

ANNUAL REPORT 2023



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Lukas Groebke (Pronovo, Switzerland), Chair of the AIB Board

"I would like to say thank you for all of the contributions to strengthening our joint mission: Guaranteeing the origin of European energy".

Foreword

2023 was a very intense year for AIB. We have reached some significant milestones and witnessed that energy attribute tracking has further grown as a key focus in numerous legislations and policies worldwide, particularly in Europe, playing a crucial role in disclosure and sustainability reporting. Roughly 950 TWh of GOs were transferred over the AIB Hub, marking the multi-billion euro value of the current European market of Guarantees of Origin, which AIB proudly facilitates.

Within AIB we have embarked on rebuilding our transfer platform, the AIB hub, enhancing our GO operations with an upgraded message protocol and message schema. Quality assurance remained at the heart of our activities whereby the Icelandic compliance assessment sparked a lot of attention on our daily business of guaranteeing the origin of European energy.

A key achievement was formalising the Gas Scheme Group, which now has three formal members. Our commitment to professionalising processes and structures has been unwavering, reflected in the five productive physical meetings with working groups focusing on content and strategy.

We have further elaborated our EECS standard, cooperated intensively with EN16325 and also kept a close eye on evolving standards like the ISO Book-and-Claim, and the GHG Protocol. Networking and knowledge transfer remained a priority, with workshops and webinars for both our expanding team and members, including special sessions for newcomers. We ended the year with setting a solid strategy for the year to come. Although our mandate is sometimes limited, AIB is committed to maximizing our impact in the battle against climate change, leveraging our role in energy attribute tracking as a crucial component in European legislation and policies related to the energy transition and sustainability reporting. Double counting of energy attributes must be prevented and the energy disclosure legislation upheld, which is why AIB and our members are currently very devoted in the dialogue with the European Commission regarding the roll-out of the Union Database for Biofuels, which contains serious risks for the system of Guarantees of Origin.

AIB would be nothing without its members and team, a wonderful group of people working tirelessly on our common purpose. I would like to say thank you for all of the contributions to strengthening our joint mission: "Guaranteeing the origin of European energy".



Key figures





Below is a short summary of the main statistical data collected from AIB members on activities related to EECS Guarantees of Origin (electricity only) in 2023. More detailed statistics can also be found on the <u>AIB website</u>.

The first graph shows the number of EECS GO issued, transferred intra-domain, transferred ex-domain (import-export), expired or cancelled. Ex-domain cancellations show the exports of directly cancelled EECS GO mainly to areas outside of EECS. **Transaction date statistics** refer to the year when the transaction took place.

There is a clear uptrend in EECS GOs issued, transferred (both intra-domain and exdomain) and cancelled intra-domain in last 3 years. AIB members are close to breaking the milestone of 1,000 TWh of EECS GOs issued across Europe. On the other hand, we see a decreasing interest in ex-domain cancellations as more and more countries join the EECS scheme, leaving less room for this option.

Annual EECS transactions in TWh (based on transaction date)





The second graph shows the number of EECS GO issued, cancelled and expired in last 3 years, based on production date. **Production date statistics** refer to the year when the certified electricity was produced.

Final production date cancellation statistics are not yet fully available, as part of 2023 electricity production GOs can be cancelled later in 2024. GOs are often cancelled close to their expiry date.



Annual transactions in TWh (based on production date)



The next graph shows an overview of shares of individual domains of different types of transactions. Norway, Sweden and France are the biggest net exporters of EECS GOs whereas Germany, Netherlands, Ireland and Switzerland are the biggest net importers.

AT - Austria BE - Belgium 100% BEB - Belgium (Brussels) BEF - Belgium 90% (Flanders) 🛯 BEW - Belgium (Wallonia) CH - Switzerland 80% CY - Cyprus 70% CZ - Czech Republic DE - Germany 60% DK - Denmark EE - Estonia 50% ES - Spain FI - Finland 40% FR - France GR - Greece 30% HR - Croatia HU - Hungary 20% IE - Ireland 10% IS - Iceland IT - Italy 0% LT - Lithuania 2021 2022 2023 2021 2022 2023 2021 2022 2023 2021 2022 2023 2021 2022 2023 LU - Luxembourg Issue Cancel Own Cancel Ex-Import Export Domain domain

Annual transactions per domain (based on transaction date)



From the last two graphs of the monthly overview of imports and exports per domain in 2023, it is apparent that the peak season for inter-domain transfers is between December and March due to the disclosure rules and deadlines in many countries.

Monthly exports per domain (TWH)





Monthly imports per domain (TWH)





2023 Achievements

Members

By the end of 2022, AIB had 36 members from 29 European countries. All are Issuing Bodies appointed by their governments to administer a system for Guarantees of Origin (GOs).

During 2023, AIB welcomed SEDA, **Bulgaria** as an AIB member, to be validated by the GM in spring 2024. The next step is to complete their application to the EECS Electricity Scheme, allowing them to issue EECS GOs and transfer certificates over the AIB Hub.

In preparation for their membership, Issuing Bodies interested in joining can apply for "Scheme Observer Status" (see more info): in 2023 the JSC **Georgian** State Electrosystem of Georgia was granted Observer status.

The geographic scope of AIB is limited to the EU, EFTA countries and Energy Community. Within the EU, only Poland, Romania and Malta are not yet participating in the EECS system of GOs for electricity.

The contracting parties of the Energy Community are in the course of setting up national GO systems. Currently, EMS Serbia is a full Electricity Scheme member for over 4 years, COTEE Montenegro is an AIB member and at the Scheme application stage. Talks are ongoing with ERE Albania and URE Poland. There is little or no contact with the issuing bodies of Kosovo, North Macedonia and Moldova.

EU member states are currently unable to recognize Guarantees of Origin from the contracting parties of the Energy Community under Article 19 of the Renewable Energy Directive II (REDII), pending a Union-wide treaty for mutual recognition. A significant step forward is being made within the Energy Community towards establishing robust national Guarantee of Origin systems. On December 14, 2023, the 21st Energy Community Ministerial Council convened in Vienna, where the European Commission proposed an indicative roadmap for the mutual recognition of GOs. This proposal, subject to feedback from Contracting Parties, sets the stage for a proposed Decision to be adopted at the next Council meeting, marking a significant step towards enhancing energy collaboration across Europe.

Besides electricity certificates, AIB also facilitates the system for governing and trans--ferring certificates for gases, including biomethane and hydrogen. This has been included in EECS since 2019 and was further finetuned in 2022. By the end of 2023, the Gas Scheme Group had three formal members: E-Control (Austria), Enagas GTS (Spain) and Conexus (Latvia). AIB Hub connection of these members means that the first gas GO transfers over the AIB hub are about to happen. This development also transforms the Gas Scheme Group, focused on gas-specific issues, into an independent decision-making body within the AIB. A notable change is the modification of voting rights, now exclusive to approved EECS Gas Scheme members, which replaces the previous system where any meeting attendee could vote. Additionally, the Group's Board representation is strengthened, with River Tomera of Elering now serving as a formal board member rather than as an Observer.

There are currently five ongoing Gas Scheme applications, with many more in preparation. Impressively, 21 AIB members have been governmentally appointed to manage gas Guarantees of Origin (GOs). All current gas and electricity Scheme members have a governmental mandate and have successfully passed the necessary quality checks and compliance assessments with the EECS standard. This adherence to high standards underlines our dedication to ensuring the reliability of renewable gas claims, a responsibility we take very seriously at AIB.

In 2023, the Gas Scheme will be consolidated with trades going through the Hub. Furthermore, the facilitation of so called "non-governmental certificates" is being revived in EECS in order to accommodate Issuing Bodies for energy certificates that are not (yet) qualifying as official Guarantees of Origin under the European Renewable Energy Directive; providing the ability to pioneer certificate products that may later be adopted in legislative frameworks.

AIB guides newcomers through the membership application and assigns them a SPOC (Single Point of Contact) to assist them with their onboarding in the association.

This map identifies the countries of organisations that were members of the AIB, and countries interested in or actively pursuing membership, as at the end of 2022.







2023 Achievements

Strategy

In previous years a lot of strategy development has been completed including a strong vision for 2021-2025 and three strategic roadmaps. In 2023, the execution of this strategy was in full force.

As a part of the **Hub roadmap** that leads to gradually rebuilding the AIB Hub, the data management processes of the AIB Hub were built onto a new platform. A tender was held to rebuild the actual transfer part of the Hub, and the contract was awarded to Unicorn Systems.

To increase the amount of information on European Guarantees of Origin, including after cross border transfer, the members aligned on the addition of new data fields, with flexibility for further futureproofing in the continuously evolving legal landscape. Therefore, the **v80 roadmap** updating the content of transfer messages was approved and is currently rolled out by AIB and its members. By doing so, the GO system responds to ongoing evolutions and AIB members will be ready to implement the EN16325 when this comes into force.

External cooperation

AIB continued its cooperation with **ERGaR** with a view to bringing together the certification of renewable gases. AIB advocates bringing the two gas certification schemes together, as closely as possible. There are little benefits to the existence of separate schemes in the fight against climate change and on the path towards an integrated energy sector.

