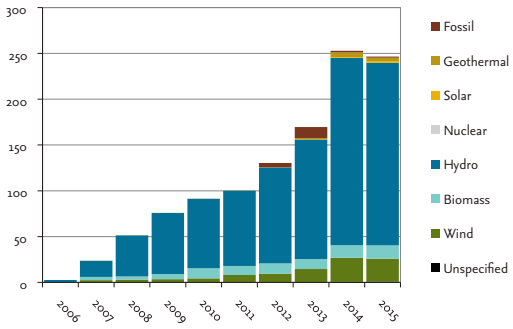
Issued per technology (TWh) (except nuclear and hydro)



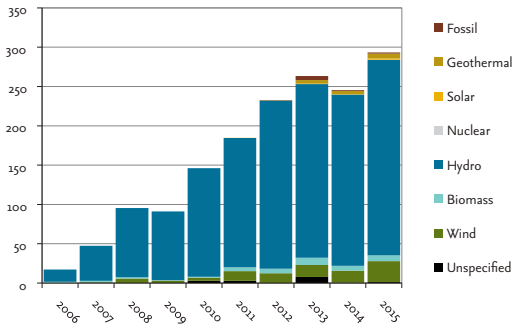
In addition, the following graphs show the volume of certificates by each energy source that have been transferred within a country, and those that have been traded internationally.

graphs 17 + 18

Transferred per technology (TWh)



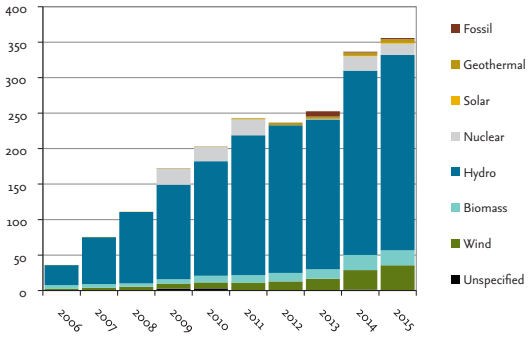
Imported per technology (TWh)



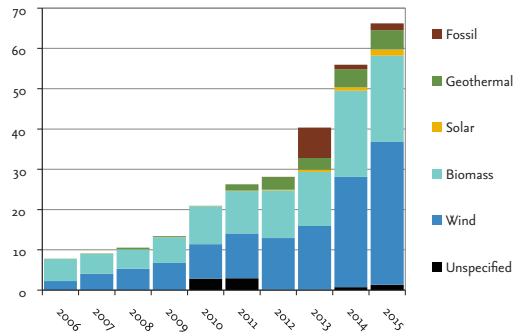
These graphs show the annual quantity of certificates cancelled during each year, analysing these in more details for energy sources other than nuclear and hydro.

graphs 19 + 20

Cancelled per technology (TWh)



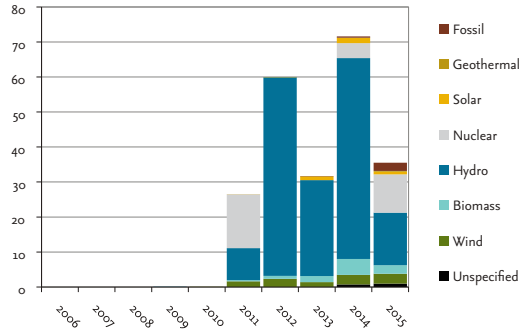
Cancelled per technology (TWh) (except nuclear and hydro)



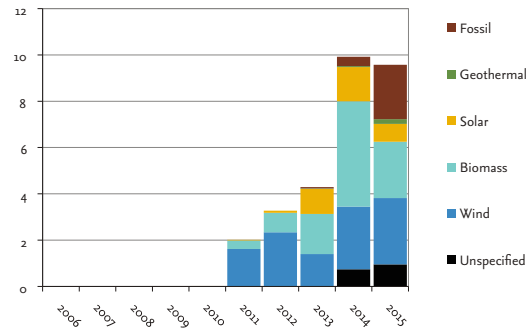
We can also see the growth in expiry of certificates as the requirements of Directive 2009/28/EC are implemented.

graphs 21 + 22

Expired per technology (TWh)



Expired per technology (TWh) (except nuclear and hydro)



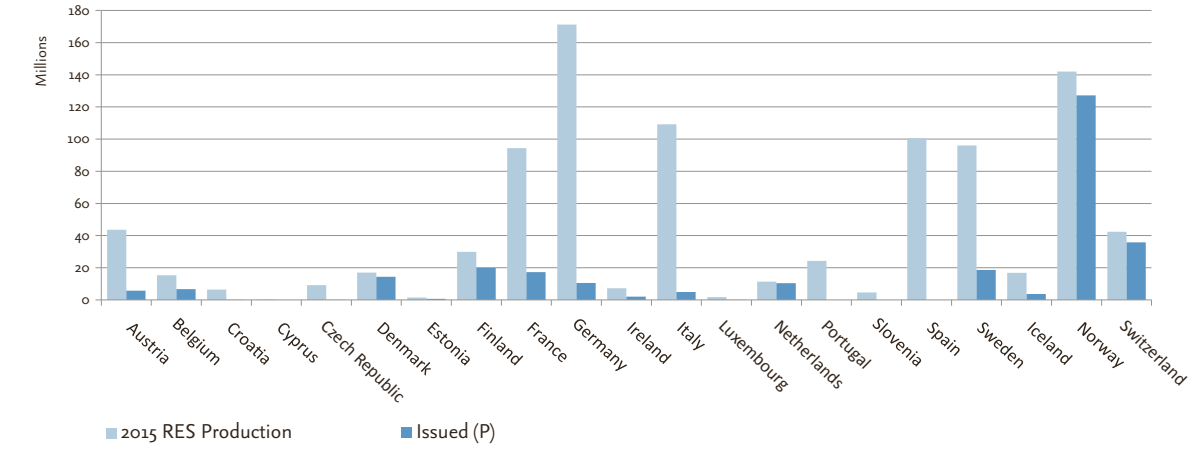
EECS market penetration

It is interesting to compare renewable electricity production in member countries with the number of EECS certificates issued.

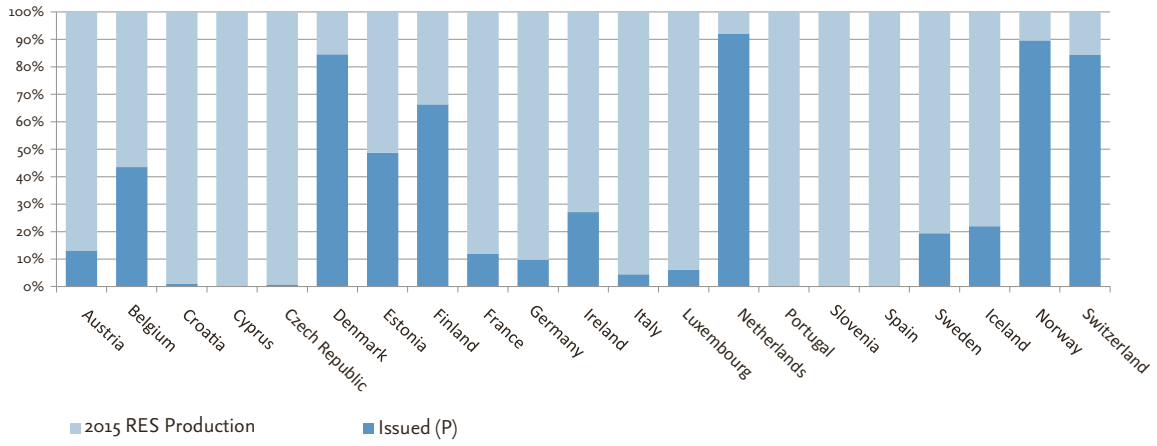
Based on the latest available twelve months of ENTSOe statistical data regarding the production of electricity, the following graphs relate to electricity produced in 2015. They show the annual RES production and the quantity of certificates issued for a production period in each member country.

These show that Norway, the Netherlands, Switzerland, Denmark and Finland are now predominantly using EECS GOs to provide evidence of the source of energy to consumers; and there are gains in a number of other countries.

graph 23 **EECS market penetration (Millions)**



graph 24 **EECS market penetration (%)**

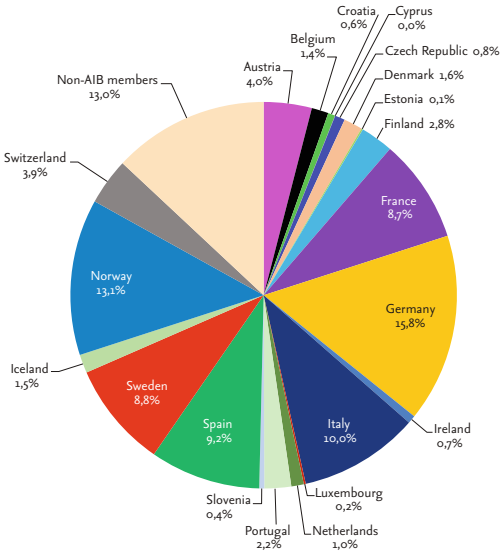


The following graphs, also relating to 2015 production, show clearly that AIB members cover regions which, during 2015, were responsible for the production of 77 % of European electricity, 87 % of which was from renewable sources. Hence the electricity for which certificates are not issued is either:

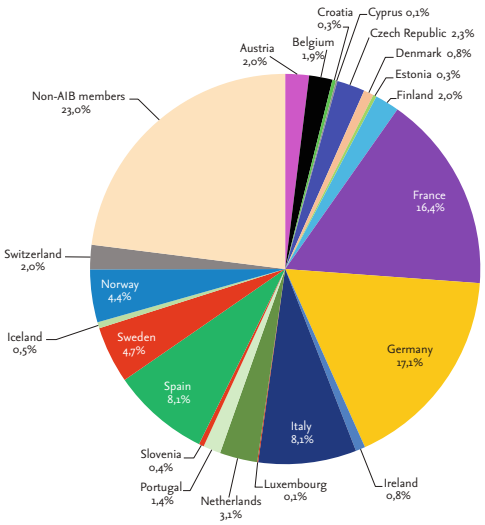
1 produced by a country which is not yet a member of AIB; or
2 produced by a member of AIB which does not yet support EECS for all forms of certificates, or which does not yet support EECS for some production (e.g. only for external trade); or
3 not certified, due to lack of demand; or
4 not certifiable, as it has received support and this electricity is included in the mix supplied to consumers.

graphs 25 + 26

European 2015 RES-E electricity production by source



European 2015 electricity production by source



2015 Achievements

The last year has been busy. During 2015 we have:

1 Continued our ongoing programmes of reviewing the domain protocols (DPs) of new members and those whose practices have changed, and auditing the operations of existing members
2 Taken over the calculation of residual mixes for Europe from the RE-DISS II project
3 Redeveloped the AIB's Central Processing Hub with the assistance of Unicorn Systems
4 Published articles in international journals
5 Continued our liaison with the Concerted Action on the Renewable Energy Directive (CA-RES II)
6 Developed and published our own Reflection Paper on issues to be addressed by the forthcoming Renewables Directive
7 Concluded our support for RECS certificates
8 Concluded the signing of the Hub Participant Agreement.

DP reviews and audits

During 2015, following domain protocols were reviewed and approved for:

– E-Control (Austria)
– Elering (Estonia)
– CREG (Federal Belgium)
– Landsnet (Iceland)
– SEM-O (Ireland)
– TSO-CY (Cyprus) and
– VREG (Flanders).

Audits were conducted for:

– E-Control (Austria)
– VREG (Flanders) and
– Landsnet (Iceland).

Until December 2015, one AIB member – OTE (Issuing Body from Czech Republic) – had an open issue, because of the delay in implementing appropriate disclosure legislation. The Czech registry was connected to the AIB HUB on 25 April 2015; but while GOs were permitted to be imported from other EU registries into the Czech Republic registry, Czech GOs could not be exported to other EU registries due to the possibility of double-counting.

At the General Meeting in Arnhem on 4 December 2015, it was decided to allow OTE to remain a member of the AIB, but to suspend its membership of the EECS Electricity Scheme and to disconnect it from the HUB. This decision will be re-evaluated by the first General Meeting of 2018, unless the necessary legislation is implemented before then.

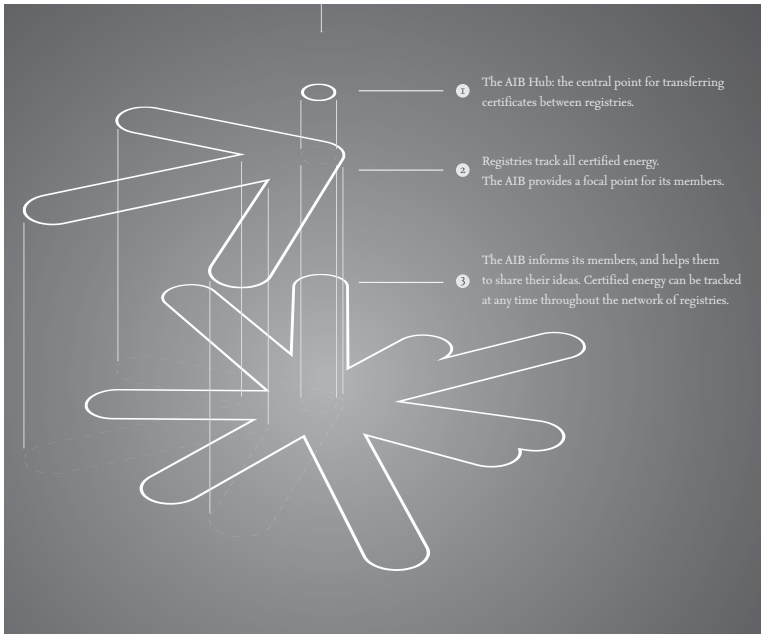
Calculation of Residual Mixes for Europe

Either guarantees of origin or Residual Mixes must be used by energy companies to inform their customers about the origin of the electricity they receive. The European Attribute Mix is used by authorities to calculate the residual mix for a country. Coordinated calculation of these mixes is crucial for the reliability of the electricity disclosure system, and thus for the credibility of green energy in the eyes of the consumers.

The AIB has now taken on responsibility for coordinating the calculation of the European Attribute Mix (EAM) and Residual Mixes (RM) for Europe, as a legacy of the RE-DISS (Reliable Disclosure Systems for Europe) project. Having calculated the EAM and RMs for the past 5 years, Grexel Systems has been engaged to provide its expertise to AIB in this critical task.

Renewal of the AIB Central Processing Hub

Unicorn System has been engaged to redevelop and operate the central registry Hub application for the AIB. The European Energy Certificate System – EECS – ensures reliable and efficient cross border exchange of GOs, thereby strengthening and enlarging the market. In order to further facilitate the international exchange of energy certificates, the AIB operates an inter-registry telecommunications Hub. Due to the enormous growth of the GOs traded, the current system is no longer sufficient. Unicorn Systems will completely redesign and rebuild the current application, and make it future proof. The new solution will be hosted, operated and maintained in the Unicorn Energy Cloud. Unicorn Systems will rebuild the Hub using its Unicorn Open Energy Platform, which has delivered several other European ICT Integration Solutions in the Energy Domain.



Publication of Articles in International Journals

These have included:

- The European Energy Review – an article by **Dirk van Evercooren**, entitled: "Why Reliable Green Electricity Matters to Customers"
- The ICER Chronicle – an article co-written by **Markus Klimscheffskij, Dirk van Evercooren** and **Phil Moody**, entitled: "Realising the Potential of Guarantees of Origin to Empower Consumers Increased Environmental Awareness & Accountability in Electricity Purchasing".

Concerted Action on the Renewable Energy Sources Directive

See External Life for a summary of AIB's **ongoing** relationship with Core Theme 5 of CA-RES II.

Reflection Paper

The European Commission launched its joint strategies regarding Energy Union and Climate Change at the start of 2015. The AIB responded by formulating and publishing its vision of full disclosure of the source of all energies by the use of guarantees of origin (GOs), and that GOs should also contain information on carbon emissions. This has met with widespread support from market parties, consumers and other stakeholders.

Conclusion of Support for RECS Certificates

RECS certificates came into being during 1998-2001 during the RECS Test Phase, an initiative supported by the European Commission and seeking to pioneer international trade in voluntary renewable electricity certificates. The RECS Test Phase was a substantial success: it aimed to issue 60,000 RECS certificates, but in the event, 19 million were issued, and most of these were traded and cancelled!

At the end of the RECS Test Phase, to provide the independence required by the market, the AIB and RECS International came into being to supervise the continuing market for RECS certificates and to represent the interests of market parties respectively. These two associations represent and coordinate the activities of certificate system administrators ("issuing bodies") and market parties. While the two associations were initially closely linked, it soon became apparent that this was no longer appropriate. Hence the AIB and RECS International have been fully independent of each other since shortly after the RECS Test Phase. Both associations remain committed to a constructive dialogue, in order to improve the market for GOs both for market players themselves and for their consumers; and to develop and operate a vibrant marketplace which will enable the delivery of accurate, reliable and fraud-resistant information to all consumers.

With the inception of the Guarantee of Origin (GO) under European Union law, the role of RECS certificates became progressively marginalised to the point where the AIB General Meeting decided that RECS certificates should not be issued after 31 March 2015, and that any remaining RECS certificates should expire by the end of that year. Consequently, since 1 January 2016, GOs are the only renewable energy certificates supported by the EECS system.

A lot has happened to the member-base of the AIB over the last ten years: what started off as a small initiative of public and private stakeholders is now a recognised platform for national competent bodies for GOs. Furthermore, AIB is actively cooperating with the Concerted Action for the Renewable Energy Directive, under the guidance of its Policy Advisory Group.