Furthermore, AIB's long standing cooperation with the **RECS Energy Certificate Association** continued, with regular joint management meetings, speaking slots by AIB members and officials at the REC Market Meeting in April and the joint organisation of the Open Markets Committee in Zagreb in November with a record of 130 attendees.

In 2023 AIB continued to foster cooperation with **other standardisation organisations.** We were involved in the revision process of EN16325 in CEN, of the ISO book & claim standard and held meetings with the organisations operating the Greenhouse Gas Protocol, i-REC and GRI reporting standards. AIB is dedicated to collaborating with stakeholders by creating opportunities to collect expert opinions, which informs our vision and guides our policy recommendations. We also share our findings and suggestions with the public. In this respect, AIB representatives participated in the ENTSOG Prime Movers meetings. AIB representatives were speaking at several fora and conferences including the REC Market Meeting, RE-Source 2023, CEBI workshops on Clean Hydrogen, the ERRA RES Committee, ISCC Sustainability conference, to name but a few.

Disclosure Platform

The Disclosure Platform is an informal exchange forum for Issuing Bodies of Guarantees of Origin and Competent Authorities for the supervision of energy Disclosure by suppliers in Europe.

Energy Disclosure is the flipside of the coin when talking about Guarantees of Origin. Consumers want to know the origin of their energy. Renewable energy is proven with Guarantees of Origin and national Competent Authorities supervise such green energy claims for electricity (and hopefully soon for gases too). However, due to limited harmonisation in European legislation, not all national Competent Authorities for disclosure are also the Issuing Bodies for Guarantees of Origin. This was hindering earlier discussions on the topic within AIB and was the motivation for setting up this platform as part of AIB's new organisation structure (in which certification of other energy carriers is also accommodated).

Experience with electricity disclosure has brought to the surface some challenges and unresolved issues and disclosure of gas and hydrogen or heating/cooling remains uncharted territory so far. There is also a need for sharing experiences and knowledge between mature markets and markets where trust and interest towards disclosure are still under development.

Internal webinars

The tradition of AIB's Tea Time Thursdays was continued in 2023 with the organisation of five webinars. These focus on a complex or newly evolving issues, such as Granular certificates in the US, Long Duration Energy Storage, PPAs and API enabled registries. On average 34 participants joined from the 36 AIB members and the webinars had positive reactions. The recordings are a popular learning resource with new member representatives.



2023 Achievements

REGATRACE

In 2023, AIB finalised its contributions in the REGATRACE project, which aims to contribute to a system for issuing and trading biomethane/renewable gases Guarantees of Origin and to the uptake of the biomethane market. The final project meeting took place in January 2023.

As a consortium partner, AIB led the work package on the integration of Guarantees of Origin between different energy carriers. Energy tracking throughout an integrated energy sector needs a harmonised approach in all involved countries, to facilitate a trusted and efficient origin tracking system.

CertifHY

In 2023 AIB continued its participation in the CertifHy III project, with the aim to integrate CertifHy as an independent criteria scheme under the European Energy Certificate System (EECS), and to facilitate the work of Issuing Bodies for hydrogen certificates in the EECS Gas Scheme.

CertifHy III will implement a harmonized H2 Guarantee of Origin (GO) scheme across Europe & beyond, build a market for H2 GO trade in close collaboration with market actors, and design a Certification Scheme for compliance with RED II renewable fuels for transport. This project is supported by the Clean Hydrogen JU (which took over from the FCH 2 JU in November 2021).

AIB's work on revising EN16325

The framework for Guarantees of Origin (GO) is set by the Renewable Energy Directive 2018/2001(EU). The Directive establishes the main design aspects of the GO system: its purpose, the mandate on member states to arrange the issuance of GOs for electricity, gas (including hydrogen) and heating and cooling, and their cross-border transferability. To ensure a reliable set-up, which is essential for trusting imports, the CEN EN16325 standard harmonises principles and essential aspects of the building blocks of this GO system.

In order to make the cross-border transfers efficient when volumes become big, and also to ensure reliable transfers, further details need to be harmonised. The European Energy Certificate System (EECS®) operated by AIB facilitates harmonisation of the details while being adaptable to changing circumstances, in agreement between Issuing Bodies.

The EN16325 standard for GOs, developed in 2013, has been based on the EECS Rules. Its ongoing revision builds upon the updated EECS Rules, for the principles of certificate administration and scheme-specific rules for different energy carriers. The revision started in 2020, and by the end of 2022 in CEN-CENELEC, a text was brought to an enquiry process with a view to collect formal feedback from the national standardisation bodies in CEN-CENELEC. The revision process will continue in 2024.

In the meantime, the EECS Rules work as a standalone standard that engages the European GO Issuing Bodies in reliability and efficiency.

While the EECS Rules will require a finetuning update after finalising the EN16215 revision, embedding the full size of EECS into a CEN standard was never advisable. Indeed, time has proven that continuous developments are needed and that details are subject to dynamic change. AIB has a democratic decision-making structure for continuous quality management of services and for the various levels of documentation of EECS, as shown in the graph below. This way, AIB facilitates both efficient and reliable handling of GOs in line with their purpose as set out by legislation.

In addition, EECS facilitates a broader scale of energy certification than just Guarantees of Origin. This enables the development of solutions for upcoming needs in a harmonised way, while in constant dialogue with Issuing Bodies from all over Europe.

Participation in Public Consultations

In 2023, AIB provided export input in several public consultations:

- CEER consultation on updated guidelines of good practice for trustworthy information on green offers and consumer protection against misleading marketing (January 2023)
- Surveys of the revision of the Greenhouse Gas Protocol (January 2023).
- Consultation on the revision of the Electricity Market Design Directive (February 2023)

Further we wrote a <u>letter</u> to the European Commission on how REDIII will regulate the link between guarantees of origin (GO) for gases and the Union Database (UDB) for renewable gaseous fuels, given that both regulatory certification and tracking systems simultaneously apply to renewable gases (March 2023).

In October, we published an <u>impact analysis</u> of the REDIII on the system of guarantees of origin.



AIB officials

The AIB board is responsible for the daily management of the Association, and meets monthly, usually alternating physical meetings with teleconferences. Also, the chairpersons meet on a regular basis to align on the work of their groups. In 2023, **Lukas Groebke** (Pronovo, Switzerland) remained Chair of the board and **Ilona Bruens** (VertiCer, Netherlands) was the Treasurer. **Ann-Christin Austang** (Statnett, Norway) became the new Vice President/Vice Treasurer. **Aigars Sīlis** (AST, Latvia) represented the Information Systems Unit. **Elke Mohrbach** (UBA, Germany) represented the Electricity Scheme Group (ESG). **River Tomera** (Elering, Estonia) took over from Wouter Vanhoudt (Hinicio) as representative of the Gas Scheme group.

The Information Systems Unit was chaired by **Martin Štandera** (OTE, Czechia) and **Katja Merkel** (UBA, Germany) as co-chairs, until 1 July 2023, when Martin joined the AIB Secretariat as a staff member. The Communication and Public Affairs Unit (CPAU) was chaired by **Milada Mehinovic** (Pronovo, Switzerland). The EECS Unit is chaired by **Maria Koulouvari** (DAPEEP, Greece). **Eva Nordlander** (Swedish Energy Agency) was the Chair of the Electricity Scheme Group. **Bram van der Heijde** (VREG, Flanders) chaired the Gas Scheme Group until the 18th of September, when **Carmen Rodriguez** (Enagas GTS, Spain) took over.

The Task Force EECS Products continued its work with **Ance Ansone** (Conexus, Latvia) as Chair, considering how EECS can efficiently facilitate extended demands and purposes of energy certification.

AIB is extremely grateful for the contributions of its member representatives, as they form the engine of the Association. We wholeheartedly thank all of the officials for their involvement.



AIB Board (left to right)

River Tomera (Gas Scheme Group representative), Aigars Silis (Information Systems Unit representative), Ann-Christin Austang (vice-chair, vice treasurer), Lukas Groebke (chair), Miguel Jeronimo (Communications Unit representative), Liesbeth Switten (Secretary General), Ilona Bruens (Treasurer), Elke Mohrbach (Electricity Scheme Group representative).



AIB secretariat

The general meeting, board, units and scheme groups are supported by the secretariat; the secretary general of AIB is **Liesbeth Switten**. Other staff members include:

- **Katrien Verwimp** as Chair of the Professional Reviewers Group and EECS Strategy coordinator. She supports the EECS Unit and both Scheme Groups in strategic and regulatory matters and represents AIB within CEN and other international platforms. She represents AIB in the REGATRACE and CertifHy projects.
- Martin Štandera was hired as IT Application Officer, supporting the Information Systems Unit, acting as SuperUser for the AIB Hub and as Product Owner of the Hub project. From 1 July 2023 onwards, he replaces Marika Timlin-de Vicente (Grexel, Finland) who was ISU secretary and Hub SuperUser. AIB extends thanks to Marika for her efforts and client-friendliness.
- Andrea Effinger supported the secretariat in administrative matters until 30 September 2023. AIB thanks Andrea for her year-long commitment within our association, including her work on the annual report.
- Svenja Vloeberghs provided general support to the secretariat, in financial and administrative matters. AIB thanks Svenja for her contributions to the work of AIB.
- From 1 September onwards **Jana Vášová** acted as the EECS Quality Officer. Thanks Jana for the pleasant cooperation

Audits and reviews, to check member compliance with the EECS framework, are conducted by member representatives, assisted by the following professional reviewers:

- Katrien Verwimp (Belgium) (Chair)
- Christos Toufexis (Cyprus)
- Diane Lescot (Observ'ER, France)
- Emma Kelly (Ireland)
- Pierre-Yves Cornelis (Belgium)
- Phil Moody (United Kingdom)
- Chris Pooley (United Kingdom)

Each of the professional reviewers has, during their career, worked with AIB or a member and has in-depth knowledge of EECS. Given the growth of the Association, the AIB is always looking for new professional reviewers to join the pool of reviewers.