The AIB's mission is "to Guarantee the Origin of European Energy", and therefore we support Guarantees of Origin (GOs) as the sole tracking instrument for electricity in Europe, as they provide the only certificate system with a solid legal basis. A European electricity disclosure system based uniquely on GOs would provide a reliable, even-handed and cost-efficient way of empowering consumers to choose the origin of their electricity. However, GOs currently are issued solely for electricity from renewable energy sources, and that produced by high-efficiency cogeneration so there is some way to go before this ideal is realised.

The role of AIB in providing reliable information to consumers about the source of their electricity has also been strengthened by its recent decision to expand its focus to address further aspects of the disclosure process. EECS currently tracks electricity from renewable sources and that produced by highly-efficient cogeneration in a reliable, trustworthy and cost-efficient way, eliminating double counting, and solely using GOs. It is truly a great system which could easily be used to track all of Europe's electricity.

Conclusion of Signing of the Hub Participant Agreement (HPA)

For a variety of reasons – some institutional, some due to legal reasons – some countries do not wish to join AIB, but are willing to use the Hub under contractual conditions. This led AIB to develop a new set of regulations, based upon contractually-binding terms, which apply to "Hub Participants". So far, the only Hub user to enter into this sort of relationship with AIB is UBA of Germany. Note that UBA of Germany has applied to change its status to that of "Member" during the first half of 2016.

The Hub Participants' document set leans on the EECS Rules and incorporates a core document, supplemented by:

1 Special conditions for individual users and standard terms and conditions of use for their account holder
2 Technical conditions of use (drawing upon the existing subsidiary document addressing the interface between registration databases and a number of relevant fact sheets) and
3 The informational questionnaire and domain protocol for the country in question.

This document set has required careful identification of the relevant provisions of the EECS Rules supplemented by appropriate provisions of contractual law, and required considerable effort along with negotiations with prospective Hub Participants.

This legal framework has the benefit of protecting all users of the Hub from risk of financial liabilities. Entering into the HPA requires members to insure themselves against the risks implicit in doing so. Most members have now insured themselves and signed the HPA, and it is anticipated that the remaining members will do so in 2016.

External life

Transition of the RE-DISS project to a task/responsibility of AIB

The RE-DISS II project terminated in September 2015. At its General Meeting in Dublin in May 2015, the AIB accepted responsibility for some of the services initially provided by RE-DISS II. These include the provision of European Attribute Mix (EAM) and Residual Mix (RM) data, and regular provision of country-specific information relating to the respective national systems for GOs and electricity disclosure. They do not include the ongoing maintenance of RE-DISS Best Practice Recommendations, nor the hosting of regular meetings/workshops of European Competent Bodies for GO and for Disclosure, which members felt should be located in a host with a more policy-related focus than that of the AIB.

The RE-DISS project has now handed over these responsibilities to the AIB, which is preparing to implement them.

Recruitment of new members

At the end of 2015, and thanks to successful membership applications from Finextra from Finland, SEM-O from Ireland and CREG from Federal Belgium, the AIB had 23 members in 20 countries (Belgium has four competent bodies representing the three regions of Belgium and Federal Belgium). While Portugal (REN) has resigned its membership at the end of the year, initial contact has been made with its successor.

Some issuing bodies have open legal or technical matters which they are working to resolve at an early opportunity. This includes the Czech Republic (OTE), which may not transfer internationally until its disclosure legislation is in place, so bringing it into line with other members.

The German issuing body (UBA), the only participant that has the status of HUB user, has now applied for membership of the AIB, and it is hoped that this application will be successful during the first half of 2016.

Four observers will potentially become AIB members in 2016 or shortly after: Energimyndigheten of Sweden, CNMC of Spain, LAGIE of Greece, Ofgem of UK, and EMS of Serbia.

The Ministry of Energy and Natural Resources from Turkey became a new active observer during the Bruges GM in September 2015. >

AIB is approaching stakeholders

An article was successfully submitted for publication in the ICER Chronicle. This article, which was jointly penned by the President, chair of Working Group Internal Affairs and the Secretary General, relates to the need to realise the potential of guarantees of origin to empower consumers, given the increased environmental awareness and accountability in electricity purchasing.

Furthermore, our President also published an article in the European Energy Review, in which he identifies just why reliable green electricity matters to customers.

The work of the AIB continues in this respect, as it seeks to inform stakeholders, and in particular consumers, about the potential benefits of guarantees of origin, and about the way in which they can be used.

Concerted Action for the Renewable Energy Sources Directive II (CA-RES II)

AIB continued to co-locate one of its quarterly general meetings with CA-RES II, and did so in Dublin, in May 2015.

While no joint meetings were held with Core Theme 5 (Guarantees of Origin / Disclosure) this year, the two bodies did coordinate on developing a reaction to a request from the EU Commission, concerning whether – and the way in which – guarantees of origin might convey information about carbon emissions. These meetings will continue into 2016.

Open Market Committee

Once a year, AIB and RECS International invite all issuing bodies and interested market players to the Open Markets Committee (OMC). This year the OMC took place in Bruges, Belgium on 23 September.

This joint meeting provides an opportunity for market parties to raise any concerns that they may have in relation to the operation of EECS and the Hub, and of the guarantee of origin market in general, and to exchange views on topics of concern to all parties.

The topics discussed at this year's OMC 2015 included:

- The Reflection Paper – its content, and the promotion of its views;
- How the market has developed: the perspective of market parties;
- Discussion of a joint vision: a collective call from AIB and its stakeholders for disclosure of all sources of electricity and the derived carbon emissions, as essential components of the forthcoming Renewables Directive; and
- The phasing out of the old voluntary RECS certificates scheme on 31 December 2015.

The next meeting of market players and issuing bodies will be held in Basel, Switzerland on 1 December.

Internal life

AIB - Officials

The decision-making body of the AIB is the General Meeting, which meets quarterly at various locations in Europe. Meetings tend to be over a two-day period, to enable decisions to be made at working and executive level. Normally, there is a social event associated with meetings, usually a dinner, giving members the opportunity for informal discussions.

The President of the Association is **Dirk van Evercooren** (who is also a Director of the VREG, the electricity and gas regulator of the Flanders region of Belgium), and he was appointed to the role in May 2014.

The Management Board is responsible for day-to-day management of the Association, and meets monthly, alternating physical meetings with teleconferences. The general cycle of meetings is organised so that budgetary plans are approved at the December General Meeting. For the whole of 2015, **Jan van der Lee**, CertiQ, Netherlands, was chairperson of the Board.

The other Board members were **Angela Tschernutter**, E-Control, Austria; **Lukas Groebke**, Swissgrid, Switzerland, who was also Treasurer for the duration of 2015; and **Lars Olav Fosse**, Statnett, Norway.

The General Meeting, Board and Working Groups are supported by the Secretariat; the Secretary General being **Phil Moody**, United Kingdom, assisted by:

- **Andrea Effinger**, Germany, regarding Working Group External Affairs, the Working Group chair' meeting, and the Open Market Committee;
- **Marika Timlin**, Grexel, Finland, regarding Working Group Systems, and who is also SuperUser for the AIB Hub; and
- **Liesbeth Switten**, Belgium, on legal and regulatory advice to Working Group Internal Affairs – note that Liesbeth is a part-time employee of a member (VREG, Flanders).

Reviews of Domain Protocols, setting out how each member implements the EECS Rules, are conducted by members, assisted by the professional reviewers: **Liesbeth Switten**, **Remco van Stein Callenfels**, CertiQ, Netherlands; **Diane Lescot**, Observ'ER, France; **Katrien Verwimp** (also an employee of VREG, Flanders) and **Markus Klimscheffskij**, Grexel, Finland. Each of the professional reviewers has worked with a member, either currently or in the past, and has in-depth knowledge of EECS.

Working Group Internal Affairs

Working Group Internal Affairs (internal regulation of the Association, and administration and development of the EECS standard) chaired by Markus Klimscheffskij of Grexel, Finland

The AIB Working Group Internal Affairs is in charge of the development and maintenance of the EECS Rules, which form the quality assurance mechanism of the EECS system and the domains in which it is implemented, and the internal regulations of the Association.

By any measures, 2015 was certainly an exciting year for Internal Affairs. A group of motivated people with a positive mindset resulted in many significant contributions to the AIB.

Starting with the Reflection Paper. In preparation for the foreseen revision of the RES directive, the Working Group held a two-day meeting in March 2015, to develop and share its visions on how the GO and disclosure system might be improved. For a group of GO enthusiasts, this was a tough question, since the system is great already. However, it soon became evident that there was room for significant improvement. In May, the results of the brainstorm were presented to the Dublin General Meeting, which accepted the resulting Reflection Paper. Since then, the AIB has been raising awareness by communicating these thoughts to a large group of stakeholders, and has developed more specific proposals for improvements.

The Reflection Paper process was a truly memorable AIB effort. The group started with a blank whiteboard which, less than 2 months later, resulted in an 18-page document defining in detail why and how the GO system might be improved. The work goes on, and its objective has moved on to a second version of the paper, addressing the details left open by its predecessor.

Apart from the Reflection Paper, a major project for early 2015 was to establish further guidelines on Production Device (PD) inspections. The result is a Best Practice Recommendation, offering advice on who, when, why and how to do PD inspections, as well as a template report structure. As a follow-up, WGIA is now setting up more detailed guidelines for eligible power output with regard to e.g. on-site demand, life-cycle assessment and pumped storage. Furthermore, during the first half of the year, WGIA proposed a new process for handling Domain Protocols, to ensure equal treatment of all members, and to avoid postponing membership decisions wherever possible.

During the second half of 2015, the group managed to review two major documents of the AIB, the EECS Rules and the Hubcom (which contains the rules for inter-registry transfers), and to solve inconsistencies between them. The AIB Articles of Association were also reviewed and updated. Last, but not least, the EECS system was adapted to accommodate the Directive 2012/27/EC for High-Efficient Cogeneration GOs, which repealed Directive 2004/8/EC.

In the autumn, WGIA also tightened its collaboration with the Policy Advisory Group formed from CA-RES Core Theme 5 Members addressing in particular those topics addressed by the Reflection Paper. The question of GOs and carbon emissions in particular has been important for both parties. The AIB's Carbon Task Force will continue its work, and target its results for the first half of 2016, when a follow-up for the next version of the Reflection Paper will be developed.

In addition to single items, WGIA managed yearly recurring tasks, such as supporting reviews of Domain Protocols and audits of new and existing members. This was especially important to avoid showstoppers emerging in General Meetings, which could postpone important membership decisions by three months. During 2015, the AIB welcomed two new members: CREG (Federal Belgium) and SEM-O (Ireland).

Personnel-wise, we have been enjoying work contributions from **CertiQ**, **Cwape**, **E-Control**, **Grexel**, **GSE**, **HROTE**, **ILR**, **Powernext**, **SEM-O**, **Statnett**, **Swissgrid** and **UBA**.

Working Group Systems

Working Group Systems (interfaces between computer systems) Co-chaired by Annie Desaulniers of CWaPE, Belgium-Wallonia and Jennifer Holgate of Statnett SF, Norway (2016) / Katrien Verwimp of VREG, Belgium-Flanders (2015 till end September)

Working Group Systems (WGS) advises the AIB General Meeting (GM) on the AIB certificate transfer system, proposes change requests, and follows up on decisions made in this framework. The WGS' main focus is on the follow-up of AIB software for certificate exchange. This software is also referred to as the AIB Hub. In addition, WGS makes suggestions and takes up questions raised by the General Meeting and the Board, which can lead to WGS projects.

During 2015, the WGS co-chairs changed several times. **Katrien Verwimp** chaired the group over the first semester, while **Annie Desaulniers** was on maternity leave. Katrien held a steady hand on the group until Annie took over the lead in the second semester and Katrien stepped down, for reasons of internal reorganization at her employer, VREG. **Jennifer Holgate** took over Katrien's position in the third quarter with the approval of the GM.

The WGS organized four physical meeting days and eight teleconferences in 2015. At WGS meetings, views are collected and work is assigned.

2015 was a busy year for the WGS. The new SuperUser and Secretary, **Marika Timlin** from Grexel, took up her new role quickly and actively, and provided an important and appreciated support for the WGS. The year began with a tender for a new hub provider for the AIB hub, as the contract with the current one was to expire in February 2016. After an intense first semester, the task force Hub Tender, chaired by **Lars Olav Fosse**, delivered a solid contract with the winner of the tender, the IT company Unicorn Systems. The AIB decided to renew the whole AIB hub and Unicorn Systems immediately took up this task. The task force followed the work closely and provided the necessary information, documentation and testing. In October, a user acceptance team (UAT) had an on-site training at Unicorn's premises in Prague in order to start the acceptance tests of the new hub. The WGS team, and specifically a task force New Hub Development, made much effort in testing over the remainder of the year, in order to prepare for a smooth go-live in the beginning of 2016.

Though the above-mentioned tender and the testing of the new hub took most of the WGS' time in 2015, the group also made improvements to technical documents used by all AIB members (in collaboration with the WGIA). A "code of conduct for handling technical issues between registries" was developed and agreed in the first semester of 2015, and the Testing Turn system for all members was further improved.

We are also happy to inform that the registries CREG (the Federal energy regulator of Belgium) and Finextra (Finland) became full members of the AIB and were connected to the AIB hub.

The WGS consists of enthusiastic AIB members from all over Europe, bringing together their needs, ideas and expertise. This makes it possible to increase the quality of the AIB certificate transfer system. The members of the group strive to find the best solution for all members, and the meetings are fruitful, inspiring and including.

For their fantastic contributions to the work of WGS in 2015 we say a big thank you to:

- **Arjan van der Toorn** and **Jolanda Reurinck**, CertiQ, The Netherlands
- **Lars Olav Fosse**, Statnett, Norway
- **Marko Lehtovaara**,Grexel, Finland
- **Matthieu Boisson**, Powernext, France
- **Martin Standera** and **Miroslav Řehoř**, OTE, Czech Republic
- **Katja Merkel**, UBA, Germany
- **Marta Grassilli**, GSE, Italy.

Working Group External Affairs

Working Group External Affairs
(provision of information)
Dubravka Brkić
of HROTE, Croatia

Working Group External Affairs (WGEA) is in charge of organising the issuance of all types of publications, newsletters, short press releases, annual reports, and communicating with stakeholders essential for the promotion of the organisation. The main tool for these tasks is the website, which provides a comprehensive set of information documents. WGEA is mandated to promote, facilitate and incorporate new AIB members, HUB users and observers.

Due to the adoption of the new Directive that is planned in 2016/2017, all Working Groups have been actively involved in promoting the Reflection Paper concerning the proposal for a new Directive in terms of full disclosure. This is one main part of our new work towards developing a strategic approach to improving communications with our Stakeholders, which includes contacting members of the European Parliament, the European Commission and taking a more active role in European-wide events like conferences.

All responsibilities of WGEA are aiming at recruiting members, but the members also look internally, because the work in the Association is voluntary, and contributions from members /observers are more than welcome. The Working Group collaborated on a study about the motivation of AIB's members, where it noticed subjective and objective reasons why some members are more motivated than others, and how this is affected by the corporate culture in their country in relation to the work of the AIB, which itself is composed of members drawn from many states of the European Union.

The Working Group also launched the so-called SPOC project („Single Point of Contact"), that encourages experienced members to take the role of mentor for observers, applicants and members with less than one year of membership. The SPOC person is the main contact for the 'newcomer' to ask any questions and seek help with difficulties and help finding a solution to facilitate acquisition of membership.

Furthermore, WGEA is the promoter of the "Greening the AIB" project, which has the purpose of making the AIB's own structures and organisation environmentally and socially friendly. The main areas in which the AIB is able to improve its own sustainability are communication (website, emails) and the AIB meetings, which are held across Europe. Read more on the inside page of the back cover of this annual report.

During 2015, the chair of the Working Group was replaced. **Claudia Delmirani**, GSE, IB from Italy, ceased to be chair, but remained as a member of the group, and **Dubravka Brkić**, HROTE, IB from Croatia, replaced her as chair.

Other active members of the Working Group are **Milada Mehinovic**, Swissgrid, IB from Switzerland, and the Association's assistant to the Secretariat, **Andrea Effinger**. The President of the AIB, **Dirk Van Evercooren** is our key player in Social Media issues (see LinkedIn), and supports WGEA with his dedication as AIB's ambassador.

This small but very motivated and active group has a significant role in the Association as the promoter of all activities within the AIB.

Budget / Actual expenditure and income

In 2015, expenditure exceeded income by € 73 991, income being € 39 884 less than had been forecast; while expenditure was € 52 493 more than the allocated budget. This has required AIB to reduce its reserves from € 440 924 at the start of 2015 to € 267 410 on 31st December 2015.

This will enable the Association to complete its funding of the replacement and upgrade of the Communications Hub.

Annual costs	Budget	Expenditure	Variance
Administration	€ 267 872	€ 264 657	€ 3 215
Workgroup Internal Affairs	€ 111 030	€ 145 639	€ - 34 609
Workgroup External Affairs	€ 93 340	€ 61 986	€ 31 354
Workgroup Systems	€ 484 241	€ 536 694	€ - 52 453
2015 expenditure	€ 956 483	€ 1 008 976	€ - 52 493

Budget	Budget	Expenditure	Variance
2015 income	€ 974 821	€ 934 986	€ 39 835

Position against budget

Income

Income was € 39 835 less than the allocated budget, due to:

1 Croatia started to transfer, and transferred less than had been expected, while Iceland transferred half as many GOs as it had in 2014
2 Greece did not join AIB in 2015, as expected , while Ireland joined halfway through the year
3 The remaining fees for 2014 collected in 2015 being offset by a lower amount of fees for 2015 to be collected in 2016
4 The Czech Republic, Denmark, Estonia, Italy, Luxembourg and Slovenia transferring more than expected.