AIB secretariat (left to right):

Svenja Vloeberghs (Executive Assistant), Liesbeth Switten (Secretary General), Jana Vášová (YEECS Quality Officer), Katrien Verwimp (Cordinator Sector Integration), Martin Štandera, IT Application Officer, not pictured: Andrea Effinger.



AlB reviewers (left to right): Chris Pooley, Liesbeth Switten (Secretary General), Emma Kelly, Christos Toufexis, Pierre-Yves Cornelis, Katrien Verwimp and Phil Moody.



Andrea Effinger



Information Systems Unit

The Information Systems Unit (ISU) advises AIB Scheme Groups and units on the certificate transfer system, recommends changes, and follows up on all related decisions. In the first half of 2023, Katja Merkel (UBA) held the role of Co-Chair of the ISU together with Martin Štandera (OTE) and during the year Aigars Sīlis (AST) represented the Unit on the AIB Board.

In June 2023, Martin Štandera joined the AIB secretariat to fill the new role of IT Application Officer. He now supports the AIB in a variety of IT matters, from IT strategy, over management of the Hub and ISU coordination, to operational including Superuser tasks (as a business specialist, supervisor and second line support), as well as serving the Product Owner role of the new AIB Hub and DME implementation project.

Katja Merkel (UBA) continued chairing the ISU, and the cooperation of Katja, Martin and Aigars continues. The splitting of tasks between several people increases the overall efficiency and broadens cooperation within AIB.

We extend our gratitude to Marika Timlin-de Vicente from Grexel Systems for her past contributions as AIB's SuperUser and ISU secretary. Marika excelled as a business specialist, supervisor, and second-line support as Hub SuperUser. Her work on updating the XML schema to v80 was especially invaluable to AIB.

The ISU's main task remains as supervising and further developing the AIB Hub which facilitates transfers of certificates between AIB member registries and ensures the quality of the registries with regular technical auditing. In 2023, technical audits were approved for no less than 20 AIB registries. The important process of technical audits was further improved in 2023, and the detailed descriptions can be found on the <u>AIB</u> <u>website</u>.

Upgrade to new message schema v80

The ISU focused on an important project of upgrading the message format from Version 71 to Version 80, marking the first major change in over a decade and the largest since the hub's launch in 2008. Key updates include:

• Enabling the transfer of gaseous energy carrier GOs, with heating and cooling to follow.





ISU (EECS System (AIB Hub) efficiency and enhancement as well as development of the AIB Hub), co-chaired by **Katja Merkel**, UBA (Germany) and **Martin Štandera**, OTE (Czech Republic) (until July 2023).

- Addition of conversion information and dissemination level details.
- Optional sustainability information, including scheme names and certification bodies.
- More precise production period timestamps.
- Clearer separation of high-efficient cogeneration from general CHP.
- Improved format for additional environmental labels.
- Clarifications for non-RES GOs data fields.
- Option to send messages from transfer sender to receiver.



Information Systems Unit

The Unit organized three in-person meetings and ten teleconferences during 2023. The concept of monthly meetings helps the group to follow up efficiently on topics.

In daily operations, the efforts of Technical Support Users Daniel Hubálek and Barbora Kánská, along with the Unicorn Systems maintenance team, are highly appreciated as their responsibilities to support AIB members grow.

Upcoming challenges include thoroughly testing and successfully implementing the renewed AIB Hub and DME and assisting AIB members in adopting the new XML schema v80 for certifying new energy carriers. Another priority is exploring the new data management environment's potential and helping members utilize its benefits.

The ISU works hard on continuously improving the efficiency of its meetings and internal processes and procedures. We want to acknowledge and thank all members who contributed to the work of the Unit in 2023 and welcome new members to join the Unit!



Communication and Public Affairs Unit

Last year, the **Communications and Public Affairs Unit** (CPAU) again addressed matters relating to communicating with members and stakeholders. The group members met at regular intervals to discuss and work on the operational tasks and the further development of the communication strategy. During the strategy meeting at the beginning of 2023, the Board considered the setup of a communication strategy as one of the key elements for AIB in 2024. We engaged in close cooperation with an external communications agency which in mid-June presented a proposal for a communication strategy and how to implement it. This will form the basis for future work.

The CPAU organised two workshops dedicated to the future role of the CPAU and its responsibilities. Members decided that all communications tasks and activities should be in the hands of the Secretariat and the officials responsible for the communications strategy of the AIB. Members should act as supervisors and give feedback in case the wrong direction or actions were taken. On the other hand, the strategic Board Member for communication could collect opinions to be discussed and evaluated during CPAU workshops/meetings held on-demand, each year.

Several other important tasks like supporting the Secretary General in her work on the AIB corporate identity have been started. The very first step was refreshing the AIB house style including an updated logo and font.

Via a "Single Point of Contact" (SPOC), the CPAU follows up requests and activities from new observers, applicants, and members within AIB, especially in their first year of membership. In addition, the CPAU oversees the continuous update of information on the AIB website, both the public and members sections. Our members were able to attend six internal webinars to deepen their knowledge and obtain useful information on various topics related to GOs.

In total, five AIB newsletters were published in 2023 and were distributed to over 1,400 subscribers. In terms of social media, the total number of followers on LinkedIn increased by 50% to 3,000 at the end of 2023, compared to 2,000 at the end of 2022. LinkedIn updates, done every few weeks, generally receive 1,200 to 5,000 impressions with an average of around 40 likes.

Andrea Effinger, long-time assistant of the Secretariat and contributor to the CPAU, left AIB at the end of September. We warmly thank Andrea for her dedication and contributions to CPAU and AIB.



CPAU (information, communication and recruitment of new members), chaired by **Milada Mehinovic** of Pronovo Switzerland.



EECS Unit

The EECS Unit consists of all members of AIB and is therefore as large as the General Meeting. The EECSU is responsible for the revision of the generic (non-energy specific) parts of the European Energy Certificate System (the EECS Rules), to rise to the challenge of a rapidly evolving attribute certificate market, while maintaining the highquality assurance mechanism. During 2023, the EECSU convened seven times and continued evolving the EECS rules by:

- strengthening the quality assurance of EECS Registries by adding new check points to the peer audit check list
- establishing clarity on the relationship between Non-Governmental Certificate (NGC) Schemes and Guarantees of Origin
- finetuning conversion rules and storage rules
- lowering the retention period for data records from ten to six years

Topics which members of the Unit decided require further analysis, were delegated to subgroups; promoting members' contribution via development and building confidence of the outcome, the final decisions were then made by the Unit.

In parallel, the EECS Unit investigated the potential risks for double claiming of attributes due to parallel schemes operating outside of AIB and started working in the direction of mitigating these risks.

In relation to the EN16325 standard, the EECSU coordinated the Electricity and Gas Scheme Groups to produce input into the inquiry process set out by CEN for the revision of EN16325, covering a variety of topics: inspection of Renewable Gas Production Devices, conversion rules (issuance timeline, additional data fields on GOs), amending the list of technology codes and marking the Face Value field as mandatory.

Finally, the EECSU promoted the reliable renewable attribute allocation and certification, with its contribution to the CEER public consultation, on updated guidelines of good practice for trustworthy information on green offers and consumer protection against misleading marketing, as well as on the survey set out by the World Resources Institute (WRI) for the update of the GHG Protocol, in particular the issue related to Scope 2 Guidance.



(Internal regulation of the Association, and administration and development of the EECS standard), chaired by Maria Koulouvari of DAPEEP, Greece



Electricity Scheme Group

The Electricity Scheme Group (ESG) held five meetings during 2023, of which one was a physical meeting, held in Leuven. Eva Nordlander was the Chair throughout the year. The main focus of the group was the approval of audits and reviews of members and their Domain Protocols (DPs), which is an important process for the continued quality assurance provided by the Association. Twelve audits, including updated Domain Protocols, were approved in 2023; CNMC (Spain), CertiQ (Netherlands), EMS (Serbia), Statnett (Norway), HROTE (Croatia), ILR (Luxembourg), SEM-O (Ireland), CREG (Belgium), E-Control (Austria), UBA (Germany), OTE (Czech Republic) and MEKH (Hungary).

There were two DP updates from EEX (France) and OKTE (Slovakia) due to changes in their legislation, these were also approved.

The ESG has also followed and discussed, to some degree, the development of a number of topics including: the Corporate Sustainability Reporting Directive (CSRD), net output calculation in CEN EN16325 standard (from an electricity perspective) and the compliance assessment of Iceland.



ESG (ongoing development and implementation of the regulations surrounding the electricity specific part of the EECS Rules), chaired by **Eva Nordlander**, Energimyndigheten, Sweden.



Gas Scheme Group

The Gas Scheme Group got

decision making power in 2023 with the approval of the Scheme Membership of the first three members: E-Control (Austria) in May, and Conexus (Latvia) and Enagás GTS (Spain) in December. In February 2023, River Tomera was appointed Board Representative for the Gas Scheme Group. The Gas Scheme Group got decision making power in 2023 with the approval of the Scheme Membership of the first three members: E-Control (Austria) in May, and Conexus (Latvia) and Enagás GTS (Spain) in December. In February 2023, River Tomera was appointed Board Representative for the Gas Scheme Group.

Along with the follow-up of audits for the first official members, the focus of this group is refining the EECS Rules for gas (chapter O of the EECS Rules, since 2019). This is a continuous process that in 2023 got stirred up by the evolution of the revision of CEN 16325, the approval of REDIII, the discussion on the implementation of the UDB and the findings of the first gas DP audits.

The interaction between GOs and PoS when it comes to certification of renewable gases has been a challenge since REDII. Preventing double claims or double counting in a framework with multiple certification systems is challenging, even moreso given the existence of simultaneous targets: disclosure, (sustainable) renewable targets and emissions accounting.

The revision of the standard may been partially penalised by this complexity. Another factor, more determining in the standstill faced by the standard, was the introduction of hydrogen as a renewable gas. The absence of a pre-existing market, the lack of regulation, the lack infrastructures for its development, and the opposing interests from different stakeholders brought discussions to a deadlock.

The REDIII, with the new reference to 'network characteristics' in Article 19, may have smoothed the support for the standard approval. In contrast, Article 31a on the UDB became a new source of confusion regarding certification of renewable gases.

The Gas Scheme Group held nine meetings during 2023. In these meetings the Group discussed the challenges and risks derived from the UDB and mirrored the discussion held in CEN on topics such as auxiliaries, network characteristics or optional fields for conversion issuance. Some of the topics discussed, were derived from the Domain Protocol audit reviews such as the proposal of a transitional approach for non-gaseous auxiliaries or how to handle potential changes in the dissemination level.

Another important topic closely followed by the Gas Scheme Group in 2023 was the interaction between AIB and ERGaR, as their competing co-existence may hinder market liquidity for gas GOs.

Some additional scheme membership applications were processed in 2024 and the number of GSG members is expected to increase significantly*.



The Gas Scheme Group (GSG) (development and implementation of the regulations surrounding the gas specific section of the EECS Rules), chaired by Bram van der Heijde of VREG, Belgium (Flanders) until 1 July 2023, and from September 2023, the GSG was chaired by **Carmen Rodriguez.**



Financial Year 2023

1. SUMMARY

As an independent organisation, AIB is proud to be primarily financed through membership and observer fees. To maintain our impartiality, we do not engage in partnerships or sponsorship contracts for our activities, except for occasional European projects.

The bookkeeping process follows Belgium's financial reporting framework. The annual accounts, auditor's report, and budget vs. expenditure cover 1 January to 31 December 2023.

2. ANNUAL ACCOUNTS

The annual accounts contain the balance sheet after appropriation, the income statement, the appropriation account and the explanatory disclosure. The annual accounts provide a comparison between the current period (2023) and the preceding period (2022). The total gain of 2023 available for appropriation is \notin 120,051.91 compared to \notin 501,787.82. This is due to accelerated depreciation of the old Hub and to the development of the new Hub. The annual accounts are filed with the National Bank of Belgium and are available in annex.

3. FINANCIAL AUDIT

The auditor concludes that the financial statements fairly represent the financial position as of 31 December 2023 and the year's financial performance, in accordance with Belgium's financial reporting framework.

4. KBC BANK

On 31 December 2023, the bank balance was \in 1,081,310.63. At the end of 2022, the bank balance was \in 1,171,124.08.

As a rule of thumb, AIB strives to hold at least 50% of the total turnover of the current financial year as a bank reserve. Reserves are or will be used to cover the current and or future investments.



5. BUDGET VERSUS EXPENDITURE 2023

5.1 Overview including projects

	Budget 2023	Costs/Income 2023	Balance 2023
Costs	-€ 1,880,520.00	-€ 1,652,368.93	€ 228,151.07
General	-€ 560,050.00	-€ 492,389.88	€ 67,660.12
CPAU	-€ 93,000.00	-€ 67,034.42	€ 25,965.58
EECSU	-€ 302,480.00	-€ 313,254.89	-€ 10,774.89
ISU	-€ 489,990.00	-€ 352,421.21	€ 137,568.79
Internal Projects	-€ 290,000.00	-€ 389,414.14	-€99,414.14
External Projects	-€ 145,000.00	-€ 37,854.39	€ 107,145.61
Income	€ 1,662,000.00	€ 1,639,603.58	-€ 22,396.42
Total	-€ 218,520.00	-€ 12,765.35	€ 205,754.65

5.2 Overview excluding projects

	Budget 2023	Costs/Income 2023	Balance 2023
Costs	-€1.445.380.00	-€ 1,225,100.40	€ 220,419.6
General	-€ 560,000.00	-€ 492,389.88	€ 67,660.12
CPAU	-€ 93,000.00	-€ 67,034.42	€ 25,965.58
EECSU	-€ 302,480.00	-€ 313,254.89	-€10,774.89
ISU	-€ 489,990.00	-€ 352,421.21	€ 137,568.79
Income	€ 1,227,000.00	€ 1,212,335.05	€ 30,127.89
Total	-€ 218,380.00	-€ 12,765.35	-€ 235,084.55



Audit Report

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Moore Audit

www.moore.be

Kempische Steenweg 301 bus 11 B-3500 Hasselt T +32 11 42 5022 ASSOCIATION OF ISSUING BODIES IVZW For the attention of the board of directors Koloniënstraat 11 1000 BRUSSELS

INDEPENDENT PRACTITIONER'S REVIEW REPORT ISRE 2400 TO THE BOARD OF DIRECTORS OF **"ASSOCIATION OF** ISSUING BODIES" IVZW FOR THE YEAR ENDED ON 31ST DECEMBER 2023

We have reviewed the accompanying financial statements of the "Association of Issuing Bodies" IVZW for the year ended 31st December 2023. This balance sheet and income statement shows a balance sheet total of \in 1.836.743,30 and a profit of the financial year of \in 120.051,91.

Management's responsibility for the financial statements

The management is responsible for the preparation and fair presentation of these financial statements in accordance with the financial reporting framework applicable in Belgium, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Practitioner's responsibility for the financial statements

Our responsibility is to express a conclusion on the accompanying financial statements. We conducted our review in accordance with the International Standard on Review Engagements ("ISRE") 2400, Engagements to Review Historical Financial Statements. ISRE 2400 requires us to conclude whether anything has come to our attention that causes us to believe that the financial statements, taken as a whole, are not prepared in all material respects in accordance with the applicable financial reporting framework. This Standard also requires us to comply with relevant ethical requirements. DocuSign Envelope ID: D9107884-B803-4BED-934D-14BC5A77168B

A review of financial statements in accordance with ISRE 2400 is a limited assurance engagement. The practitioner performs procedures, primarily consisting of making inquiries of management and others within the entity, as appropriate, and applying analytical procedures, and evaluates the evidence obtained.

The procedures performed in a review are substantially less than those performed in an audit conducted in accordance with International Standards on Auditing. Accordingly, we do not express an audit opinion on these financial statements.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that these financial statements do not present fairly, in all material respects, the financial position of the "Association of Issuing Bodies" IVZW as at 31st December 2023, and its financial performance for the year then ended, in accordance with the financial reporting framework applicable in Belgium.

Hasselt (Belgium), 10th April 2024.

Moore Audit BV, represented by:

Jimmy Depré, Certified auditor.

Annex: Financial statements for the year ended 31st December 2023

An independent member firm of Moore Global Network Limited members in principal cities throughout the world B&DC, Esplanade 1 box 96, 1020 Brussels: VAT: BE0453 925 059



ASSOCIATION OF ISSUING BODIES IVZW 2/2

Reports from Members, Applicants and Observers

Hereby you will find the annual update of each AIB member, differentiated by 'Scheme Members', 'Applicants' and 'Observers'.

Applicants are AIB members who are not yet part of an EECS Scheme, contrary to Scheme Members. Observers are awaiting membership of the Association.

In 2023 four members joined the Gas Scheme, E-Control (AT), Conexus (LV), Gasgrid (FI), Ambergrid (LT) and Enagas GTS (ES).

AIB also continues its expansion into the South-Eastern part of Europe, with Georgia becoming a formal Scheme Observer.

This Annual Report does not include all European countries AIB is in contact with but reflects on their different rates of progress along the route to membership.

The scope of national participation in EECS shows the degree to which EECS is implemented in that country.



Name of the company E-Control

Area of operation Austria



Rudolfsplatz 13a 1010 Wien Austria www.e-control.at



In Spring 2023, Austria became the first member of the gas scheme and first gas registry connected to the AIB Hub; able to import and export gas GOs.

Area of operation, information on the market, member of the AIB

Austria. Member of the AIB since 2001.

Profile of the organisation

E-Control is the Energy Regulator and Competent Authority for electricity GOs (all types), gas GOs (natural, renewable and other gas including hydrogen) and electricity and gas disclosure.