Note that the activity fees of other countries that had significantly different activity levels to those estimated had been capped, so there was no impact on fee income.

Expenditure

In total, expenditure was € 52 493 more than the allocated budget.

Within **General Administration**, costs were € 3 215 less than expected:

- The cost of the **Secretariat** was € 7 958 higher than expected, due to additional work supporting AIB restructuring, the Reflection Paper and Commission consultations, the RE-DISS tender (which had not be anticipated) and changing teleconferencing supplier.
- **Banking** costs were slightly higher than expected (a variance of € 129), due to the zero deposit account rate.
- There was no expenditure on either **RE-DISS takeover** or **Task Force Carbon**, leading to underspend of € 10 000 for each.
- **Expenses** were € 8 698 less than anticipated, and can be attributed thus:
  - There was no expenditure on "*sales trips*" (€ 2 000). Also, there was lower than expected expenditure leading to savings on *teleconferencing* (€ 891), due to increased use of this facility, which also reduced the cost of *meeting accommodation* (€ 6 901) due to the increased use of teleconferencing.
  - This was offset by marginal overspending on *sundries* (€ 15) and *insurance* (€ 25), *travel and accommodation* (€ 17 970) due to professional reviewers having been used more than anticipated; while there was also overrun due to increased *audit and VAT advice* (€ 478).

Within **Working Group Systems**, costs were in total € 52 453 more than expected. This was due to the costs of replacing the Hub, which only became fully clear once the tender had been awarded and the project team had been formed, and exceeded those originally included in the 2015 budget. This was exacerbated by the delay into 2016 of going live.

Expenditure on hosting and supporting the Hub was € 4 220 under budget, due to there being no need to perform two restores of the database, as had initially been anticipated. In addition, Hub development expenditure was € 75 000 under budget due to the delay in go live – this will be deferred into 2016. Finally, € 11 154 was recovered from contingency.

Against this must be offset the cost of handover from Atos (this remains unclear at the time of writing) and additional Unicorn support during this period (€ 20 106); the additional costs of tendering and negotiation, which had been underestimated (€ 40 462); and the need for additional commercial and overall project management (€ 35 598) and operational project management support (€ 46 661) on the side of AIB.

Working Group Internal Affairs spent € 34 609 more than its allocated budget. This was due mostly to the inclusion of corporate matters (circa € 19 441) within the budget of WGIA – these will be moved to General Administration next year; the development and promotion of the Reflection Paper, and proposals for adjustment of the RES Directive (€ 16 200); and to more use of professional auditors and reviewers (€ 12 728) than had been anticipated. This was offset by the use of legal advice for WGIA matters (€ 8 473), and € 5 287 contingency was recovered.

Working Group External Affairs expenditure was € 31 354 less than the allocated budget, due mostly (€ 19 000) to the implementation of the new website having been deferred into 2016, but also to the costs of greening-up AIB being lower than expected (€ 763 – this has been accrued until 2015), as was the cost of registering the trademark (€ 6 931) in some countries of the Energy Community, the lower than expected cost of the newsletter (€ 1 724), and contingency of € 4 445.

This was offset by the higher than expected costs of the secretariat (€ 900) due to additional support to the chair being required, and the higher than expected cost of producing and posting the annual report (€ 609 overspend) – although note that € 1 646 was later recovered from members for postage and extra copies, and that this amount is included within "Income".

Position at Jyske Bank

2015 commenced with € 440 924 brought forward in the bank account.

Receipts for membership fees (€ 954 447) and VAT refunds (€ 77 931) were offset by expenditure of € 1 056 773 during the period January to December, resulting in € 267 410 being carried forward to 2015. Note that no bank interest was received for 2015, due to a zero bank rate for deposit accounts.

Invoices have now been received for all work commissioned during this period, € 69 862 having been set aside at the beginning of the year for outstanding payments relating to work commissioned in 2015.

Invoices have also been issued for the remaining membership fees relating to 2015, and which amount to € 145 331.

Reports from members/ from observers

The following pages give details of each of the members of the AIB during 2015; and summarise the major events of 2015 and the expectations of 2016 for members and their countries.

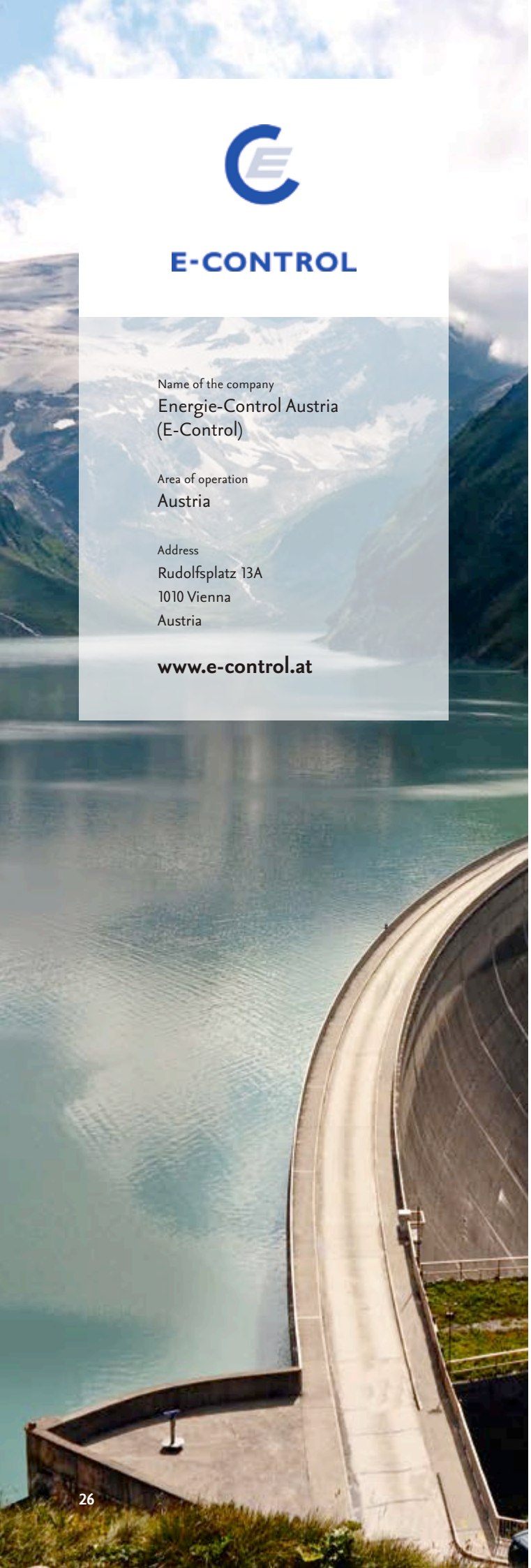
Three former observers became members of AIB (Finextra from Finland, SEM-O from Ireland, CREG from Federal Belgium). And the community of countries in the process of becoming a member of AIB and connecting to the Hub is growing: current observers are the Spanish regulator (CNMC), the Greek Issuing Body (LAGIE), Sweden's Energy Agency (Energimyndigheten), the UK electricity and gas regulator (Ofgem), and the Serbian competent body for guarantees of origin (EMS).

While Portugal (REN) has resigned its membership, first contacts have been made with its replacement.

This Annual Report does not include all of these countries, but reflects on their different rates of progress along the route to membership.

The legal framework of AIB has been continually enhanced to improve and adapt it to reflect recent developments, perceptions and needs. The contract between the AIB and its members (the Hub Participant Agreement, or HPA) has now been signed by all members. Furthermore, the EECS Rules have been considerably strengthened.

The scope of national participation in EECS shows the degree to which EECS is implemented in that country, according to the best available statistics.



E-CONTROL

Name of the company
Energie-Control Austria
(E-Control)

Area of operation
Austria

Address
Rudolfsplatz 13A
1010 Vienna
Austria

www.e-control.at

REPORT FROM MEMBER

Profile of the organisation

E-Control is the Austrian energy regulator.

Role

Competent authority for electricity guarantees of origin for all types of resources. Competent authority for disclosure in Austria.

Member of the AIB

Member of the AIB since 2001.

E-Control joined the AIB in the summer 2001 in the course of the Helsinki Meeting. Ever since, E Control has actively contributed to the development of the Association. For instance, Walter Boltz, Executive Director of E-Control, headed the AIB as President from summer 2004 to summer 2006. Since 2008, Angela Tschernutter has been an active member and she is also vice chair of the Board of the AIB.

Activities within the AIB

Angela Tschernutter: Vice Chair of the Board, Member of Working Group Internal Affairs. She was also partner of the RE-DISS projects and is involved in the Concerted Action RES Project.

News and perspectives regarding national IB

In 2015, no major adaptations of the Austrian database were needed. Only small adaptations were made to facilitate users' and administrators' work with the database.

In the Austrian domain, GOs from renewable sources and fossil sources are issued, transferred and cancelled electronically. GOs issued in other countries and imported to the Austrian database are automatically checked once they are going to be used for disclosure purposes. If they are not in line with the criteria of § 6 SK-VO 2011, amended in 2013, cancellation of these GOs is not allowed in the system. This mechanism is a quality check for the supplier to use only valid GOs for national disclosure purposes. The list of countries from which foreign GOs can be accepted for Austrian disclosure purposes has been published on E-Control's website.

During 2015, Austria implemented a full disclosure system. This means that GOs must be applied by suppliers to declare the full amount of electricity delivered to final customers for all types of sources (in practice RES GOs and fossil GOs are used). The full disclosure requirement was implemented by all suppliers and this led to full transparency for customers in Austria.

News and perspectives regarding the national framework on electricity

The Stromkennzeichnungsverordnung (Disclosure by-law) 2011 was amended in 2013. No adaptions were found necessary in 2015.

The Elektrizitätswirtschafts- und -organisationsgesetz (ElWOG 2010) was amended in 2013. As a result of this amendment, full disclosure is in force by 2015 (for the disclosure year 2014) – see point above.

The amount of suppliers and traders acting internationally by using the AIB Hub rose as a response to this new requirement.

Benefits to the company of AIB membership

The AIB is a major player in the international market for trading guarantees of origin (GOs). The AIB assures a high standard for GOs based on the European Renewables Directive. Further, E-Control very much appreciated when AIB also took on disclosure topics. Disclosure is the only driver for GOs; and clear rules and regulations, to avoid double counting and any other kind of misuse, are essential.

Being an active member of AIB enables us to participate in the development and improvement of the EECS standard. The AIB offers an excellent platform for exchange of good practices between issuing bodies, bodies responsible for disclosure and related organisations. The AIB cooperates with European projects dealing with GOs and disclosure in Europe, namely RE-DISS and CA-RES, which broadens the scope for all participants and serves as a useful networking approach. As the RE-DISS project was con-cluded in 2015, E-Control very much welcomes the fact that AIB is taking over some relevant tasks from the project. Especially the continuation of the publication of country-specific information on the AIB website will provide useful information for recognition of foreign GOs for national disclosure purposes. 30 % of the GOs used for Austrian disclosure purposes in 2014 were issued in other countries, mainly in Norway.

"The AIB is the leading organisation for GOs and disclosure in Europe and it brings together extensive know-how from and among its members. Being member of the AIB enables us to access a lot of data and facts, participate directly in European developments and be part of an experienced team."

Angela Tschernutter

Scope of national participation in EECS

Number of registered scheme participants	47

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
66 039	20 070

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
PV	62 043	730
Hydro	3 504	16 895
Wind	492	2 445

Certified EECS production as compared to national RES production (GWh) *

EECS RES production	National RES production
32 887	35 715

* preliminary data (Dec. 2015 not complete)

"Being member of the AIB enables us to access a lot of data and facts, participate directly in European developments and be part of an experienced team."

brugel

LE REGULATEUR BRUXELLOIS POUR L'ENERGIE
DE BRUSSELSE REGULATOR VOOR ENERGIE

Name of the company
BRUGEL

Area of operation
Brussels-Capital Region

Address
Avenue des Arts 46
Brussels
Belgium

www.brugel.be

REPORT FROM MEMBER

Profile of the organisation
Regulator

Role
BRUGEL is the competent authority responsible for the delivery of guarantees of origin to green electricity production, which is defined as electricity produced from renewable energy sources and from high-efficiency cogeneration.

Member of the AIB
BRUGEL has been a member of the AIB since 2008.

Activities within the AIB
The follow-up of AIB activities and representation of BRUGEL on the General Meetings is assured by Régis Lambert.
Patrice Mathot follows up on the Working Group Systems.

News and perspectives regarding national IB
The new Decree on renewable energy support and tracking mechanisms, which has been adopted end of 2015, shifts the responsibility of certifying the production devices from the regulator to accredited certifying parties. This is hence an operational load less for BRUGEL, which will allow us to focus more on regulatory tasks.

News and perspectives regarding the national framework on electricity
Along with the new renewable Decree mentioned above, a specific Decree adapting the GC-quota levels has also been adopted. In this globally improved and fine-tuned framework, a slightly higher support level for small photovoltaic plants has been established, which could re-launch investments in this segment. Also, the text contains provisions in order to fully comply and to be totally consistent with the RES-directive, as well as the EECS-rules and the Brussels Domain Protocol.

Regarding disclosure, the new Decree provides a periodic quarterly disclosure of green electricity supplies, instead of the annual disclosure provided at the moment. Besides the higher frequency of disclosure, consumers will be given the opportunity to check online which part of their electricity supply has been declared as green by their supplier, and which part of this declaration has been formally approved by BRUGEL. The formal approval will only rely on the cancellation of the amount of GO's concerned.

> "It is crucial for BRUGEL to be connected to a stable and reliable exchange-platform, which enables market parties to import standardised GO's in order to prove to Brussels consumers the origin of their electricity in a transparent and waterproof manner."

Benefits to the company of AIB membership

The AIB enables BRUGEL to be part of and to be involved in the broader European debate on Guarantees of Origin. As for now, only few transferable GO's are issued in the Brussels Region itself, it is crucial for BRUGEL to be connected to a stable and reliable exchange-platform, which enables market parties to import standardised GO's in order to prove to Brussels consumers the origin of their electricity in a transparent and waterproof manner.

Scope of national participation in EECS

Number of registered scheme participants	33*

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
1	51

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Municipal waste incineration	1	51

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
not available before printing	

* Except for one GO-producer/importer, these 33 scheme participants are all pure GO-importers or traders

Report from member

Profile of the organisation

Regulator for Electricity and Gas

Role

Competent Authority and Issuing Body for guarantees of origin, Competent Body for disclosure scheme.

Member of the AIB

Member of the AIB since 2006.

Activities within the AIB

- Dirk Van Evercooren (President)
- Katrien Verwimp (vote in General Meeting; 2015: co-chair of Working Group Systems; 2016: Working Group Internal Affairs)
- Mieke Langie (alternate vote)
- Karolien Verhaegen (Working Group Systems)

News and perspectives regarding national IB

In September 2015 VREG published an online tool that facilitates easy comparison of electricity suppliers based on the origin of their electricity. The online tool offers the consumers to see where the electricity comes from - the country of origin and the type of energy source, incl. type of renewable energy source, and to see data on the electricity supplied in the previous year by each supplier. The data in this Origin Comparator comes from VREGs annual Fuel mix Report. For electricity from renewable resources and High Efficient Cogeneration the data is based on information on the cancelled GOs.

> “ The connection to the AIB Hub allows huge efficiency gains … ”

The Origin Comparator provides an easy access to the fuel mix information for consumers at the time when they are considering switching electricity supplier. (= ex ante checking)

Furthermore, VREG facilitates, since 2012, an online GreenCheck allowing consumers to check whether the supplier actually did provide the origin of electricity as promised in the contract. (= ex post checking)

News and perspectives regarding the national framework on electricity

In 2015, VREG has worked on advice on the Electricity Disclosure. This advice will be consulted in the market in 2016 before handed over to policy makers.

Benefits to the company of AIB membership

The connection to the AIB Hub allows huge efficiency gains compared to the administration of bilateral contacts between issuing bodies for individual international GO transfers, in order to fulfil the obligations of art.15 of the RES-Directive 2009/28/EU.

Thierry Van Craenebroeck, CEO ad interim

Scope of national participation in EECS

Number of registered scheme participants	12 002

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
242 482	3 539 836

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Biogas – digestion of Fruit and vegetable waste	2	4
Biogas – agricultural	92	98
Biogas – other	15	20
Biogas – sewage	19	8
Biogas – landfill gas	13	15
Biomass – selectively collected biogenic waste	11	204
Biomass – biogenic municipal waste	9	52
Biomass – agricultural or forestry	33	302
Hydropower	17	1
Wind on shore	177	636
Solar photovoltaic	242 094	2 200

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
3 446 January - October 2015	data not available before printing

CWAPE
Commission Wallonne pour l'Energie

Name of the company
CWAPE (Energy Regulator of Wallonia)

Area of operation
Wallonia, Belgium

Address
Route de Louvain-la-Neuve 4
boîte 12
Namur
Wallonia, Belgium

www.cwape.be

REPORT FROM MEMBER

Profile of the organisation

Regulator of electricity and gas for Wallonia, Belgium. CWAPE is in charge of enforcing public services obligations and distribution regulations, distribution tariffs, and developing renewable: support system, electricity tracking and integration into the grid.

Role

Competent authority for renewable (EECS GO) and CHP electricity guarantees of origin, operator of the certificate database in Wallonia.

Member of the AIB

Member of the AIB since 2007, scheme member since 2009, pending scheme membership: none (potentially CHP-GO)

Activities within the AIB

- Representatives to the General Meeting: PY Cornélis & Annie Desaulniers
- Working Group Systems: Annie Desaulniers
- Working Group Internal Affairs: Pierre-Yves Cornélis
- CA-RES Policy Advisory Group: Pierre-Yves Cornélis
- Carbon Task Force: Pierre-Yves Cornélis
- Legal counsel: Sabine Keirse
- Statistics: Gauthier Libeau
- EPED: member & RE-DISS: consulted party

News and perspectives regarding national IB

CWAPE has been performing formal approval of distribution grid tariffs and monitoring of renewable technology costs.