Activities, both within the AIB and associated activities

Member of the EECSU, ESG and GSG (Angela Tschernutter)

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In 2023, approximately 420,000 generation plants (renewable, fossil and gas (mainly biomethane). All plants were issued GOs, regardless of their fuel source.

The electricity disclosure statement on the annual bills were further graphically developed and are now easier to integrate into the annual bills of every supplier. It shows the source of electricity, the country of origin of the GOs used and the percentage of bundled GOs and physical flow of electricity. The display of gas disclosure statements on annual gas bills has been mandatory since 2022.

What are the benefits of the company being part of AIB?

We highly appreciate the professional team and members, coordinated work, and efficient solutions. The implementation of a new scheme for gas has shown us again, the importance of harmonised work amongst members and decision makers on a national and European level.

The connection of our gas registry to the AIB Hub to enable international trades was the biggest milestone in 2023. We were proud to be the first registry connected and appreciate that others followed. In the changing environment with voluntary schemes and legally regulated schemes, potential multiple focuses of GOs for target fulfilment and PoS relevance next to disclosure, a coordinated work of gas Issuing Bodies is of high relevance to us. AIB is the right and unique platform, we appreciate being a part of it. (Dr. Harald Proidl, Head of Renewables and Energy Efficiency Department)

Scope of national participation in EECS

Number of registered scheme participants	71
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Registered production devices and total capacity installed		
Number of production devices	217,319	
Total capacity installed (MW)	53,223	

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	403,101	6,872
Electricity - wind	892	4,396
Electricity - hydro	3,834	17,273
Electricity - biomass	543	1,958
Electricity - other	749	13,239
Gas - biomethane	14	33
Gas - hydrogen from RES	1	0.3
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	49,050	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	123	
National electricity production from RES	52,362	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	123	



Name of the company **BRUGEL**

Area of operation **Brussels, Belgium**

Avenue des Arts 46 1000 Brussels www.brugel.brussels



In 2023, new gas and hydrogen registries were developed, and systems were adapted to meet AIB's requirements.

Area of operation, information on the market, member of the AIB

Brussels Region Member since 2008. GSG Observer (aiming for membership 2024). Account Holders: 68 | GOs issued annually: 120,000 Cancelled GOs: 3 million | Transfers: 3 million

Profile of the organisation

Brussels Regulatory Authority for electricity, gas and water price control focusing on:

- production incentives,
- integration of renewable energy into the grid and the market,
- information on the origin of green electricity.

Activities, both within the AIB and associated activities

- General Meeting, EECSU, ESG, GSG: Laura Rebreanu, Bekay Chihi
- ISU: Attila Acs, Laura Rebreanu

News and perspectives regarding the national IB and the national framework for energy tracking certificates

BRUGEL was appointed in 2022 as Renewable Gas GO Issuing Body. In 2023, new gas and hydrogen registries were developed, and systems were adapted to meet AIB's requirements. The goal is to join the GSG in 2024.

Continued collaboration with the regional DSO to streamline IT systems to issue GOs automatically. The number of installations receiving GOs has increased dramatically compared to previous years, primarily driven by household installations. However, the increase in EECS RES production remained limited. New demands for GOs continued, mostly from third-party investors, one of the main drivers behind the development of new installations in the Brussels Region.

The Greencheck tool for green electricity disclosure was updated;. consumers check the origin and energy source of the green electricity consumed. It offers new functionalities increasing transparency and better informing consumers.

What are the benefits of the company being part of AIB?

It allows efficient compliance with European law on electricity source disclosure and informs Brussels consumers about the source and origin of their electricity consumption. It is also an excellent platform for exchanging information, ideas and good practices. "Our membership allows us to keep track of the progress of extending GOs to other energy carriers, such as biogas, hydrogen, and heat and cooling. Promoting renewable energy consumption and securing its future is crucial." Régis Lambert, Deputy Director

Links to relevant sections of our website

Statistics for the Brussels Region are available here.

Scope of national participation in EECS

Number of registered scheme participants 68

Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	1,242	57,383
Electricity - wind	-	-
Electricity - hydro	-	-
Electricity - biomass	1	51,000
Electricity - other	82*	2,683
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

* Electricity poduced by HEC with natural gas

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	136,758	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
Regional electricity production from RES*	292,522	
Regional electricity production from fossil sources	246,597	
Regional electricity production from nuclear reactions	-	
Regional gas production from RES	-	

* The numbers here are for the Brussels Region only.



Name of the company VREG – Flemish Regulator for the Electricity and Gas Market

Area of operation Flanders, Belgium

Koning Albert II-laan 7 1210 Sint-Joost-ten-Node Belgium <u>www.vreg.be</u>



The reliability checks and audits that AIB perform on all connected Domains leads to important savings in terms of resources for its members.

Area of operation, information on the market, member of the AIB

Regulator for the Electricity and Gas Market and for District Heating and Cooling systems in the Flemish Region, Belgium

- Circa 4,4 million EECS Electricity GOs issued
- Circa 5,469 (non-EECS) GOs for Gas issued
- 211 Account Holders
- Member of AIB, Electricity Scheme Group since 2006

Profile of the organisation

- Electricity and Gas Regulator
- Issuing Body for
- Electricity from RES (EECS) and HEC (National GOs)Gas from RES (National GOs)
- Competent Body for electricity disclosure and for providing disclosure information
- Annual Report 2023: <u>https://www.vreg.be/nl/document/rapp-2024-06.</u>

Activities, both within the AIB and associated activities

- Pieterjan Renier: General Meeting
- Kirsten Van der Stappen: Participation in the ISU, follow-up in the EECSU, back-up for the General Meeting
- Karolien Verhaegen: Back-up for the ISU

What are the benefits of the company being part of AIB?

Being a member of AIB is a question of trust in the GO system, reliability and efficiency.

Statistics on issuing, trading and expiring of GOs are available at <u>https://www.vreg.be/nl/energiemarkt-cijfers.</u>

Scope of national participation in EECS

Number of registered scheme participants	211
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Registered EECS production devices and total capacity installed pe	
energy carrier and type	

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	13,907	2,114
Electricity - wind	394	1,713
Electricity - hydro	14	3
Electricity - biomass	41	620
Electricity - other	158	179
Gas - biomethane	2	4
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	4,402	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	5	
Regional electricity production from RES	-	
Regional electricity production from fossil sources	-	
Regional electricity production from nuclear reactions	-	
Regional gas production from RES	-	



Name of the company Service Public de Wallonie (SPW)

Area of operation Wallonia, Belgium

Rue des Brigades d'Irlande 1 5100 Namur Belgium https://energie.wallonie.be



"Being part of the AIB enables us to enhance our efforts in promoting renewable energy and ensures that we are aligned with the best practices in energy tracking and certification across Europe."- Bora Topal, SPW

Area of operation, information on the market, member of the AIB

Belgium (Wallonia) Member of the AIB since 2019

Profile of the organisation

The Walloon Administration Department of Energy serves as the Competent Authority for issuing renewable energy Guarantees of Origin (EECS GO) for electricity and gas. SPW also operates the Green Certificate database in Wallonia.

Activities, both within the AIB and associated activities

- General Meeting Representatives: Bora Topal
- EECS Unit Representative: Annie Desaulniers
- ESG Unit Representative: Bora Topal
- ISU Representative: Annie Desaulniers
- GSG Representative: Emile Jeanmart

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In 2023, each cancellation in the Greencheck system will be for a maximum of one calendar month and only for one product of the electric energy supplier.

A new methodology to support renewable energy plants was approved by the Walloon government in November 2022. Based on the Actualised Average Production Cost, this methodology is pending validation of State Support from the European Commission and should enter into force in 2024.

The support scheme for small photovoltaic plants is declining as most have reached the 10 or 15-year support limit. This will be reflected in the regional RES production tables.

What are the benefits of the company being part of AIB?

AIB membership benefits SPW by promoting green energy production, improving the trade of Guarantees of Origin at an international level, and facilitating the exchange of good practices across Europe.

Scope of national participation in EECS

Number of registered scheme participants -

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	3,159	504
Electricity - wind	162	1,260
Electricity - hydro	49	71
Electricity - biomass	85	212
Electricity - HEC Natural Gas	157	133
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	4,212	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
Regional electricity production from RES	4,470	
Regional electricity production from fossil sources	-	
Regional electricity production from nuclear reactions	-	
Regional gas production from RES	-	

-CREG-

The Association is an ideal platform for continuously sharing experiences and exchanging best practices.

Name of the company **CREG**

Area of operation Belgium (Federal)

Nijverheidsstraat 26 1040 Brussels Belgium www.creg.be



Area of operation, information on the market, member of the AIB Belgium (Federal)

Profile of the organisation

CREG is entrusted with the task of issuing Guarantees of Origin for renewable electricity produced in the Belgian sea area and managing the corresponding registry. The CREG registry has been fully operational since 2015 and is comprised of all offshore wind producers in Belgium. Disclosure and the residual mix calculation are not within CREG's legal remit.

Activities, both within the AIB and associated activities

During 2023, CREG was represented in the AIB General Meetings by Philip Godderis. The Electricity Scheme Group and the Gas Scheme Group are followed by Yves Poncelet.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

A new GO registry was introduced in 2023. All data and certificates were migrated to G-REX (Grexel Systems).