On a daily basis CWAPE handles up to 4,000 photovoltaic meter readings, all potentially leading to issuance of GOs. Processes and database are continuously being improved.

CWAPE has been considering whether to transform local CHP GO into EECS CHP GO. The legal framework for issuing biogas GOs is in place, and several projects on the drawing board are vying to use them for indirect support.

News and perspectives regarding the national framework on electricity

Support

- **Context**: the support system based on green certificates (i.e. specific support certificates) has demonstrated its efficiency in developing affordable renewable and CHP by tripling generation in 10 years. This support is based on the extra costs (when compared to conventional plants) of the technology (banding) and the measured environmental performance of the individual plant (avoided greenhouse gas emissions (CO_2 –eq).

In the past, supplementary certificates were generously granted to solar plants, which eventually led to a plunge in the market price of green certificates and impacted all technologies.
Although the quota system remains formally in place, for all practical matters it serves like a feed-in premium system where CWAPE needs to regularly update technology costs and grant green certificates accordingly for new power plants.

- **Quota**: quota was 27.7 % at the end of 2015 and steadily increases up to 37.9 % in 2020. Due to decommissioning of a lot of capacity in 2021, a dip to 34 % occurs but the quota gradually rises back to 37.9 % in 2024.
- **Market price of support certificate**: The current oversupply of support certificates results in most generators making use of the guaranteed price (65 € / certificate) and price recovery should take a very long time.
- **Joint schemes within Belgium**: National burden sharing has been decided. It does not include extending mutual recognition to Flanders or to federal off-shore wind.
- **Review of support level**: Every second years, the support level granted to generators by way of green certificates is assessed for each technology. The number of green certificates issued for each MWh (banding factor) will be adapted accordingly for new plants set up for the next period. New PVs below 10 kW make use of another support scheme paid directly over the electricity invoice.
- **New installations**: A total of 2,740 new small (< 10kW) photovoltaic plants with a cumulative capacity of 15 MW were set up in 2015. Besides, an increase in non-domestic solar plants took place for more than 18 MW. Few new non-solar plants (wind, biomass, etc.) were commissioned due to setting-up of new financial support and, above all, uncertainties in planning permissions; a new capacity of more than 23 MW of wind was added last year.
- **Sustainability criteria**: Wallonia has actively applied demanding sustainability criteria since 2002, especially for solid and liquid biomass. Transposition of the Directive for bioliquids did not change this. Discussions are ongoing towards harmonisation of sustainability criteria for wood. CWAPE follows closely the developments of the Sustainable Biomass Partnership (SBP).

Disclosure:

- Good practices exchanged among others in CA-RES, EPED and RE-DISS lead to improvements to our disclosure system (e.g. mandatory GO cancellation prior to fuel mix declaration). Monthly reporting to regulator of renewable products and monthly cancellation of guarantees of origin for those products remain.
- In-depth coordination over fuel mix calculations with other Belgian regulators should lead to even more coherent results i.e. achieving a Belgian residual mix.

> "The AIB facilitates customer empowerment by allowing informed choice of electricity origin across Europe."

Scope of national participation in EECS

Number of registered scheme participants	864

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
1 147	1 162,4

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Biomass (total)	60	300,0
Biomass (bio-CHP only)	52	176,1
Wind	80	652,5
Hydro	80	110,8
Solar	927	99,0
Total	1 147	1 162,4

Certified EECS production as compared to regional RES production (GWh)

EECS RES production	Regional RES production
32 887	35 715
EECS CHP production	Regional CHP production
–	648

Name of the company
CREG

Area of operation
Belgium

Address
Nijverheidsstraat 26-38
Brussels
Belgium

www.creg.be

REPORT FROM MEMBER

Profile of the organisation
Electricity and gas regulator

Role
Competent authority for renewable electricity guarantees of origin

Member of the AIB
Member of the AIB since 2015.

Activities within the AIB
Koen Locquet and Philip Godderis have attended General Meetings of the AIB in 2015. Philip Godderis also participated in WGIA and at the final RE-DISS meeting.

News and perspectives regarding national IB

The CREG registry is fully operational. All offshore wind producers in Belgium are registered as account holders. The hub connection went live in September 2015.

News and perspectives regarding the national framework on electricity

The regulatory framework is stable.

Benefits to the company of AIB membership

The primary benefit of membership is to facilitate the export of Belgian offshore wind GO's across Europe. AIB's harmonized standard ensures a high level of reliability. The association is also an ideal platform for continuously sharing experience and exchanging best practices.

Scope of national participation in EECS

Number of registered scheme participants	4

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
3	706,65

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Offshore Wind	3	706,65

Certified EECS production (GWh)

EECS RES production
1 479,738

Name of the company
Croatian Energy Market Operator (HROTE)

Area of operation
Croatia

Address
Ulica grada Vukovara 284
10 000 Zagreb
Croatia

www.hrote.hr

"On 28 August 1895 electricity generated at this location was transmitted to the city of Šibenik, where six power transformers supplied a large number of street lamps. This early system of power generation, transmission and distribution was one of the first complete multiphase alternating current systems in the world and it remained in operation until World War I."

REPORT FROM MEMBER

Profile of the organisation

HROTE was established in 2005 as the state-owned company which performs the activities necessary to organise the electricity and gas markets as a public service under the supervision of the Croatian Energy Regulatory Agency.

HROTE controls the system of financial incentives for renewable energy sources, high efficient cogeneration and biofuels under the supervision of the Ministry of Economy.

Role

The Regulation establishing the system of Guarantees of Origin of electricity was passed in July 2013. The Regulation determines the rules of electricity Guarantees of Origin for the purpose of certification of electricity produced from plants in the Republic of Croatia, in accordance with the Energy Act. In accordance with the Regulation HROTE performs the role of the Issuing Body for the Domain.

Member of the AIB

HROTE became member of the AIB with a conditional status in May 2014. In the meantime all terms regarding the disclosure rule had been fulfilled, and the unconditional membership status was therefore approved and changed to ordinary membership status in November 2014.

Activities within the AIB

- Dubravka Brkić contributes to Working Group External Affairs tasks as chair of the group.
- Morana Lončar contributes to Working Group Internal Affairs tasks as member of the group.

News and perspectives regarding national IB

The provisions, established for the use of the Guarantees of Origin Registry, lay down the rules of running the Registry of electricity Guarantees of Origin for the purpose of certification of electricity produced from plants in the Domain, in accordance with the Electricity Market Act. The Rules are under supervision of HROTE.

The Registry is an electronic registry based on database technology allowing transfer of international GOs transfer.

> “ … it also gives us the opportunity to discuss with other members and share their experiences. ”

News and perspectives regarding the national framework on electricity

The competent body for disclosure is the Croatian Energy Regulatory Agency. The disclosure rule and the methodology applied for calculating the residual mix are under the supervision of the Croatian Energy Regulatory Agency.

According to the regulation cancelled EECS-GO certificates will be the sole proof of the source of energy that will be eligible for disclosure approval from January 2016. Furthermore, the supplier claims the electricity purchased from the feed-in system to its customers.

HROTE has the obligation to calculate and publish the Residual Mix. The calculation is to be performed “in coordination” with other issuing/disclosure competent bodies (EAM is to be used for this purpose). The residual mix for Croatia will be calculated according to the methodology presented in the RE-DISS Best Practice Recommendations. Since Croatia has electricity imports/exports with third countries, ENTSO-e data will be used for determining net imports from certain countries.

A new Act on RES and HE-CHP will come into force on 1 January 2016. The new Act defines a new support scheme for RES, and the scheme will be established in accordance with the new Guidelines on State aid for environmental protection and energy 2014-2020.

Benefits to the company of AIB membership

Being member of the AIB allows us not only to participate in the decision making process for developing a better Guarantees of Origin system, but it also gives us the opportunity to discuss with other members and share their experiences.
The establishment of the EECS rules helps Croatia and other countries to provide secure GO transactions, which ensures trustworthy operations for market participants. Dubravka Brkić

Scope of national participation in EECS

Number of registered scheme participants	5

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
1	42,29

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Hydro power plant	1	42,29

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
72	6,587*

* disclaimer: the other RES-E production from small scale or non registered plants could be minor statistical error

Name of the company
Cyprus Transmission System Operator (TSO-Cy)

Area of operation
Cyprus

Address
Evangelistrias 68
2057 Strovolos
Cyprus

www.dsm.org

REPORT FROM MEMBER

Profile of the organisation

The Cyprus TSO was established in 2004 as an independent legal entity for the public benefit. It operates, maintains and develops Cyprus' electricity transmission system; and it maintains security of supply, integrates renewable energy sources and issues the conditions for connections to be applied by new independent power producers. Under its duties and responsibilities is also the operation of the Cyprus electricity market.

Role

The Cyprus TSO is responsible for issuing, transferring, cancelling and revoking Guarantees of Origin for RES as well as High Efficiency CHP installations in Cyprus.

Member of the AIB

The Cyprus TSO is a member of the AIB since September 2014.

Activities within the AIB

The Cyprus TSO is currently not involved in AIB activities.

News and perspectives regarding national IB

The Cyprus Electronic Registry of GOs has been fully operational since 2011, when the first GO was issued. Since then, the Registry has been functionally improved and it is being continually upgraded to harmonise with AIB's rules and the AIB Hub. All work on the Registry to become fully compatible with EECS Rules was completed during 2015. The new Cyprus EECS GO registry is expected to go live at the same time as the new AIB Hub early in 2016, thus allowing the international transfer of Cyprus EECS GOs.

News and perspectives regarding the national framework on electricity

The IEM Directive 2009/72/EC and the RES Directive 2009/28/EC were implemented in national legislature in 2012 and 2013, respectively. The new Electricity Market Law of 2012 has provisions for disclosure of the energy mix and for joint projects.

Supplier fuel mix disclosure itself was implemented by the Cyprus Energy Regulating Authority (CERA) in 2015 with Decision 1279/2015. The regulation which had been drafted by the Cyprus TSO, provides for the use of Guarantees of Origin and the Residual Mix as the only evidence of fuel mix disclosure. Supplier fuel mix disclosure will be applied for the first time in Cyprus in 2016.

> “ The use of the AIB Hub will mark the beginning of GO trading between Cyprus and other approved users. ”

Benefits to the company of AIB membership

The Cyprus TSO membership will facilitate the sharing of knowledge and experience with other AIB members, and hence the communication and implementation of more efficient and widely accepted ways to harmonise with EU law regarding efficient and transparent market systems. It will particularly assist the Cyprus TSO in learning from the experiences of other issuing bodies and implementing best practices, aiming also to standardising local practices and rules. The use of the AIB Hub will mark the beginning of GO trading between Cyprus and other approved users.

Scope of national participation in EECS

Number of registered scheme participants	6

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
6	157

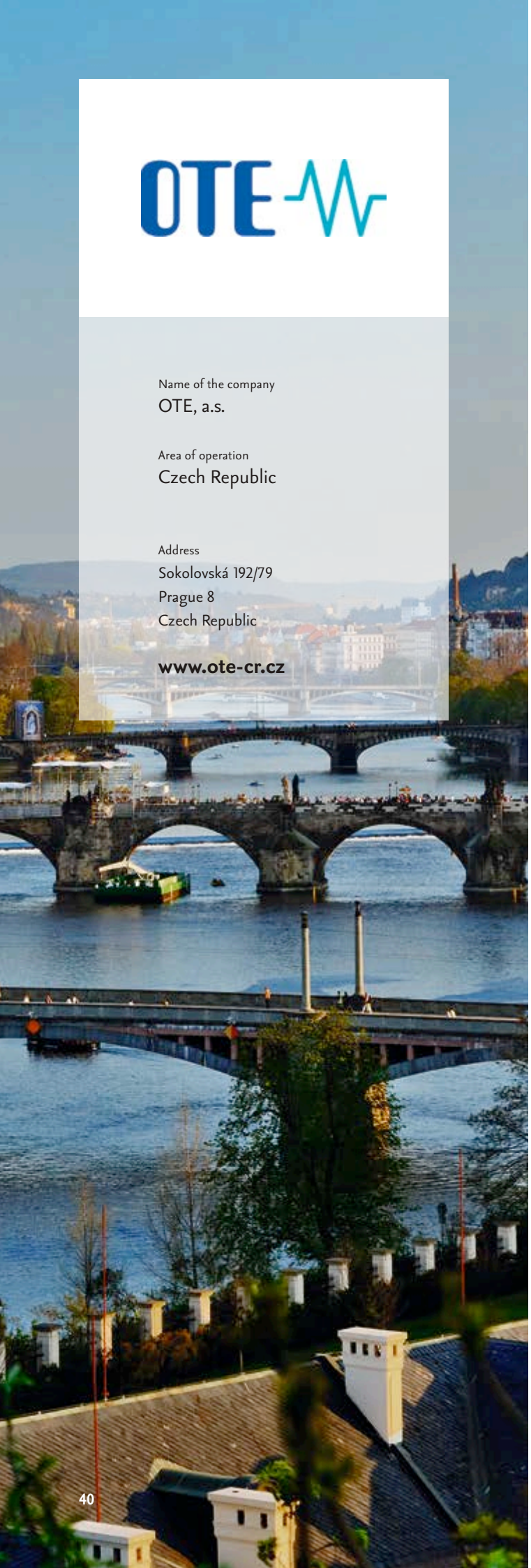
Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind	6	157

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production	National GO RES production*
0	384,5	221,4

* Cyprus does not issue EECS certificates yet, but only issues National GOs



Name of the company
OTE, a.s.

Area of operation
Czech Republic

Address
Sokolovská 192/79
Prague 8
Czech Republic

www.ote-cr.cz

REPORT FROM MEMBER

Profile of the organisation

OTE, a.s., the Czech electricity and gas market operator, is a joint stock company established in 2001. OTE provides comprehensive services to individual electricity and gas market players. OTE commenced organising trading in the day-ahead electricity market in 2002 and the intra-day and block electricity markets later on. OTE has been the market operator on the gas market since 2010, including operation of the day-ahead gas market and the intra-day gas market. Continuous data processing and exchange, required for the accounting and settlement of the imbalance between the contractual and actual volumes of electricity and gas supplied and received, are among the services offered by the OTE to players in the Czech electricity and gas markets, as well as the administrative procedures associated with change of supplier.

OTE is responsible for payments of a green bonus and feed-in tariff for electricity from renewable energy sources, secondary sources and combined heat and power, and support for decentralized electricity generation to producers. OTE also administers the National Registry of Greenhouse Gas Emissions. OTE is the holder of the license for the market operators' activities, which includes activities in the electricity and gas markets in the Czech Republic.

Role

OTE, a.s. is the competent authority for RES and high efficiency CHP GOs in the Czech Republic. Issuance of high-efficiency CHP GOs will start from January 2016.

Member of the AIB

OTE, a.s. became member of the AIB on 28 November 2013.

Activities within the AIB

In the year 2015, OTE, a.s. was represented in the AIB General Meetings, Working Group Systems and the RE-DISS Workshop by Miroslav Řehoř and Martin Štandera.

News and perspectives regarding national IB

In accordance with the Commission Implementing Regulation (EU) No 1348/2014 on data reporting OTE, a.s., has been registered as Organised Market Place with Agency for the Cooperation of Energy Regulators (ACER) as of 27 October 2014. This REMIT Regulation will trigger new obligations for the market participants, among others the obligation to report records of trade and fundamental data to the European database managed by ACER.

> " ... the possibility to exchange experience with other members of the AIB helps us fulfil our role as an electricity and gas market operator ..."

News and perspectives regarding the national framework on electricity

In 2015, the Parliament adopted amendments to the Energy Act and the Act on Promoted Energy Sources which will come into force as of 1 January 2016. These amendments implement Brussels' recommendations, such as promoting small-scale solar power generation and the establishment of a multi-person regulatory council to replace the regulator's current single chairperson. The Czech government also approved a new long-term energy plan predicated on the build-up of additional nuclear reactors, and will now work to prepare tenders for reactors and nuclear fuel.

Benefits to the company of AIB membership

"As member of the AIB, since November 2013, we highly appreciate the lively cooperation between members of the AIB with the aim of securing credibility of the GO system and transparency of the whole Association. In addition, the possibility to exchange experience with other members of the AIB helps us fulfil our role as an electricity and gas market operator in the Czech Republic, and further contribute to the consumers' demand for a transparent electricity market."

Igor Chemišinec, Member of the OTE's Board.

Scope of national participation in EECS

Number of registered scheme participants	86

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
161	2 180

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind	10	39
Solar	39	72
Thermal	42	801
Hydro-electric head	70	1 268

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
180,268	8 246,154

Name of the company
Energinet.dk

Area of operation
Denmark

Address
Tonne Kjærsvej 65
7000 Fredericia
Denmark

www.energinet.dk

REPORT FROM MEMBER

Profile of the organisation

Energinet.dk is the Danish transmission system operator (TSO). The enterprise was established by virtue of the Danish Act on Energinet Danmark of December 2004.

Energinet.dk is an independent public enterprise owned by the Danish State, as represented by the Ministry of Climate, Energy and Building. It has its own Supervisory Board.

As the entity responsible for the electricity and natural gas systems, Energinet.dk owns the overall energy infrastructure, ensuring reliable Energy supply and creates the framework for well-functioning energy markets and effective integration of renewable energy.

Energinet.dk is appointed by Executive orders in accordance with the Danish Electricity Law to issue Guarantees of Origin, to prepare general declaration for the default set of disclosure information, and to lay down conditions and guidelines for individual declarations on specific electricity supply.