Regarding hydrogen, the Act of 11 July 2023 created a federal legal framework for the transport of hydrogen, including ownership unbundling and regulated third party access.

What are the benefits of the company being part of AIB?

For CREG, the primary benefit of AIB membership is to facilitate the export of Belgian offshore wind GOs across Europe. AIB's harmonized standard ensures a high level of reliability.

Scope of national participation in EECS

Number of registered scheme participants	10
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	-	-
Electricity - wind	10	2,266
Electricity - hydro	-	-
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	7,867	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	7,867	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company HROTE (HRVATSKI OPERATOR TRŽIŠTA ENERGIJE d.o.o.)

Area of operation Croatia



Ulica grada Vukovara 284 10 000 Zagreb Croatia <u>www.hrote.hr</u>



In March 2023, a new Regulation on GOs was passed, including other energy carriers and the import of nuclear GOs for disclosure.

Area of operation, information on the market, member of the AIB

Croatia Member since 2014 Percentage of electricity in the incentive scheme, sold as EECS GOs: 40% Issued GOs: 810,610

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 market as a public service under the supervision of the Croatian Energy Regulatory Agency.

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

HROTE issued GOs to eligible producers in the incentive system, they were then sold on the electricity market, and then sold on the market through auctions. Following the successful sale of the GOs, the collected funds were transferred to the incentive system fund and the GOs were transferred to the buyers.

The Regulation establishing the system of GOs for electricity was passed in July 2013; it determines the rules of electricity GOs for the purpose of certification of electricity produced by plants, in accordance with the Energy Act.

In accordance with the Regulation, HROTE performs the role of the Competent Body and the Issuing Body. HROTE also calculates the residual electricity mix for Croatia. However, the Croatian Energy Regulatory Agency supervises disclosure.

Activities, both within the AIB and associated activities

Dubravka Brkić contributes to the CPAU and ISU. Ida Žužić contributes to the ESG. Boris Dokmanović contributes to the GSG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In December 2023, HROTE successfully completed another periodic audit

What are the benefits of the company being part of AIB?

Some projects are of great help to HROTE in order to implement provisions from RED II, likewise the CEN standard for GOs and issuing GOs for other energy carriers. Also links to relevant sections of your website are appreciated (if available in English). Especially your link to national statistics if available

Links to relevant sections of our website

https://www.hrote.hr/registry https://www.hrote.hr/reports-313

Scope of national participation in EECS

Number of registered scheme participants 32

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	6	1.67
Electricity - wind	17	356.22
Electricity - hydro	27	2,148.05
Electricity - biomass	1	3.00
Electricity - other	19	23.85
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	8,289.60	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	11,232.74	
National electricity production from fossil sources	4,722.00	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company Transmission System Operator -Cyprus - (TSOC)

1

Area of operation **Cyprus**

Evangelistrias 68 2057 Strovolos Cyprus www.tsoc.org.cy



Trading through the Hub facilitates our efforts to increase public awareness of the benefits of declaring the origin of electricity production.

Area of operation, member of the AIB

Cyprus Member since 2014 GOs issued in 2023: 336,000 Account Holders in 2023: 94

Profile of the organisation

TSOC was established in 2004 as an independent legal entity for public benefit. The new Electricity Market Regulation Law came into force in October 2021 and delineates further, TSOC as the Transmission System Operator and Market Operator.

TSOC is the Issuing Body, appointed by the Cyprus Energy Regulatory Authority (CERA), for Guarantees of Origin both for RES and for High Efficiency CHP installations and it performs the Residual Mix and Suppliers Mix calculations following the issuance-based method.

Activities, both within the AIB and associated activities

Representatives at General Meetings, EECS Unit and ESG-Michalis Syrimis, Demetra Cleanthous and Christos Chadjicostas.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Connection to the AIB Hub took place in June 2019. The increased interest in the GO Registry continued throughout 2023. The total number of registered Parties reached 94 (86 Producers and 8 Suppliers), while the total number of Production Devices reached 78. Interest will continue, as many companies have become more environmentally conscious and want to reduce emissions and improve sustainability ratings. The first imports and exports of GOs through the AIB hub occured in 2022 and continued throughout 2023. Cancellations of both Cyprus and imported GOs were accounted for in the 2022 Disclosure.

What are the benefits of the company being part of AIB?

Membership facilitates the sharing of knowledge and experience and the implementation of more efficient and accepted ways to harmonise with EU law. TSOC can learn from other Issuing Bodies and implement best practices, also standardising local practices and rules.

Links to relevant sections of our website

National Issuing statistics can be found at the following link.

Scope of national participation in EECS

Number of registered scheme participants	30
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	18	46.88
Electricity - wind	6	157.5
Electricity - hydro	2	1
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	248	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	1,094	
National electricity production from fossil sources	3,986	
National electricity production from nuclear reactions	-	
National gas production from RES	-	

REPORT FROM

Name of the company **OTE**, a.s. (**OTE**)

Area of operation **Czech Republic**



Sokolovska 192/79 Prague, 186 00 Czech Republic <u>www.ote-cr.cz/en</u>



In May 2023, OTE launched a new registry; a fundamental expansion of system functionalities improving user interface and simplifying administration.

Area of operation, information on the market, member of the AIB

Czech Republic. Member since 2013. 7.7 million electricity GOs issued in 2023.

Profile of the organisation

OTE a.s., is a joint stock company, established in 2001 and is the licensed Market Operator.

OTE organises the day-ahead and intraday electricity and gas markets and offers 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.

It administers subsidies (green bonus, feed-in tariff and auction bonus) to energy producers and is also the Czech national administrator of the Union Registry which guarantees accurate accounting for allowances issued under the EU Emissions Trading System (EU ETS).

OTE is the appointed Issuing Body for electricity, biomethane, heat and hydrogen GOs. For more information, see <u>OTE Annual Reports.</u>

Activities, both within the AIB and associated activities

In the first half of 2023, Martin Štandera represented at the General Meetings and was ISU co-chair.

Then, Martina Gabriel represented at the General Meetings.

Alena Vojteková and Michaela Mácová represent at the ESG, EECSU and GSG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

From 1st January 2023 OTE can issue GOs for all electricity (renewable or non-renewable sources), for biomethane, for heat from renewable sources and from nuclear, and for hydrogen.

What are the benefits of the company being part of AIB?

"OTE, a.s. has been working closely with AIB for many years and we appreciate it. Thanks to AIB we can enable our Account Holders to trade GOs efficiently with other member states. At the same time, the sharing of knowledge and experience among members is an invaluable asset that helps us to constantly improve the services we provide to our Account Holders."

Martina Gabriel, Head of Guarantees of Origin and Clean Mobility

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Links to relevant sections of our website

Information on Guarantees of Origin in the Czech Republic https://www.ote-cr.cz/en/gos_and_allowances/guarantees-of-origin/

Annual Guarantees of Origin transactions in 2023 https://www.ote-cr.cz/en/gos_and_allowances/guarantees-of-origin/annualgos-transaction-list?date=2023-01-01

Scope of national participation in EECS

Number of registered scheme participants

2,855

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	2,347	2,211.8
Electricity - wind	82	344.5
Electricity - hydro	639	2,271.7
Electricity - biomass	672	11,293.7
Electricity - other	2	4,290.0
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)
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EECS electricity production from RES	5,458.1
EECS electricity production from fossil sources	0.3
EECS electricity production from nuclear reactions	1,414.7
EECS gas production from RES	-
National electricity production from RES	6,240.3
National electricity production from fossil sources	35,986.7
National electricity production from nuclear reactions	28,729.2
National gas production from RES	-

ENERGINET

Name of the company Energinet Systemansvar A/S (Energinet)

Area of operation **Denmark**

Tonne Kjærsvej 65 7000 Fredericia Denmark www.energinet.dk



Energinet is also the authority appointed for issuing, transferring, cancelling and supervising GOs for hydrogen within the pipeline infrastructure.

Area of operation, information on the market, member of the AIB

Denmark Member since 2002. Full Member- Electricity Scheme. Observer- Gas Scheme. Account Holders: 44 Registered Production Devices Electricity: (approximately) 4,500 Electricity EECS GOs issued: 26.5 million (85% of total production)

Registered Production Devices Gas: 60 biomethane

Gas non-EECS GOs issued: 8 TWh (38% of gas consumption)

Profile of the organisation

Energinet is the TSO for electricity and gas, Issuing Body for renewable GOs for electricity and gas and Disclosure Body for electricity. Member of the ERGaR hub. Link to <u>Annual Report</u>

Activities, both within the AIB and associated activities

Represented by Kristoffer Mitens in the EECS Unit, ESG and ISU and by Jeppe Bjerg and Dorte G. Kristiansen in the GSG.

Sofie M. Skov will join the ESG and Alexandro C. Mastrandrea the GSG in 2024. Upscaling the number of resources reflects Energinet's motivation to coordinate work on GOs across electricity, biomethane and new areas (hydrogen).

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In June 2023, an Executive Order, pursuant to the Danish Electricity Act, was extended to include hydrogen. Energinet is the authority appointed for issuing, transferring, cancelling and supervising GOs for hydrogen within the pipeline hydrogen infrastructure, when such a system is constructed.

A new GO concept for e-methane was established allowing a local PTX plant to inject and market methane from renewable electricity and biogenic carbon.

A registry update for electricity was implemented migrating from the old platform to the more modern G-REX platform.

What are the benefits of the company being part of AIB?

"We find the sparring and discussion on the GO market and functions very valuable. It is necessary to develop a uniform, European GO system for electricity, gas and other energy carriers to support a well-functioning market. Hub solutions and standard governance are beneficial to all participants in operations, to avoid the risk of doublecounting or even fraud. Through AIB we have a shared forum to enable this". (Kristoffer Mitens)

Links to relevant sections of our website

Electricity statistics: <u>G-REX (G-REX (grexel.com)</u>) (see Reports for DOMAIN = Denmark)
 Biomethane statistics: Statistics (Statistics (energinet.dk))

Scope of national participation in EECS

Number of registered scheme participants	44
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Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	688	2,553
Electricity - wind	3,725	7,313
Electricity - hydro	4	5
Electricity - biomass	127	4,126
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	_	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	26,445	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	28,938	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	

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Name of the company **Elering AS**

Area of operation **Estonia**



Kadaka tee 42 12915 Tallinn Estonia www.elering.ee



Elering is continuously improving the existing Renewable Energy Information System and aims to allow crossborder transfers of gas GOs through AIB.

Area of operation, information on the market, member of the AIB

Elering became an Observer in 2011 and a Full Member in 2015. Approximately 2.3 million electricity GOs and 0.2 million biomethane GOs issued in 2023.

Profile of the organisation

Elering is the electricity and gas Transmission Systems Operator; Competent Body for GO issuance and for disclosure of renewable electricity, biomethane, liquefied biomethane, hydrogen, heating and cooling; national agency for subsidies; operator of the national central electricity and gas metering data hubs and operator of the national transport sector quota obligation trading platform.

The mission of Elering is to keep the lights on and homes heated in Estonia.

Activities, both within the AIB and associated activities

River Tomera – General Meeting and GSG representative, AIB Board Member Anne Mändmets- ESG and EECS Unit representative Kadri-Liis Rehtla – GSG representative Siim Nettan- ISU representative

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Elering has been operating and developing the transport sector quota obligation trading platform, aiding transport sector decarbonisation (2021) and a consumer portal for Estonian consumers (2022).

As the appointed Competent Body for hydrogen GO issuance and for disclosure, Elering will integrate hydrogen into the existing Renewable Energy Information System. Future projects include integration of national solutions with the Union Database according to the Renewable Energy Directive (RED III), development of solutions for conversion between the energy carriers and for storage.

What are the benefits of the company being part of AIB?

"We see that a GO allows to consume renewable energy of zero emissions and provides the opportunity to track progress towards climate neutrality. GOs help to involve end users to contribute to climate change mitigation." River Tomera (Head of the Renewable Energy Department)

Links to relevant sections of our website

https://elering.ee/en/guarantees-origin https://elering.ee/elektri-paritolutunnistused https://elering.ee/en/biomethane https://elering.ee/biometaani-paritolutunnistused

Scope of national participation in EECS

Number of registered scheme participants 728

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	5,432	378
Electricity - wind	36	422
Electricity - hydro	19	6
Electricity - biomass	20	397
Electricity - other	3	2
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	2,306	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	2,607	
National electricity production from fossil sources	2,302	
National electricity production from nuclear reactions	-	
National gas production from RES	211	



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Name of the company Finextra Oy

Area of operation Finland

Läkkisepäntie 21 00620 Helsinki Finland www.fingrid.fi



AIB Hub enables GO trading across Europe.

Area of operation, information on the market, member of the AIB

The area of operation is Finland where the capacity of registered power plants is nearly 20,000 MW. Wind power capacity is increasing rapidly. Approximately 68 TWh (RES 38 TWh, NUC 30 TWh) of GOs were issued in 2023. Finextra has been a member since 2015.

Profile of the organisation

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

Fingrid Oyj, which is the appointed competent Issuing Body for electricity GOs according to Finnish legislation, has assigned this duty to its totally owned subsidiary Finextra Oy. Please see Fingrid's <u>Annual Report</u> for further details of the company.

Activities, both within the AIB and associated activities

Representative at the General Meeting: Kaija Niskala Representatives at the EECS Unit: Kaija Niskala and Veea Pulkkinen Representatives at the Electricity Scheme Group: Veea Pulkkinen Representative at the Information Systems Unit: Samuli Konttinen

News and perspectives regarding the national IB and the national framework for energy tracking certificates

We aim to develop our registry, when needed, cost-effectively in order to meet customers' and our own expectations and requirements. We conduct yearly customer satisfaction surveys and during 2023 the NPS (Net Promoter Score) of our GO customers was 77.

During 2023, as the energy system is transforming, Finland began using 15-minute imbalance settlement periods (electricity).

Thus, in our GO service, 15-min resolution was used in the net time series that are sent to us for GO issuance purposes.

What are the benefits of the company being part of AIB?

The main benefit of being a member of AIB is that the AIB Hub enables GO trading across Europe and thus enables international business possibilities for our customers.

Links to relevant sections of our website

- Data of Guarantees of Origin for Electricity- Fingrid
- Guarantees of origin (GO) for Electricity- Fingrid

Scope of national participation in EECS

Number of registered scheme participants	77
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	18	37
Electricity - wind	342	7,408
Electricity - hydro	168	3,264
Electricity - biomass	76	4,570
Electricity - other	3	4,394
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	38,078	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	30,282	
EECS gas production from RES	-	
National electricity production from RES	40,485	
National electricity production from fossil sources	4,800	
National electricity production from nuclear reactions	32,737	
National gas production from RES	-	





Membership grants us access to the AIB Hub, a valuable tool that allows for efficient transfers of certificates and facilitates the market development of clean gases.

Name of the company Gasgrid Finland Oy

Area of operation **Finland** H

Keilaranta 13-19 B 02150 Espoo Finland <u>https://gasgrid.fi/en/</u>



Area of operation, information on the market, member of the AIB

Finland (Gas and Hydrogen) Member since 2022. Scheme Observer- GSG (aim to secure full membership early 2024) Production Devices: 18 Account Holders: 20 Total Biogas production: approximately 1 TWh

Profile of the organisation

Gasgrid Finland is a Transmission System Operator (TSO) and is the Issuing Body for renewable gas and hydrogen GOs. It is responsible for the operation of the gas and hydrogen GO system. Publications, such as annual reports, can be found <u>here</u>.

Activities, both within the AIB and associated activities

Heli Haapea- representative at the General Meetings, EECS Unit and GSG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In April 2022, Gasgrid Finland launched a GO registry for gas and hydrogen in an active effort to enhance the reliability of the gas disclosure system, develop customeroriented services, and foster the green gas market. It also underscored a commitment to promoting a carbon-neutral energy and raw material system for the future. 2023 was pivotal; diligent preparations were made to secure membership of the GSG, bringing Gasgrid Finland closer to achieving GSG membership and strengthening its position. It has been able to better serve customers and stakeholders, and further the mission of promoting a carbon-neutral society.

What are the benefits of the company being part of AIB?

"Membership grants us access to the AIB Hub, a valuable tool that allows for efficient transfers of certificates and facilitates the market development of clean gases. This has been instrumental in our operations and strategic planning". Mika Myötyri, Head of Market and Customers

Links to relevant sections of our website

https://gasgrid.fi/en/our-services/guarantees-of-origin

> eex

Name of the company European Energy Exchange (EEX)

Area of operation France



5 Boulevard Montmartre 75002 Paris France <u>www.eex.com</u>



France implemented a first step towards full disclosure by allowing electricity GOs from non-renewable sources.

Area of operation, information on the market, member of the AIB France

Member of the AIB since 2013.

Profile of the organisation

Market Operator and the Issuing Body for Electricity Guarantees of Origin (GOs) (May 2013) and Biogas GOs (October 2023). EEX's mandate was extended to the organization of auctions for subsidized GOs (September 2019).

Activities, both within the AIB and associated activities

General Meeting, EECS Unit, ISU, EAU, ESG - Aude Filippi (Director for Business Development for Gas and Sustainability Markets) and Blaise Farrokhi (Business Developer)

GSG- Aude Filippi, Blaise Farrokhi and Lena Müller-Lohse (Business Developer) Task Force VAT Fraud- Saul Pedraza (Head of Data Analytics)

News and perspectives regarding the national IB and the national framework for energy tracking certificates

EIn 2023, EEX saw its scope and responsibilities extended to IB for GOs for nonrenewable power sources at the end of 2023; it is also the IB for biogas GOs (October 2023) covering around 600 Production Devices, injecting 9.1 TWh into the gas network.

France implemented a first step towards full disclosure by allowing electricity GOs from non-renewable sources and a new framework has introduced mechanisms related to auctions. Operators of subsidised renewable PDs will have preferential access to the GOs from their own installations and municipalities will benefit from prefential access to GOs from installations located within their territory. The auction process will be amended to sell part of the subsidised GOs on a longer term rather than on the spot market.

What are the benefits of the company being part of AIB?

EEX joined AIB when designated as the operator for the national registry for GOs in 2013.. EEX wanted their GOs to be compliant to the EECS standard and within four months and thanks to AIB, EEX was able to import and export GOs. We are confident in the reliability the standard as it relies on clear and secure processes regularly audited by the AIB members. Today, EEX is pleased to contribute to improving the GO system and reinforcing consumers' confidence in renewable energy.