Role

Energinet.dk is the Danish issuing body, issuing under EECS: guarantees of origin for renewable source electricity (since 2004), guarantees of origin for cogeneration (since 2010) and RECS certificates (since 2002).

Member of the AIB

Energinet.dk has been member of the AIB since 2002.

Activities within the AIB

Energinet.dk is normally represented in the AIB GM's via a proxy held by a Grexel consultant.

> " We support a transparent certificate market, declaring the origin of electrical production, to provide an informed basis for a customer's free choice of energy. "

News and perspectives regarding the national framework on electricity

A customer-centric market model is to be introduced in Denmark by 1 April 2016. The model will empower the customer to choose a prime supplier, and aims to increase competition between energy traders/suppliers. Among other features, the model allows for hourly settlement, mobilises flexible consumption balancing the grid, and empowers the customer with a choice when to use power in a household – hour by hour during the day. Energy traders can after the introduction still brand their products using GO's when approaching the customers even though GO's are disclosed at an aggregated level.

Benefits to the company of AIB membership

"Being an AIB-member, sharing best practices, and taking part in developing the European AIB-Hub for controlled exchange of certificates ensures that Energinet.dk meets the requirements of the EU Directives in an efficient way. We support a transparent certificate market, declaring the origin of electrical production, to provide an informed basis for a customer's free choice of energy."

Carl Morten Baggesen Hilger at Energinet.dk

Scope of national participation in EECS

Number of registered scheme participants	18

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
103 512	6 950

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Biomass	75	587,4
Biogas	187	95,5
Wind	6 511	5 073,4
Hydro	42	7,1
CHP	1	407
Solar	96 696	781,6

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
17 795	18 385

elering
GENERATING OPPORTUNITIES

Name of the company
Elering AS

Area of operation
Estonia

Address
Kadaka tee 42
12915 Tallinn
Estonia

www.elering.ee

REPORT FROM MEMBER

Profile of the organisation
Transmission System Operator

Role
Elering is an independent electricity transmission system operator in Estonia whose main duty is to guarantee high-quality electricity supply to Estonian consumers at all times. Elering is also the appointed issuing body for renewable electricity and efficient co-generation guarantees of origin in Estonia.

Member of the AIB
Elering AS has been an observer since 2011 and became member of the AIB in September 2014.

Activities within the AIB
River Tomera has been member of the Working Group Internal Affairs since the autumn 2015.

News and perspectives regarding national IB
Elering AS is continually developing and improving the Estonian registry system that facilitates the issuing, transfer and cancelling of guarantees of origin. As of November 2014 the Estonian registry is connected to the AIB Hub to enable international transfers.

News and perspectives regarding the national framework on electricity
The European Commission granted Estonia “state aid permission” which allows changing the support scheme for electricity produced from renewable sources or in high-efficiency cogeneration mode. The changes to the Electricity Market Law regarding the aforementioned production support schemes are still subject to discussions in the Estonian parliament and no planned date of enactment has been announced. The changes to the law include articles implementing the cooperation mechanisms set forth in the Renewable Energy Directive 2009/28/EC.

> “ Elering AS shall continue to further develop and improve the Estonian national registry in cooperation with the market participants involved ...”

Benefits to the company of AIB membership

”Elering AS has been appointed by law to implement a reliable and fraud-resistant system for issuing, transferring and cancelling guarantees of origin for both renewable energy sources and efficient co-generation. Having been granted full membership of the AIB in the autumn of 2014 proved and confirmed that the Estonian national registry, rules of operation and the disclosure regulation framework in the Electricity Market Act have been developed in line with the EECS rules. Elering AS shall continue to further develop and improve the Estonian national registry in cooperation with the market participants involved to facilitate and increase transactions (including export and import) of guarantees of origin and is looking forward to making a contribution to the AIB and its working groups.”

River Tomera, Head of Renewable Energy Unit

Scope of national participation in EECS

Number of registered scheme participants	37

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
34	599,074

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind	16	283,700
Hydro	7	4,114
Biogas	5	3,660
Biomass	6	307,600

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
1 221	1 507

Name of the company
Finextra Oy

Area of operation
Finland

Address
Läkkisepäntie 21
Helsinki

www.fingrid.fi

REPORT FROM MEMBER

Profile of the organisation

Finextra Oy is a subsidiary totally owned by Fingrid Oyj, which is the Finnish Transmission System Operator (TSO).

Role

Fingrid Oyj is the Competent Authority appointed according to the Finnish legislation but has assigned this role to its wholly-owned subsidiary Finextra.

Member of the AIB

since 2015.

Activities within the AIB

Kaija Niskala is taking part in the AIB by participating in the General Meetings.

News and perspectives regarding national IB

Finextra´s new GO registry was launched simultaneously with Finextra becoming member of the AIB on 1 January.2015. The registry enabled the transfers of GOs via the Hub right from the start. When developing the registry, we established a reference group consisting of our customers, which ensured that the registry would fulfil their needs. We keep aiming at high results on our customer satisfaction surveys, and we develop the registry based on customers' needs.

News and perspectives regarding the national framework on electricity

The Finnish, Norwegian and Swedish Transmission System Operators (TSOs) Fingrid, Statnett and Svenska Kraftnät implement a common imbalance settlement service for the Nordic electricity market. For this purpose, the TSOs have developed a new harmonized imbalance settlement model and founded the jointly owned service company eSett Oy to run the common imbalance settlement.

The rescheduled date for launching the Nordic Balance Settlement is at the beginning of October 2016. Regarding GO services, the new imbalance settlement model will result in some operational changes.

> “ Being a rather new member of the AIB family, Finextra benefitted from joining a structure which has a well-established network, rules and procedures. ”

Benefits to the company of AIB membership

“Being a rather new member of the AIB family, Finextra benefitted from joining a structure which has a well-established network, rules and procedures. By complying with these well-defined rules and procedures, we ensured a swift build-up of our efforts to become a compatible part of the EU certificate market. We look forward to the continuous development of this market through fruitful dialogues and exchange of experience with our European colleagues.”

Juha Kekkonen, Executive Vice President of Fingrid Oyj

Scope of national participation in EECS

Number of registered scheme participants	31

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
281	7 439

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind	64	777
Hydro	155	3039
Solar	1	0,3
Thermal	61	3622

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
25 000	29 600

Name of the company
Powernext SA

Area of operation
France

Address
5 bd Montmartre
75002 Paris
France

www.powernext.com

REPORT FROM MEMBER

Profile of the organisation
Energy Exchange (Regulated Market status)

Role
Competent Authority for issuance, transfer and cancellation of renewable electricity guarantees of origin, mandated by the French Ministry for Ecology, Sustainable Development and Energy.

Member of the AIB
Member of the AIB since July 2013.

Activities within the AIB
The follow-up of AIB activities and representation of Powernext on the General Meeting is ensured by Aude Filippi, who is also member of the Working Group Internal Affairs and System. Matthieu Boisson is responsible for following the activities of the Working Group System.

News and perspectives regarding national IB
Powernext has been appointed as the French national registry for guarantees of origin as of 1 May 2013 by a decree issued on 15 January 2013 by the French Ministry for Ecology, Sustainable Development and Energy. Powernext has succeeded RTE in this role and has taken over the whole records of GOs issued by RTE since 2006. Powernext developed in-house a whole new electronic registry for GOs and became a member of the AIB in June 2013.

News and perspectives regarding the national framework on electricity
On 20 January 2012, the existing legislation on guarantees of origin for electricity produced from renewable sources or cogeneration (decree #2006-1118 of 5 September 2006) was modified by the decree #2012-62. Also, the decree #2004-388 of 30th April 2004 was modified. This introduces new characteristics on French GOs making them fully compliant with Directive 2009/28/EC. In particular, GOs can only be cancelled in France provided their production start date occurred within the 12 previous months. Only GOs can certify the origin of the electricity produced from renewable sources serving to prove to final consumers the quantity of energy produced from renewable sources that contains the commercial offer contracted with their energy suppliers: from 20 January 2012, RECS certificates could no longer be used in France to prove the renewable character of electricity. The Energy and Climate Authority (Direction Générale de l'Energie et du Climat or DGEC) formally requires POWERNEXT to publish the French residual mix from 2013 onwards.

Benefits to the company of AIB membership

Powernext has faith in the European guarantee of origin mechanism and that it provides reliable information to consumers on energy. We are particularly proud of having been mandated to become the national registry for guarantees of origin in France and as such participate in facilitating transparency of energy markets.

> "Powernext is honoured to be a member of the AIB."

As soon as Powernext had been designated, the decision was made to join the AIB. We were already convinced of the decisive role of the association in the development of the GoO market. Within a very tight schedule - and thanks to the AIB - Powernext has been able to allow all its market participants to easily import and export guarantees of origin throughout Europe. Powernext also wanted French GoOs to become compliant with the EECS standard developed and promoted by the AIB. We have confidence in the reliability of such a standard, as it relies on clear and secured processes regularly audited by the AIB members themselves. Today, as a member of the AIB, Powernext is pleased to contribute to constantly improving the GoO system, and thereby regaining consumers' confidence in renewable energy.

"Powernext is honoured to be a member of the AIB. We are delighted to answer the renewable actors' needs for international exchanges of guarantees of origin and to contribute to respond to the consumers' demand for increasing transparency in the energy market."
Egbert Laege, Powernext's Chief Executive Officer.

Scope of national participation in EECS

Number of registered scheme participants	36

Registered production devices and total capacity installed

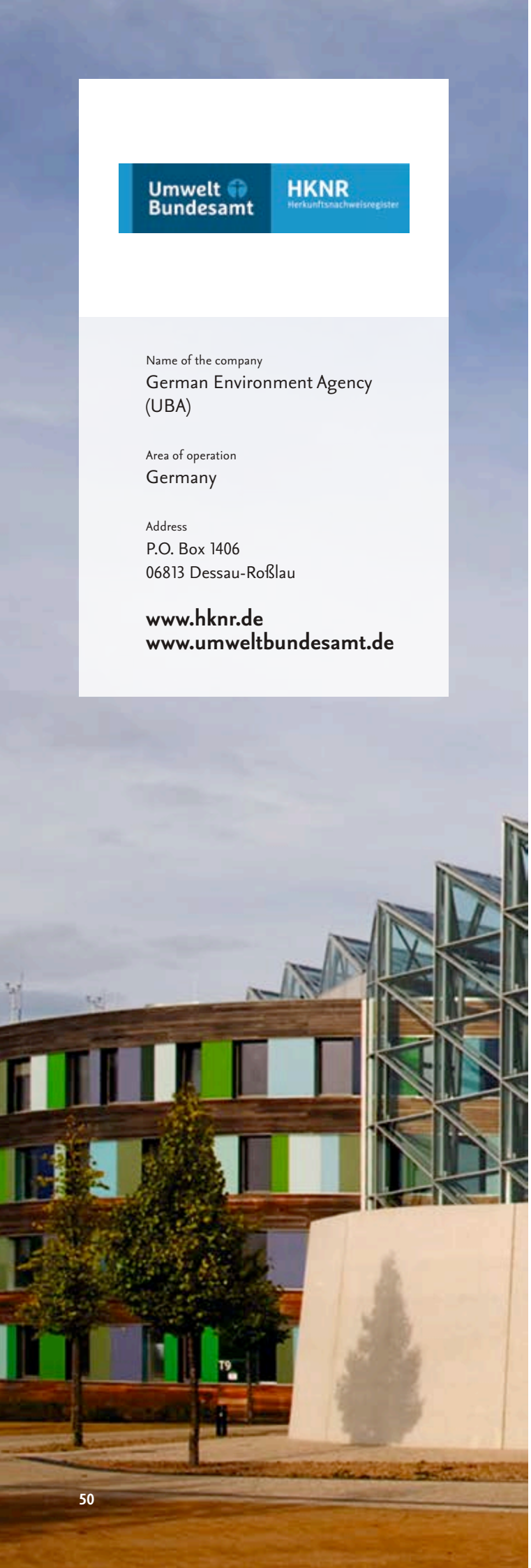
Number of production devices	Total capacity installed (MW)
197	6 938

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
hydropower	178	6 818
biomass	19	120

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
26 339	88 400



Name of the company
German Environment Agency (UBA)

Area of operation
Germany

Address
P.O. Box 1406
06813 Dessau-Roßlau

www.hknr.de
www.umweltbundesamt.de

REPORT FROM MEMBER

Profile of the organisation

The UBA is a public authority competent for operating the German registry and issuing GOs. The UBA has regulatory competencies with regard to the detailed provisions on GOs and the registry, laid down in the GO Imple-menting Ordinance, as well as fees. The Register of guarantees of origin is legally and technically supervised by the Federal Ministry for Economic Affairs and Energy. Besides running the GO system, the UBA is the scientific environment authority that comes within the remit of the Federal Ministry of the Environment, Nature Conservation, Building and Reactor Safety (BMUB) and it deals with a wide and varied range of environmental subjects.

Role

The UBA is the competent authority and issuing body for Guarantees of Origin according to the EU Directive 2009/28/EC (RES Directive). The special section is the "Register of Guarantees of Origin for Electricity from Renewable Energy Sources" (German abbreviation "HKNR").

Member of the AIB

Since July 2013, the UBA has been a Hub user without being a member of the AIB. In October 2015, the UBA applied for Membership and the General Meeting approved the application on 4 December 2015. The UBA plans to become a full member in 2016.

Activities within the AIB

- Friederike Domke – Observer, Participant in Working Group Internal Affairs, Spokesperson of the CA-RES II Policy Advisory Group to the AIB
- Michael Marty – Observer, Head of the Register of Guarantees of Origin for Electricity from Renewable Energy Sources
- Katja Merkel – Observer, Participant in Working Group Systems
- Elke Mohrbach – Observer, Participant in Working Group Internal Affairs and the Carbon Taskforce

News and perspectives regarding national IB

The UBA has used the AIB Communication Hub as a non-member since the summer of 2013, and has now finally applied for regular membership of the AIB. In 2016, the UBA will continue the challeng-ing process of fine-tuning the register software and complete the revision of the GO implementing ordinance. A "user advisory board", established in the spring of 2014, gives us valuable input to adapt our system to meet the needs of our users.

The UBA plans to become a full member in 2016.

News and perspectives regarding the national framework on electricity

The Federal government is currently discussing the public possibilities of issuing GOs for market-premium supported electricity and disclosing it as "supported regional green electricity". There seems to be a demand of renewable electricity produced not only in Germany, but also in the region where people live.

Benefits to the company of AIB membership

"After two years of operating as a Hub user without membership, we want to become member of the AIB. Over the past year, a lot of work has been done to achieve progress in improving the system. And you can be sure: in the AIB General Meeting (the key forum for decisions) your voice is heard, and it is actually possible to make a difference."
Michael Marty

Scope of national participation in EECS

Number of registered scheme participants	1 757

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
976	13 886,381

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind - onshore	568	1 509,435
Solar	44	27,056
Hydro	247	4 935,278
Biogas - other	2	0,780
Biogas - landfill	43	50,735
Biogas - sewage	3	1,406
Solid renewable fuels	36	1 077,364
unspecified renewable energy	33	6 284,327

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
10 542	194 100

LANDSNET
ICEGRID

Name of the company
Landsnet hf.

Area of operation
Iceland

Address
Gylfaflöt 9
112 Reykjavik
Iceland

www.landsnet.is

REPORT FROM MEMBER

Profile of the organisation

Landsnet hf was established on the basis of the 2003 Electricity Act. Landsnet's role is to operate Iceland's electricity transmission system and administer its system operations (TSO). Landsnet operates under a concession arrangement. Landsnet's activities are subject to regulation by the National Energy Authority (Orkustofnun).

Landsnet owns, operates and maintains all major electricity transmission lines in Iceland. The Icelandic electricity system's highest operating voltage is 220 kV. A large part of the system operates at 132 kV, but some parts have voltages of 66 kV and 33 kV. The newest transmission lines in south-west Iceland were built as 420 kV lines, but operate at 220 kV. In year 2015 around 18.1 TWh were transmitted through the transmission system.

Role

Landsnet is the competent authority for the issuance of GOs, renewable electricity guarantees of origin, in Iceland as stipulated in the Act on Guarantees of Origin, No. 30/2008.

Member of the AIB

Landsnet has been an observer of the AIB since late 2009 and applied for membership in September 2011.

Activities within the AIB

Landsnet is represented in the AIB by Iris Baldursdottir, Executive VP of System Operations and ICT at Landsnet.

News and perspectives regarding national IB

In January 2015 and until spring, Landsnet and its issuing processes were audited by the AIB. The audit was thorough and brought some issues to light, that were dealt with during the spring and summer of 2015. The audit was unanimously approved at the Brugge GM in September.

> " The AIB membership provides us with valuable opportunities to learn from other members on how to approach delicate situations. "

News and perspectives regarding the national framework on electricity

In 2015, Landsnet completed its work on the Transmission network development plan for 2015-2024, along with the environmental assessment of the plan. The report is quite extensive, covering the estimated system requirement over the next 10 years, as well as the effect that the plan has on the environment and society. The report has been submitted to the National Energy Authority for review and approval.

Work on Iceland's Master Plan for Nature Protection and Energy utilization continued in 2015 with the National Energy Authority's delivery of 81 proposed plant options, all of which are renewable. The Master Plan is completed in phases and the 81 options are part of the Plan's 3rd Phase. The Master Plan's steering committee is currently reviewing these options and expects to continue its work into 2016.

Landsvirkjun, Iceland's National Power Company, formally received a plant license from the National Energy Authority in September 2015 to expand its Burfell hydro facility by 100 MW. The current capacity of the Burfell facility is 270 MW.

Benefits to the company of AIB membership

"At Landsnet we are continually improving the performance of our processes and the effectiveness of our systems. The AIB membership provides us with valuable opportunities to learn from other members on how to approach delicate situations."

Iris Baldursdottir, Executive VP of System Operations and ICT

Scope of national participation in EECS

Number of registered scheme participants	4

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
25	2 610,4

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Hydro	18	1 940
Geothermal	7	670

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
5 495,5	18 114,0

Name of the company
SEMO (Single Electricity Market Operator)

Area of operation
Republic of Ireland and Northern Ireland

Address
EirGrid plc , The Oval
160 Shelbourne Road
Ballsbridge, Dublin 4
Ireland

www.sem-o.com

REPORT FROM MEMBER

Profile of the organisation

The Single Electricity Market (SEM) is the wholesale electricity market operating in Ireland and Northern Ireland. The Single Electricity Market Operator (SEMO) facilitates the continuous operation and administration of the SEM. SEMO is a contractual joint venture between Eirgrid Plc., the Transmission System Operator for Ireland, and SONI Limited, the System Operator for Northern Ireland. SEMO is licensed and regulated cooperatively by the Commission for Energy Regulation (CER) in Ireland and the Utility Regulator (UREG) in Northern Ireland.

Member of the AIB

Member of the AIB since 19 May 2015.
The Domain Protocol for Ireland was approved during the May 2015 General Meeting held in Dublin, Ireland.

Activities within the AIB

- Until March 2015, SEMO welcomed the opportunity to attend the Working Group Internal Affairs and General Meetings as an observer.
- SEMO hosted the AIB General Meeting in Dublin on 19 May 2015, when SEMO was approved as a member of the AIB.
- Laura Plunkett participates in both Working Group Internal Affairs and General Meetings.

News and perspectives regarding national IB

In the Irish domain, GOs from renewable sources are issued, transferred and cancelled electronically. In April 2015, SEMO launched CMO.Grexel as the Online Registry for the Irish domain, and was granted membership of the AIB in May 2015.

> " What a great year for Ireland! ... our market is open to Europe and our participants have great opportunities to trade."

The Irish registry was connected to the AIB hub on the 1 July 2015 and EECS-GOs have been issued for production from 1 July onwards. The hub connection allows Irish Account Holders to import and export Irish GOs between members of the AIB.

GOs issued for renewable sources in other countries and imported to the Irish registry will be accepted for Fuel Mix Disclosure (FMD) in Ireland, provided they have not already been cancelled or used in FMD.

Benefits to the company of AIB membership

Being a member of the AIB allows SEMO to share knowledge and experience with other AIB members and connecting the Irish registry to the AIB hub facilitates efficient trading of GOs between AIB members.

"What a great year for Ireland! Finally achieving AIB membership has meant that our market is open to Europe and our participants have great opportunities to trade." Laura Plunkett, Market Operations

Scope of national participation in EECS

Number of registered scheme participants	27

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
111	885,161

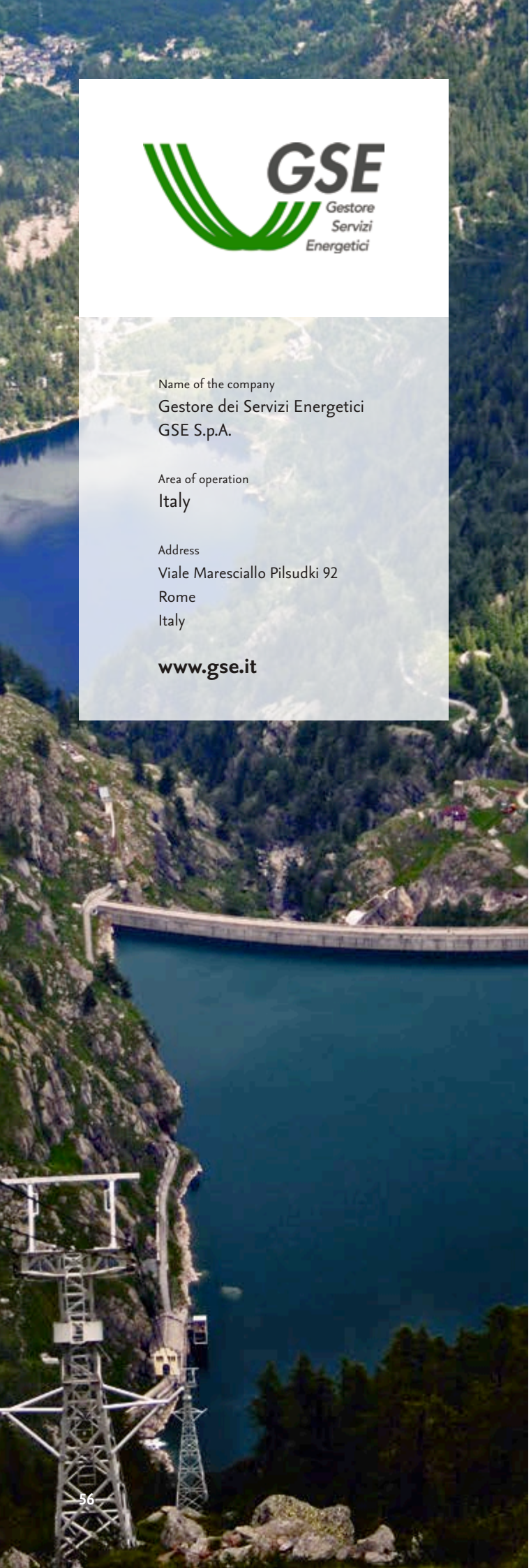
Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Hydro-electric head installations/ Run-of-river head installation	5	2,195
Hydropower	37	230,586
Thermal	6	20,130
Wind/Onshore	63	632,250

Certified EECS production as compared to national RES production (GWh)

EECS RES production*	National RES production
1 052,133	7 336,519

* Period from July – December (EECS GOs only)



Name of the company
Gestore dei Servizi Energetici
GSE S.p.A.

Area of operation
Italy

Address
Viale Maresciallo Pilsudki 92
Rome
Italy

www.gse.it

REPORT FROM MEMBER

Profile of the organisation

GSE is the state owned company which promotes and supports renewable energy sources in Italy. The sole shareholder of GSE is the Ministry of Economy and Finance, which exercises its rights in consultation with the Ministry of Economic Development.
GSE is the Parent Company of three subsidiaries:

- Gestore dei Mercati Energetici GME S.p.A. which organizes and economically manages the electricity markets as well as the environmental markets and the gas markets.
- Acquirente Unico AU S.p.A. which buys electricity in the market on the most favourable terms and resells it to distributors or retailers of the standard offer market for supply to small consumers who did not switch to the open market.
- Ricerca sul Sistema Energetico RSE S.p.A. which performs research in the electricity and energy sectors and in projects of strategic interest.

Role

GSE grants support for renewable electricity generation in Italy, qualifies RES power plants by checking the documentation provided by the production devices' owners and by performing on-site inspections. Also, it verifies that the production devices qualification criteria are (and continue to be) fulfilled. Furthermore, GSE has been appointed by the Ministry of Economic Development as Competent Body to issue Guarantees of Origin in Italy.

Member of the AIB

GSE was one of the founding members of the AIB from its beginning in 2001, and the CEO of GSE, Pier Luigi Parcu, became the first President of the Association.

Activities within the AIB

The engagement of GSE within AIB activities encompasses all the working groups:

- General Meeting: Claudia Delmirani
- WGEA: Claudia Delmirani
- WGS: Marta Grassilli
- WGIA: Rosanna Pietropaolo
- WGIA: Annalisa Ciatti (from December 2015)

> “ Joining the AIB means joining a big network of energy experts in Europe.”

News and perspectives regarding the national framework on electricity

On 19 May 2015 the Ministry of Economic Development has published the Ministerial Decree on the ”Approval of a simplified procedure for the construction, connection and operation of small photovoltaic systems integrated on the roofs of buildings”.

On 25 February 2015, the Resolution 45/2015/R/eel of the Italian Regulator launched the “market coupling” within the Multi-Regional Coupling (MRC) project dedicated to integrating the spot electricity markets in Europe. The market coupling has been structured with the French, Austrian and Slovenian borders for commercial exchanges made the previous day. The introduction of this mechanism makes the allocation of interconnection capacity more efficient with the long-term opportunity to form a single price with neighbouring countries.

Benefits to the company of AIB membership

““The AIB provides a reliable, transparent and cost effective system”, thinks Marta Grassilli, part of the Working Group Systems while Rosanna Pietropaolo of the WGI underlines that one of the added values of being part of the Association is the continuous discussion on topics related to energy with EU and non-EU countries. “The continuous growth of the AIB in fact provides, especially with the participation in General Meetings, every day more possibilities to exchange know how and improve knowledge on energy legislation and related matters” underlines Claudia Delmirani, WGEA.

According to Annalisa Ciatti, part of the WGIA from December 2015, “Being a member of the AIB, as a Company or as an individual, comes with many benefits. Joining the AIB means joining a big network of energy experts in Europe. It is possible to draw maximum benefit from meetings and Working groups through exchange of local experiences and synergies created by working together with members from other countries.”

Scope of national participation in EECS

Number of registered scheme participants	723

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
831	23 770

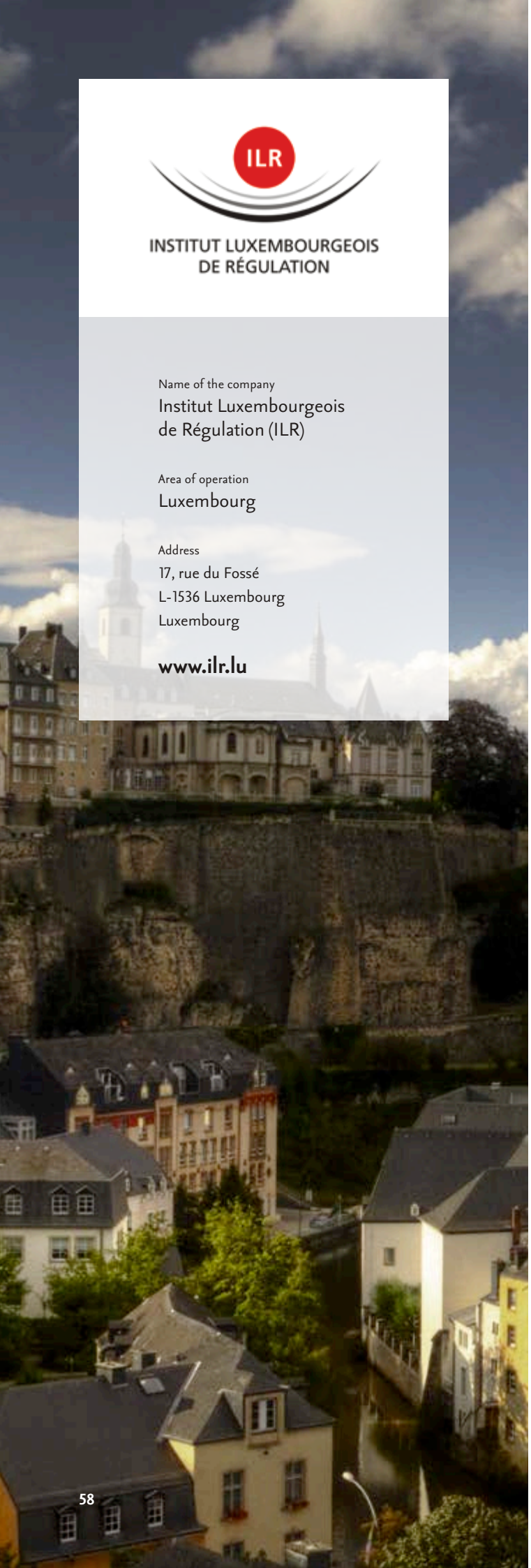
Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind	149	2 820,29975
Geothermal	32	872,0
Hydro	558	17 005,64223
Solar	48	270,0
thermoelectric	44	2 802,285

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
15 776,432	91 500 *

* Provisional data 2015: 91 500 GWh, bioenergies not included
2013 Data: 104 000 GWh



INSTITUT LUXEMBOURGEOIS
DE RÉGULATION

Name of the company
Institut Luxembourgeois
de Régulation (ILR)

Area of operation
Luxembourg

Address
17, rue du Fossé
L-1536 Luxembourg
Luxembourg

www.ilr.lu

REPORT FROM MEMBER

Profile of the organisation

The Institut Luxembourgeois de Régulation (ILR) is an independent authority in charge of regulation of electricity and natural gas markets, as well as of telecommunications, railways, airport taxes, postal services, and radio spectrum. In addition to the above, the ILR is also designated as the national competent authority for issuing guarantees of origin for electricity generated from renewable energy sources.

Role

The ILR is the national issuing body for renewable electricity guarantees of origin.

Member of the AIB

The Luxembourg registry has been operational since 1 January 2010.

Activities within the AIB

Jill Thinnes and Claude Hornick participate in the WGIA.

News and perspectives regarding national IB

In accordance with article 3, paragraph 4 of the Luxembourg grand-ducal regulation of 1st August 2014 relating to the production of electricity from renewable energy sources, the ILR issues Guarantees of Origin to certify the share of electricity produced from renewable energy sources in accordance with Article 15 of Directive 2009/28/EC.

More information for account holders is available on the following websites:

- http://cmo.grexel.com, which allows access to public details of the registry; and
- http://www.ilr.lu/electricite/etiquetage_electricite/certif_EECS/index.html, which describes GOs and their use within Luxembourg.

News and perspectives regarding the national framework on electricity

In July 2010, disclosure regulations entered into force and define a unique form of electricity labels to be used by all suppliers in their disclosure information on the final bill for the end consumer. Cancellations of EECS certificates represent an easy and straightforward tool for electricity suppliers to prove the renewable origin of their electricity supply. In 2015, 4 million GOs (4 TWh) were cancelled in the registry, representing more than 60% of the total electricity consumed in Luxembourg.

> "Today, 100% of the electricity supplied to low voltage consumers is disclosed as being generated from renewable energy sources, mainly through GO cancellations."

Benefits to the company of AIB membership

In order to facilitate monitoring and to improve the reliability of the electricity disclosure system, and especially of its green attributes, the ILR decided to join the AIB in 2009 and made available a platform for registration of production devices and handling of certificates.

Generators can value their renewable generation attributes; and suppliers can improve the reliability and credibility of their electricity products. "Today, 100% of the electricity supplied to low voltage consumers is disclosed as being generated from renewable energy sources, mainly through GO cancellations." Claude Hornick

Scope of national participation in EECS

Number of registered scheme participants	6

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
14	57,34

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Photovoltaic	5	1,19
Wind	5	10,90
Hydro	3	28,25
Municipal Waste	1	17,00

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
134	421

certiQ

Name of the company
CertiQ B.V.

Area of operation
The Netherlands

Address
Utrechtseweg 310
PO box 718
Arnhem
Netherlands

www.certiq.nl

Report from member

Profile of the organisation

CertiQ B.V. is a subsidiary of TenneT TSO B.V.

Role

CertiQ B.V. performs the role of national issuing body for guarantees of origin (GOs), a task for which TenneT has been issued a mandate by the Dutch Minister of Economic Affairs.

CertiQ issues guarantees of origin for renewable electricity, for electricity from high-efficient cogeneration and for renewable heat. In addition, CertiQ also issues disclosure certificates for electricity derived from other sources.

Within the Netherlands, CertiQ works closely with:
- The Ministry of Economic Affairs, which determines the legal frameworks upon which guarantees of origin are based within the Netherlands;
- The Netherlands Enterprise Agency, an agency of the Ministry charged with, amongst other things, the execution of support schemes related to the production of renewable electricity and renewable heat;
- The Authority for Consumers and Markets (regulator), which supervises the correct functioning of the Dutch electricity markets.

Member of the AIB

Member of the AIB since 2001.

Activities within the AIB

- Jan van der Lee, Senior manager
  Chair of AIB's management board
- Remco van Stein Callenfels, Assistant controller
  Member of Working Group Internal Affairs
- Arjan van der Toorn, Functional application manager
  Member of Working Group Systems

News and perspectives regarding national IB

As of 1 January 2015, CertiQ performs its duties under mandate of the Minister of Economic Affairs. We have managed to keep the impact of this change to a minimum.

News and perspectives regarding the national framework on electricity

CertiQ has always advocated the use of GOs for disclosure of electricity from all sources. At the time of writing this, the legal obligation on suppliers in the Netherlands to use GOs is limited to disclosure of renewable electricity. However, over 2015 the topic of full disclosure has received a lot of attention from NGOs and the Dutch Parliament. We believe that a unique one-on-one relation between GOs and disclosure is crucial for consumers to make a credible claim regarding the energy they use, and we welcome every improvement that further increases consumer empowerment.

Benefits to the company of AIB membership

We believe that it is important for each issuing body to realise that it is responsible for the correct functioning of the GO system – not just in their own country, but in Europe as a whole. A challenge in one country is a challenge in all countries.

> " To overcome such challenges, it is vital to connect with competent bodies from all countries involved, and the AIB provides the perfect platform for that."

Scope of national participation in EECS

Number of registered scheme participants	93

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
12 642	9 636

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Biomass	245	5 494
Hydro	14	36
Solar	11 278	208
Wind	1 105	3 898

Certified EECS production as compared to national RES production (GWh) *

EECS RES production	National RES production
13 000	13 200

* preliminary estimate

Statnett

Name of the company
Statnett SF

Area of operation
Norway

Address
Nydalen Allé 33 /
PB 4904 Nydalen
0423 Oslo
Norway

www.statnett.no

REPORT FROM MEMBER

Profile of the organisation

Transmission System Operator - TSO

EECS scheme membership

Statnett SF is the system operator of the Norwegian energy system. This means operating about 11 000 km of high-voltage power lines and 150 stations all over Norway. Operations are monitored by one national control centre and two regional centres. Statnett is also responsible for the connections to Sweden, Finland, Russia, Denmark and the Netherlands. In addition, connections to Germany and the UK will be operational by 2020 and 2021 respectively according to plan.

Statnett is a state enterprise, established under the Act relating to state-owned enterprises and owned by the Norwegian state through the Ministry of Petroleum and Energy.

Apart from being owner of the national grid, Statnett has a 28.2 per cent ownership of Nord Pool Spot, which Statnett owns together with the other Nordic and Baltic TSOs.

Member of the AIB

Statnett has been member of the AIB since 1st of January 2002.
It has issued RECS certificates since 2001, and Statnett-issued certificates have been compliant with the EECS standard since 2011.

Activities within the AIB

- Lars Olav Fosse, Board
- Jennifer Holgate, WGS

News and perspectives regarding the national framework on electricity

Compared with the issuing of guarantees of origin (GO) in Norway, cancellation has been more moderate. In the new portal for comparing electricity offers, strompris.no, you can filter the offers so that only those backed by GOs are presented. That should increase awareness of GOs.

> "As a member of the European Economic Area, but not the EU, it is important to secure market access on equal terms. That's guaranteed through our AIB membership."

In addition to operating the registry for GOs, Statnett also operates the Norwegian registry for elcertificates. Norway and Sweden have had a common support system based on elcertificates since 2012 to meet their 2020 targets for renewable energy.

News and perspectives regarding national IB

We are continuously developing our registry in close cooperation with our IT service provider Grexel. In 2015 we have launched a two-way API service allowing for direct communication between our customers own systems and the NECS database.

Benefits to the company of AIB membership

"Over the coming months the political framework for the European GO system will be set in the third renewable energy directive. Through our network in the AIB we get valuable information about the development in the EU, which we can share with our regulator. As a member of the European Economic Area, but not the EU, it is important to secure market access on equal terms. That's guaranteed through our AIB membership." Lars Olav Fosse

Scope of national participation in EECS

Number of registered scheme participants	47

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
1 066	32 446

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Hydro	1 035	31 502
Wind	26	891
Thermal	5	53

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
134 700	142 200

Name of the company
REN –
Rede Eléctrica Nacional, S.A.

Area of operation
Portugal

Address
Av. Estados Unidos da América, 55
1749 - 061 Lisbon
Portugal

www.ren.pt

REPORT FROM MEMBER

Profile of the organisation

REN is engaged in two principal lines of business: electricity transmission and natural gas. REN owns and operates the National Transmission Grid, the only electricity transmission network in mainland Portugal. REN is also engaged in the reception and storage of natural gas and regasification of LNG, the operation of the national high-pressure gas transmission network, which it owns and operates under concessions, and the underground storage of natural gas.

Role

Operator of ICS RECS scheme

Member of the AIB

Member of the AIB since 2003 scheme member since 2004.

News and perspectives regarding national IB

During 2015, with the publication of Decreto-Lei nº 68-A/2015 the function of Issuing Body for RES-E and HE-CHP GO that was attributed to REN was transferred to the DGEG, Direcção Geral de Energia e Geologia.

Additionally, at the end of 2015 REN ceased to be RECS Issuing Body and a member of the AIB.

> " Additionally, at the end of 2015 REN ceased to be RECS Issuing Body and a member of the AIB. "

Benefits to the company of AIB membership

"I consider that the AIB, Association of Issuing Bodies, has taken an important step towards achieving a standardised model for energy certificate system which supports and promotes the international trade of certificates. Being a member of AIB allowed REN to participate in the construction of this standard and closely followed the implementation of Guarantees of Origin in the other member states represented in the AIB."

Scope of national participation in EECS

Number of registered scheme participants	3

Registered production devices and total capacity installed

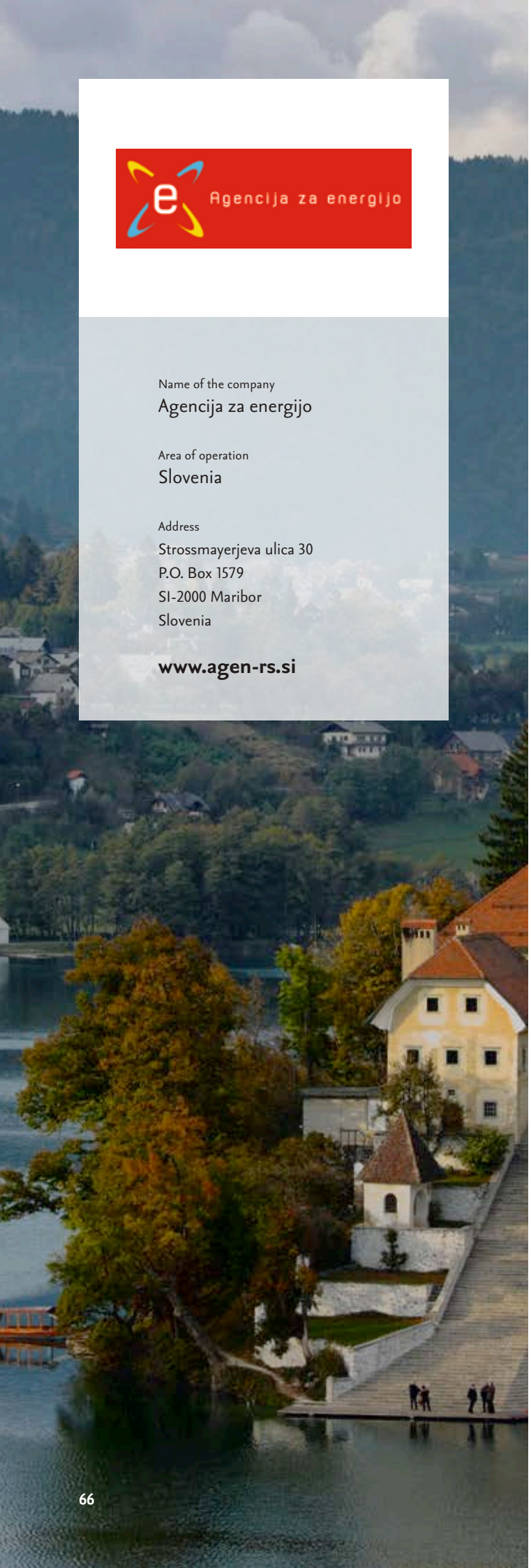
Number of production devices	Total capacity installed (MW)
4	68

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Hydro	4	68

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
0	24 294



Agencija za energijo

Name of the company
Agencija za energijo

Area of operation
Slovenia

Address
Strossmayerjeva ulica 30
P.O. Box 1579
SI-2000 Maribor
Slovenia

www.agen-rs.si

REPORT FROM MEMBER

Profile of the organisation
National Regulatory Authority

Role
The Energy Agency is the regulatory authority for electricity and gas in Slovenia and the Slovenian Issuing Body of GO for renewable electricity and electricity from high efficiency CHP. It is also the competent authority for issuing renewable and CHP production declarations that are needed by the production devices to be eligible for issuing GOs for their electricity production and to enter the Slovenian support scheme. In addition to this, the Energy Agency is the Slovenian competent authority for disclosure.

Member of the AIB
Member of the AIB since 2004.

Activities within the AIB
- Andrej Špec – member of the Working Group Internal Affairs
- Tomaž Lah – member of the Working Group Systems

News and perspectives regarding national IB
In the near future, the Energy Agency does not foresee any big changes in relation to its role of being the national Issuing Body of GO for renewable electricity and high efficiency CHP. The Energy Agency will continue to performing this function, which was assigned to it by the Slovenian Energy Act. It will also keep its membership in the AIB as an electricity scheme member issuing EECS GO for renewable electricity. The improved national disclosure rules and increased awareness of the Slovenian electricity customers will cause an increased demand for GOs from domestic and foreign markets. The Energy Agency therefore expects that the activities in the Slovenian EECS RES GO scheme will expand, both in terms of quantities and in the number of market participants. To enable smooth transfer of EECS certificates between Slovenia and other domains the agency will constantly update the national registry to remain compatible with all the IT related requirements, including the changes of the AIB Hub.

News and perspectives regarding the national framework on electricity
Slovenia thoroughly changed its disclosure rules in 2013. These rules which introduced national residual mix were first applied in 2014 for the disclosure of the suppliers' fuel mixes in 2013. In early 2015, the rules were slightly changed to bring them in line with the requirements of the new Slovenian Energy Act that came into force in March 2014. The changes were related to the treatment of supported electricity. In the previous version of the disclosure rules all supported RES-E production was included in the national residual mix. With the changed rules which were already applied for calculation of residual mix for 2014, the GOs related to electricity produced by the devices in

the feed-in scheme are cancelled for the suppliers according to their market shares in the year for which electricity is disclosed, while GOs related to electricity from production devices that receive premium to the market price belong to the suppliers or traders buying this electricity. These GOs can be freely transferred within the Slovenian Registry.

The above-mentioned new Energy Act brings a significant change related to entering the support scheme. All the new entrants to the support scheme will be selected on the basis of a public tender procedure. The Energy Agency is responsible for this procedure and selection of the new entrants. The procedure will start by publishing an invitation for submission of applications for the new entrants after the official approval of the changes of the Slovenian RES-E and HE CHP support scheme by the European Commission.

> " Being member of the AIB for more than 10 years, we are proud of having participated in the development that brought so many important changes for electricity customers, producers and suppliers"

Benefits to the company of AIB membership

"Membership of the AIB enables us to participate in the creation of the Europe-wide standards for electricity certification and transfer of certificates. Being member of the AIB for more than 10 years, we are proud of having participated in the development that brought so many important changes for electricity customers, producers and suppliers. Being part of the AIB also gives us the opportunity to share knowledge and information with colleagues from other AIB members."
says Alenka Domjan, Head of Market Monitoring Department.

During our membership in the AIB we used a lot of information obtained by this organisation and other members in the creation of national GO and disclosure legislation. We also used the AIB experience and knowledge in setting up the national GO registry which has been from its creation in line with the latest AIB requirements and recommendations. All this has enabled us to establish modern, reliable and credible GO and disclosure systems in Slovenia. And finally, we made it possible for our market participants to transfer GOs between Slovenia and other countries, which is to the benefit of both Slovenian electricity producers and customers.

Scope of national participation in EECS

Data from Slovenia not available before printing.
The system operators DSO and TSO are obliged to send these data not earlier than at the beginning of April.

grexel

Name of the company
Grexel Systems Ltd.

Area of operation
Sweden

Address
Lautatarhankatu 6
FI-00580 Helsinki
Finland

www.grexel.com

REPORT FROM MEMBER

Profile of the organisation

Grexel is a privately owned company. Grexel enables energy certification by providing market infrastructure solutions and services.

Our customers include issuing bodies mandated to arrange the issuing and trade of Guarantees of Origin (GOs) and other green certificates as well as competent bodies for electricity disclosure and residual mixes.

Our full-service package includes registry system provision, issuing body and electricity disclosure services, market design and regulatory development as well as renewable energy support scheme design.

Role

Registry operator
EECS Issuing Body for the domain of Sweden.

Member of the AIB

Member of the AIB since 2006.

Activities within the AIB

- Markus Klimscheffskij,
  Chairperson of Working Group Internal Affairs
- Marko Lehtovaara, Vesa Hyrskylahti,
  Member of Working Group Systems

Grexel was a project partner in RE-DISS projects I and II (Reliable Disclosure systems for Europe), where our main task was European residual mix calculation and further development of the calculation methodology as well as offering support to Competent Bodies. Grexel will continue to calculate European residual mixes for the Association of Issuing Bodies. Grexel is also the AIB Hub Superuser.

News and perspectives regarding national IB

In 2014, GOs were issued in Sweden for a generation volume equalling 145.6 TWh, representing 96 % of the country's total electricity generation. In Sweden, GOs are issued for electricity production from all energy sources. Of the total volume, 24.7 TWh was issued as EECS-GOs and the remaining part as national GOs. Volumes for 2015 show similar values. In Sweden, GOs are the only method to sell electricity products and deviate from the residual mix in relation to any energy source.

> “ Only with EECS, the European GO market can be truly efficient and therefore EECS are the key in enabling consumer choice when it comes to electricity origin. ”

In late 2014, the CMO.grexel registry grew with Croatia followed by Ireland in early 2015. We had the pleasure of working together with the locally mandated Issuing Bodies for GOs, Hrote and Eirgrid, respectively. All GOs in both countries are issued in EECS format and in the CMO.grexel registry.

News and perspectives regarding the national framework on electricity

The joint-support scheme with Sweden and Norway (elcertificate system) had its quota compliance deadline on 31.3.2015, for the 2014 quota. The preceding year average price was 19.4 €/MWh, with a total cancellation volume of 17.9 TWh.

Benefits to the company of AIB membership

Standards are vital in international systems and GOs are a true success story of a European-wide RES policy. What's also great about GOs is that consumers are at the heart of it. Only with EECS, the European GO market can be truly efficient and therefore EECS are the key in enabling consumer choice when it comes to electricity origin. Being a member of the AIB allows us to be a part of the group of experts with the essential task of developing the system.

Markus Klimscheffskij, Director, Chairperson of Working Group Internal Affairs

Scope of national participation in EECS

Number of registered scheme participants	38

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
1 244	23 400

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Wind/Onshore	900	2 550
Wind/Offshore	48	110
Hydropower	270	13 010
Thermal	19	920
Nuclear	7	6 788

Certified EECS production as compared to national RES production (GWh)

EECS RES production	National RES production
28 900	100 000 (Estimate)

swissgrid

Name of the company
Swissgrid AG

Area of operation
Switzerland

Address
Dammstrasse 3
CH-5070 Frick
Switzerland

www.swissgrid.ch

REPORT FROM MEMBER

Profile of the organisation

Swissgrid is the Transmission System Operator (TSO) of Switzerland.

Role

Swissgrid is the sole competent Issuing Body for Guarantees of Origin in Switzerland. Swissgrid has been accredited with this task by the Swiss Accreditation Service SAS. The Swiss Federal Office of Energy is the official authority for the supervision of issuing Guarantees of Origin for electricity as well as for the supervision of electricity disclosure in Switzerland. The legal basis is given in article 5a of the Federal Energy Act as well as in the Energy Ordinance and the Ordinance on Guarantees of Origin.

Member of the AIB

Switzerland has been an AIB member since 2002.

Activities within the AIB

- Lukas Groebke: Treasurer and Member of the Board
- Milada Mehinovic: Member of the Working Group External Affairs
- Sofya Matteotti: Member of the Working Group Internal Affairs

News and perspectives regarding national IB

Since 2013 plant operators are legally obliged to register the whole electricity production of all supported plants and plants with an installed capacity higher than 30kW (all technologies) in the Swiss Guarantee of Origin system. Therefore, almost 100% of the Swiss electricity production is registered in the Swissgrid database. On the supply side, all available national and international Guarantees of Origin have to be cancelled for disclosure purposes in order to give maximum transparency to the end consumers. In addition, suppliers are obliged to publish their disclosure mixes on a common website once a year (www.stromkennzeichnung.ch). With this regulation, Switzerland has implemented almost all recommendations proposed by the EU-supported RE-DISS project (Reliable disclosure system for Europe). As an improvement of the disclosure system, the Swiss parliament is currently discussing a potential introduction of a Guarantee of Origin obligation for imported electricity. With this measure, disclosure could be done in Switzerland based on Guarantees of Origin only, no matter whether it refers to domestic or foreign electricity.

News and perspectives regarding the national framework on electricity

Switzerland is about to implement its Energy Strategy 2050. The aim of the Swiss Energy Strategy 2050 includes replacing nuclear electricity production by means of renewable energy and efficiency gains. In an early stage, the new strategy will be focused on the exploitation of existing energy efficiency potentials and on new renewable energy sources. Even though the revision of the Swiss energy legislation is still in progress, first measures have already been implemented. On the one hand, the feed in tariff system has been extended and on the other hand, an investment support programme for small photovoltaic plants has been introduced. In a long term, there is a strong tendency towards replacing the existing support programme by a climate and energy incentive system primarily based on taxes on electricity and combustibles. The introduction of these taxes requires amendments in the Swiss Constitution, which were subject to a public consultation in 2015.

Besides the legislative revision, a coordinated energy research action plan has been agreed in Switzerland. In accordance with this, research networks between higher education institutions are created and financed. The role of these networks is to find solutions to problems arising from the Swiss energy transition.

> " AIB's EECS is the success factor for a Pan-European reliable disclosure system to bring the required transparency into the energy market."

Benefits to the company of AIB membership

"Energy transition is on the top of the political agenda not only in Switzerland, but in whole Europe. The trust of the electricity consumers and a transparent market are the basis for this. AIB's European Energy Certificate System (EECS) is the success factor for a Pan-European reliable disclosure system to bring the required transparency into the energy market."

René Burkhard, Head of Renewables & Disclosure Services, Swissgrid.

Scope of national participation in EECS

Number of registered scheme participants	2 579

Registered production devices and total capacity installed

Number of production devices	Total capacity installed (MW)
33 549	20 773

Registered production devices and total capacity installed per technology

Technology	Number of production devices	Total capacity installed per technology (MW)
Biomass	384	464
Hydro	1 341	15 545
Solar	31 559	1 083
Wind onshore	60	61
Nuclear	5	3 388
Crude oil	15	8
Natural gas	153	335
Waste	32	353

Certified EECS production as compared to national production (GWh)

EECS RES production	EECS non-RES production	National production
37 276	22 976	63 000

Name of the company
LAGIE S.A.

Area of operation
Greece Mainland and
Grid Interconnected Islands

Address
Kastoros 72
Piraeus
Greece

www.lagie.gr

Report from Observer

Profile of the organisation

The Operator of Electricity Market - LAGIE is a state-owned company, supervised by the Regulatory Authority for Energy (RAE).

LAGIE is responsible for organizing and operating on an exclusive basis, the Day Ahead Electricity Market of Greece, including clearing and settlement of the transactions, according to the stipulations of Law 4001/2011 and related acts issued thereof. The services provided are based on transparent, objective and impartial criteria and prohibiting any discrimination between participants in the Electricity Market.

LAGIE is granting economic support for electricity produced from renewables and high efficiency cogeneration units in terms of contracts, as provided for in Law 3468/2006.

LAGIE is also appointed Issuing Body for Guarantees of Origin.

Role

Competent authority for renewable electricity guarantees of origin.

Member of the AIB

An application for membership was submitted to AIB in May 2015. Earlier LAGIE attended general meetings as an Observer.

News and perspectives regarding national IB

A new support scheme for electricity from renewable sources is submitted by the State to the Commission for approval. The new support scheme is in harmonisation with the Guidelines on State aid for environmental protection and energy 2014-2020 (2014/C 200/01).

Secondary legislation for electricity disclosure is under review by the Greek Regulatory Authority for Energy (RAE).

Benefits to the company of AIB membership

The AIB has developed and assures the implementation of a standardised system (EECS) for the reliable operation of Guarantees of Origin, based on the European Renewables Directive and providing an efficient and widely accepted method to harmonise with the European law for transparent electricity market.

The participation in the AIB certifies the compliance of each member's Guarantees of Origin System with EECS standard and facilitates the exchange of GOs between members through the inter-registry telecommunications Hub operated by the AIB.

The Association also provides a forum for members to address issues of common relevance and to share knowledge and experience.

Report from Observer

Profile of the organisation

JP Elektromreža Srbije is the Serbian Transmission System Operator (TSO) established in 2005. The company is a state owned company which owns, operates and maintains the transmission system network in Serbia. The Serbian transmission system network operates on 110, 220 and 400 KV voltage levels.

The key business goals are safe and reliable electricity transmission, efficient control of the transmission system interconnected with power systems of other countries, optimal and sustainable development of the transmission system to meet the needs of users and society as a whole, ensuring the functioning and development of the electricity market in Serbia and its integration into the regional and pan-European electricity market.

Role

Primary and secondary legislative designed certificate scheme in Serbia. According to primary and secondary legislation JP Elektromreža Srbije is recognized as Issuing office for Guaranties of Origin from renewable sources, registry operator and responsible party for calculation of the Serbian national residual mix.

Member of the AIB

Active observer since 2015.

Activities within the AIB

Representatives of EMS regularly attend general meetings of the AIB as well as working group meetings.

News and perspectives regarding national IB

JP Elektromreža Srbije has procured the Registry for guaranties of origin and its "go live" which is expected over the first six months of 2016.

News and perspectives regarding the national framework on electricity

Legal framework for certificate scheme in Serbia is established through the Energy Law and Rules for guaranties of origin. New release of Rules for guaranties of origin, Domain protocol, Disclosure rules and other necessary legislative issues are currently being developed and are expected to be adopted over the first six months of 2016.

Benefits to the company of AIB membership

The benefits for JP Elektromreža Srbije of being observer in the AIB are actively gathering knowledge on EECS certificate schemes with the aim of establishing a certificate scheme in Serbia under the EECS rules. Being part of the AIB allows JP Elektromreža Srbije to develop new ideas and to gather experience from other AIB members and observers.

EMC

Name of the company
JP Elektromreža Srbije (EMS)

Area of operation
Serbia

Address
Kneza Miloša 11
11 000 Beograd
Serbia

www.ems.rs

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA

Name of the company
CNMC

Area of operation
Spain

Address
Alcalá, Nº 47
Madrid, 28014
Spain'

www.cnmc.es

REPORT FROM OBSERVER

Profile of the organisation

CNMC is the Spanish energy regulator.
CNMC is also regulator for telecoms, audiovisual media, transport and postal sectors, and the Spanish competition authority.

Role

(By law): Competent authority for electricity guarantees of origin, competent authority for disclosure of electricity, competent authority for production device inspection, competent authority for support schemes clearance and payment.

Member of the AIB

Applicant since 2015

Activities within the AIB

CNMC participates in AIB meetings and is represented by Jose Miguel Unsion. CNMC is also part of CEER.

News and perspectives regarding national IB

CNMC is working with the target of becoming a member of the AIB.
In 2016, CNMC has to implement changes made in the new legislation regarding the guarantee of origin system: adaptation of Ministerial Order ITC/1522/2007, in accordance with Energy Efficiency Directive 2012/27/UE.

News and perspectives regarding the national framework on electricity

In 2014, a new support scheme for RES and Cogeneration in Spain was designed by the Spanish Ministry and implemented by CNMC.

As a result, in 2016, Spain has the first competitive tender for wind and biomass technologies, with the supervision of CNMC.

Benefits to the company of AIB membership

"To enhance the management system for exports and imports of guarantees of origin, using the AIB platform or hub."
CNMC Director General for Energy

> " To remove possible administrative barriers that might impair the trade of guarantees of origin across Member States. "

Report from Observer

Profile of the organisation

Ofgem is the electricity and gas markets regulator.
Ofgem E-Serve is the delivery arm of Ofgem, and is responsible for the administration of the government's environmental and social schemes. We are experts in operational design and delivery excellence.

Role

Competent authority for renewable electricity guarantees of origin

Member of the AIB

Observer since 2015

Activities within the AIB

Ofgem E-Serve is currently an observer within AIB.

News and perspectives regarding national IB

As important changes to the UK's renewable electricity schemes are under way, Ofgem E-Serve will continue to work closely with the UK government and other stakeholders to ensure the continued efficient delivery of schemes.

News and perspectives regarding the national framework on electricity

A new process has been devised to recognise Guarantees of Origin for the 2015/16 disclosure period. This will be reviewed in due course.

ofgem e-serve Making a positive difference for energy consumers

Name of the company
Ofgem E-Serve

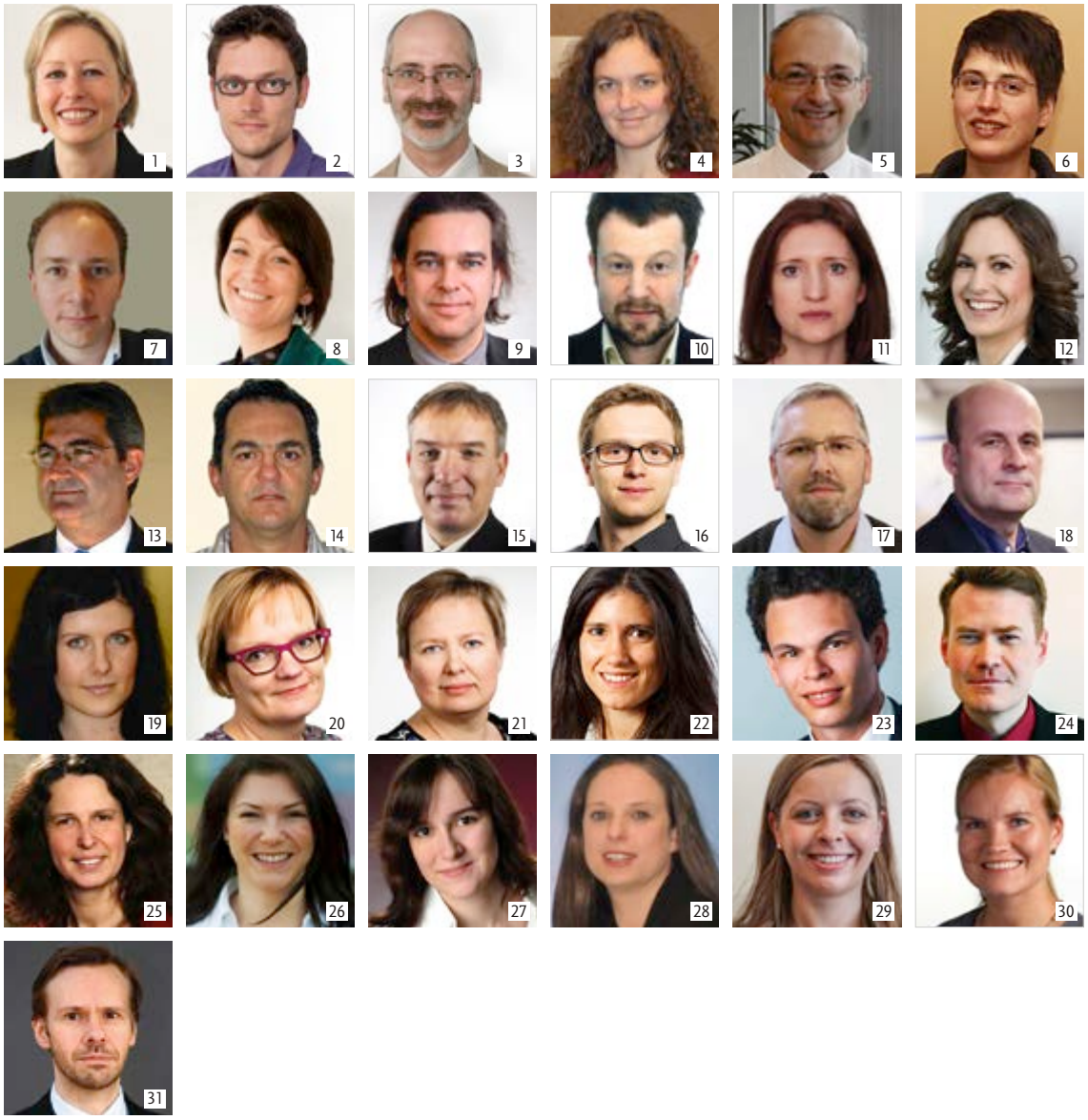
Area of operation
United Kingdom

Address
9 Millbank
London, SW1P 3GE
United Kingdom

www.ofgem.gov.uk

Annex 1

Contacts



Country	No	Name	Telephone	Fax	Email	Function in AIB
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BE (B)	Brugel – Energy Regulation Commission in the Brussels-Capital Region					
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	3	Pascal Misselyn	+32 2 563 0202	+32 2 563 0213	pmisselyn@brugel.be	
BE (F)	VREG - Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt					
	4	Katrien Verwimp	+32 2 553 1377	+32 2 553 1350	katrien.verwimp@vreg.be	Co-chair of WGS (until Sept 2015)
BE (W)	CWaPE - Commission Wallonne pour l'Énergie					
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	6	Annie Desaulniers	+32 81 32 50 12	+32 81 33 08 11	annie.desaulniers@cwape.be	Co-chair of WGS
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	10	Philip Godderis	+32 22 897 688	+32 22 897 619	pgd@creg.be	
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FR	Powernext					
	22	Aude Filippi	+33 1 73 03 76 87	+33 1 73 03 96 01	a.filippi@powerenext.com	
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DE	Federal Environment Agency (Umweltbundesamt - UBA)					
	24	Michael Marty	+49 340 2103 2249	+49 340 2104 2249	michael.marty@uba.de	
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IE	SEMO - Single Electricity Market Operator					
	28	Laura Plunkett	+353 123 702 17		guaranteesoforigin@sem-o.com	
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	31	Hermann Baldursson	+354 690 0611	+354 563 9309	hermannb@landsnet.is	


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Country	No	Name	Telephone	Fax	Email	Function in AIB
IT	GSE - Gestore dei Servizi Energetici - GSE S.p.A.					
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	34	Marta Grassilli	+39 06 8011 4174		marta.grassilli@gse.it	
	35	Annalisa Ciatti	+39 06 8011 4659		annalisa.ciatti@gse.it	
LU	ILR - Institut Luxembourgeois de Régulation					
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	37	Jill Thinnes	+352 28 228 345		jill.thinnes@ilr.lu	
NL	CertiQ B.V.					
	38	Jan van der Lee	+31 26 373 1765		jan.vander.lee@certiq.nl	Chair Board
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NO	Statnett					
	41	Lars Olav Fosse	+47 922 87 564		lars.fosse@statnett.no	Board member
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PT	REN – Rede Eléctrica Nacional, S.A.					
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Audit Report

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ASSOCIATION OF ISSUING BODIES

Report of the Independent Auditors to the Members of the Association of Issuing Bodies.

1. Introduction

We have audited the balance sheet and profit and loss account for the year ended 31 December 2015.

This report is made solely to the members of the Association and we do not accept or assume responsibility to anyone other than the Association and the members of the Association for our audit work, for this report, or for the opinions we have formed.

2. Purpose of the Audit

The purpose of the audit is to:

a) Verify the balance sheet and profit and loss account at the year end.
b) Check that the cut off between 2015 and 2016 is correctly accounted for.
c) Evaluate the payment routine.
d) Check the control over invoicing is correct and complete and in accordance with the instructions of the Board.
e) Check that the control over expenses is in accordance with existing agreements, well documented and properly authorized.
f) Calculate the audit-trail between the system and the books.

To carry out the audit we received support from the General Secretary who provided us with board minutes, agreements, a trial balance and nominal ledger at 31 December 2015, transaction lists, invoices and vouchers. The audit was performed on a sample basis.

The AIB is registered in Belgium, but VAT registered in the UK. The audit, as in the previous year, does not include the evaluation of transaction matters.

3. **Findings and Recommendation**

a) Membership fee.
The information on total certificates issued and transferred between domains per member is based on data from the websites (ie: necs.statnett.org). The total number of certificates transferred between domains in 2014 was the basis for the standing charge component of the membership fee in 2015.

The activity fees are linked to the total certificates transferred between domains in the year. Any certificates relating to the year 2015 and invoiced after the books have been closed for the year have been recognized as revenue in these accounts.

We have verified the annual membership fees were invoiced according to the approved membership fee calculation as set out in the invitation to tender.

b) Expenses
We have reviewed that expenses are supported by appropriate documents and have been correctly authorized. We have checked in particular the major costs of the consulting fees and travel expenses. We found the controls to be good and the year end cut-off seemed reasonable.

c) Bank
The payment routine was found to be in good order with the general secretary creating the payment instructions and the Treasurer authorizing the payment instructions.

The bank account in the nominal ledger reconciled both with the statements received from Jyske Bank and their year end certificate.

d) Accounts Receivable
These were checked to the invoices raised during the year.

e) VAT
The Association's proper place of registration continues to be in the UK.

The income is mainly from outside the UK and is zero rated to registered bodies in the EU whilst the expenses are mainly in the UK and the VAT can be deducted. Therefore, most quarters, the Association receives a VAT refund.

The rate of VAT for the year was 20%.

The VAT was found to be correctly calculated and recorded in the system for the year and the end of year balance agreed to the records.

f) Accounts Payable/Accruals
These were checked to the invoices raised by suppliers and found to be correctly recorded.

An accrual of 3,800 EUR due to the auditor is included in these accounts.

g) Audit Trial
There is a good audit trail between the original invoices for both fees and expenses and the nominal ledger system.

4. Conclusion

In our opinion the Financial Statement gives a true and fair view of the state of Association of Issuing Bodies as at 31 December 2015 and of its deficit for the year.

The statement has been properly prepared from information supplied.

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Jonathan Russell (Statutory Auditor)
For and on behalf of
ReesRussell LLP
37 Market Square
Witney
Oxon OX28 6RE

Date 16 February 2016

Financial statement

ASSOCIATION OF ISSUING BODIES
FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2015

Profit & Loss Account

	31/12/2014	31/12/2015 (amount in Euro)
Annual membership fee, small	40000	47500
Annual membership fee, large	200000	200000
Activity based membership fee	490187	506398
Other operating revenues	984	1645
Total operating revenues	731171	755543
Operating costs		
Consultancy fee & administration	491947	634806
Travelling & Hotels	22219	35474
Other operating costs	155585	158415
Depreciation	-	-
Total operating costs	(669751)	(828695)
Net financial items	86	-
Net profit/loss for the year	61506	(73152)

Balance Sheet

Assets	31/12/2014	31/12/2015 (amount in Euro)
Plant & Machinery	1	272746
Accounts receivable	204409	145331
Prepayment	-	1000
Net Vat refund	21291	15425
Bank	440924	267410
Total Assets	666625	701912
Liabilities		
Accounts payable	62734	171173
Total Net Assets	603891	530739
Opening Reserve	542385	603891
Profit/loss for the year	61506	(73152)
Closing Reserve	603891	530739

Date 16th February 2016

Lukas Groebke

Jan van der Lee

Imprint

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Layout: Andrea Jaschinski, Berlin, DE
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This report has been printed on environmentally friendly 100 % postconsumer-recycled paper, printed with vegetable oil-based ink, alcohol-free. The printer, Lokay, was rewarded as 'Eco-printer of the year' in 2010 (a German award) and is EMAS-certificated (as one of very few printing companies).

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Electricity disclosure is highly relevant for electricity produced from renewable energy sources. Supporting an environmental-friendly electricity market in Europe, AIB is part of the transition to a more sustainable world.

The AIB takes responsibility for its own organisation, and seeks to make its own structures and organisation environmentally and socially friendly. The main areas where AIB is able to improve its own sustainability are communication (website, emails) and the meetings which it holds across Europe.

Since 2012 AIB took several steps to improve its sustainable impact, and will take further responsibility of its operations by means of the following steps:

- Continuing to power its servers and computers using preferably renewable energy; and to benefit from the services of Wattimpact.

- Printing its Annual Reports on the most environmentally friendly paper (FSC paper, 100% recycled), in cooperation with the printing company Lokay that has committed itself to be a sustainable printer.

- Carbon offset all travelling by attendees to AIB meetings, including the four General Meetings per year, physical Working Group meetings and the annual Strategy Meeting. In 2015, a total of 32,5 t CO_2 were compensated by atmosfair.

- Holding its quarterly General Meetings:
  Seek venues (hotels) with environmental management certification, and preferably those which engage in other activities relating to improving energy efficiency, reducing environmental impact and supporting social responsibility.

AIB
association of issuing bodies

Association of Issuing Bodies

The AIB is a non-profit-making
international association

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