Scope of national participation in EECS

Number of registered scheme participants	159
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	10,287	11,501
Electricity - wind	2,036	21,764
Electricity - hydro	2,204	24,124
Electricity - biomass	924	2,003
Electricity - other	21	61,894
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	114,615	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	153	
EECS gas production from RES	-	
National electricity production from RES	126,229	
National electricity production from fossil sources	30,480	
National electricity production from nuclear reactions	318,791	
National gas production from RES	-	

Umwelt Bundesamt HKNR Herkunftsnachweisregister

Name of the company German Environment Agency (UBA)

Area of operation **Germany**



P.O. Box 1406 06813 Dessau-Roßlau Germany <u>www.hknr.de</u> <u>www.umweltbundesamt.de</u>



"Being part of AIB helps me to understand the whole GO system better. It is inspiring to exchange different views and approaches amongst the Issuing Bodies to improve the GO system."

Area of operation, information on the market, member of the AIB

Germany EECS GOs (Electricity) issued: 37 million Account Holders: 5,015 Full Member since 2016

Profile of the organisation

UBA is the German scientific environment authority, it is the Competent Authority, operating the German registry and issuing GOs. UBA has regulatory competence regarding the provisions of GOs, registry and fees, detailed in the GO Implementing Ordinance and Fee Ordinance. The Register of GOs is supervised by the Federal Ministry of Economic Affairs and Climate Action. UBA has limited inspection tasks regarding Disclosure, the Competent Authority is the Bundesnetzagentur (BNetzA).

Activities, both within the AIB and associated activities

- Friederike Domke CPAU
- Christian Herforth EECSU, ESG and GSG, CEN/CLC/JTC14/WG5/PT Electricity
- Katja Merkel Chair of ISU
- Elke Mohrbach AIB Board (since November 2020), ESG and Disclosure Platform

News and perspectives regarding the national IB

As of 1st January 2023, coupling of GOs to the underlying electricity was reformed, offering a more market-oriented system. The use of coupled GOs has become part of a state aid scheme allowing for compensation of national electricity prices. Disclosing the countries of origin on the GOs is mandatory in Germany for disclosure statements from 2022. Disclosure of supported renewable electricity has changed. For the disclosure statement for 2022 supported renewable electricity is not shown in the supplier mix but in the product mix. This is to allow consumers differentiate between suppliers according to their portfolio policy as the supported RES cannot be traded in the market and therefore is not part of the portfolio. UBA intensifies its work regarding tasks arising from the further implementation of Article 19 RED II with regard to renewable gas/ hydrogen, heating and cooling GOs.

What are the benefits of the company being part of AIB?

"Being part of AIB helps me to understand the whole GO system better. It is inspiring to exchange different views and approaches amongst the Issuing Bodies to improve the GO system."

Friederike Domke

Scope of national participation in EECS

Number of registered scheme participants 5,015

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Wind - onshore	3,557	14,987
Wind - offshore	10	2,293
Solar	1,074	6,055
Hydro	326	4,989
Biogas - other biogas	9	16
Biogas - landfill	7	14
Biogas - sewage	1	0.160
Liquid renewable fuels	2	42
Solid renewable fuels	79	1,635
Unspecified renewable energy	52	7,665

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	37,359	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	272,449	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name	of	the	со	mpan
DAPE	EP	S.A	۱.	

Area of operation **Greece**

72, Kastoros street Pireus, 18545 Greece <u>www.dapeep.gr</u>



DAPEEP established connection to the AIB Hub and expects that the value of EECS GOs issued for RES will be enhanced.

Area of operation, information on the market, member of the AIB

Greece/Hellenic Domain Member since 2019 GOs issued (GWh): 22,484 Account Holders: 80 Production Devices Registered: 20,773

Profile of the organisation

DAPEEP is a 100% state-owned Greek company under the supervision of the Ministry of Environment and Energy, serving multiple roles within the electricity sector:

- Aggregator for supported RES and HE-CHP PDs.
- Administration of the support to RES and HE-CHP producers.
- Competent Authority for State Aid schemes.
- Auctioneer of the CO₂ Emissions Allowances.
- Authorised Issuing Body for GOs for all energy carriers.
- Competent Body for Disclosure and Residual Mix calculation.
- Auctioneer of GOs issued for PDs operating under a support scheme.

Activities, both within the AIB and associated activities

Maria Koulouvari- General Meetings, EECS Unit (Chair) and the ESG Giorgos Antonopoulos- ISU, GSG (Observer)

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In August 2023, DAPEEP launched its new, state of the art GO Registry, which was connected to the AIB Hub on October $2^{\rm nd}.$

DAPEEP transposed several legislative amendments into the Domain Protocol which were audited during June to November 2023, officially approved by ESG members in January 2024.

What are the benefits of the company being part of AIB?

DAPEEP has acquired considerable expertise through through its involvement in a growing team of highly skilled professionals, collaborating towards establishing a robust European GO market. Since its appointment as an IB is now encompassing all energy carriers (2022), DAPEEP aims to enhance its proficiency in the field.

DAPEEP expects a significant increase in the demand for EECS GOs issued for RES, contributing to the acceleration of higher integration of RES in the electricity market and assisting the transition towards a low-carbon economy.

DAPEEP has access to insights from fellow members' experiences, enablging the active contribution to shaping the European-level framework for energy tracking certificates. AlB safeguards a high quality of standards.

SCHEME MEMBER

Scope of national participation in EECS

Number of registered scheme participants 49

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	20,089	5,519.54
Electricity - wind	377	4,407.22
Electricity - hydro	151	3,381.5
Electricity - biomass	122	124.77
Electricity - other	34	458.55
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	21,226	
EECS electricity production from fossil sources	1,258	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	24,839	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company Magyar Energetikai és Közmű-szabályozási Hivatal



Bajcsy-Zsilinszky út 52 1054 Budapest Hungary https://www.mekh.hu/



We plan to follow the newest topics of debate in the field, such as energy gas/H2 GOs, storage, granularity.

Area of operation, information on the market, member of the AIB

Hungary Member since 2022.

Profile of the organisation

MEKH is the National Regulatory Authority and Issuing Body for electricity and gas, supervising sectors of strategic importance.

MEKH's responsibilities cover licensing, supervision, price regulation and tariff preparatory tasks, in the fields of electricity, natural gas, district heating as well as water utility supply, and pricing of public waste management services. As official statistical body, MEKH performs standard national energy statistics related tasks and complies with the data reporting obligations of various national and international bodies and organisations.

Activities, both within the AIB and associated activities

MEKH contributes to the residual mix calculations by sending data to AIB every year.

The first audit after joining the EECS Scheme was conducted during 2023. It was successful, and also brought relevant recommendations from the reviewers. At the end of the year, we prepared a questionnaire about the simplification of GOs for plants below 50 kVA, which we presented and analysed.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

MEKH aims to implement several new certificates. Starting a gas GO registry will be an important step. MEKH also plans to issue GOs for nuclear electricity and Production Devices under 50 kVA. For all new certificates the EECS gualification shall be reached.

What are the benefits of the company being part of AIB?

As a member of AIB, MEKH has the opportunity to get information from other members' experiences and to contribute to shaping the European level framework of energy tracking certificates. It is a great inspiration and motivation to contribute to the development of GOs in order to be an effective tool for the transformation of a more sustainable energy system in Europe.

Scope of national participation in EECS

Number of registered scheme participants	121
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	2,970	3,261
Electricity - wind	37	311
Electricity - hydro	13	53
Electricity - biomass	13	1,004
Electricity - other	34	30
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	5,183	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	-	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	

LANDSNET

Name	of the	compan
Lands	net	

Area of operation **Iceland**

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Gylfaflöt 9 Reykjavík 112 Iceland <u>https://landsnet.is</u>



GOs are playing an increasing role in Iceland's ambitious target of achieving carbon-neutrality by 2030.

Area of operation, information on the market, member of the AIB

Iceland. Member since 2011. Account Holders: 9 GOs issued annually: approximately 20 million

Profile of the organisation

Icelandic Transmission System Operator (TSO) and Issuing Body for GOs.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In April 2023, AIB issued a Rectification Order and suspended exports of Icelandic GOs, due to signals of possible double counting of energy attributes. The suspension was lifted from June 2nd onwards, on the condition that Landsnet would provide a report on the issues identified and the actions taken to remediate any non-compliance regarding the issuance of GOs in Iceland. Landsnet worked closely with the Icelandic Government and the Icelandic National Energy Authority on the issue. In November 2023, the Icelandic Energy Regulatory Authority issued a report stating that there is no evidence which indicates that double counting is taking place and that the disclosure of origin in Iceland is in line with EECS rules. However, the authority found that none of the power intensive users have GOs to fully back claims for the use of renewable energy in their marketing material, websites etc. The AIB board noted that Landsnet had complied with the requirements of the Rectification Order. In light of the report by the Icelandic Energy Regulatory Authority, Landsnet has been in contact with Icelandic authorities to discuss possible remedies, currently under consideration. Furthermore, incorporating RED II and RED III into the EEA Agreement are under consideration by the Icelandic authorities.

What are the benefits of the company being part of AIB?

"GOs are playing an increasing role in Iceland's ambitious target of achieving carbonneutrality by 2030 and complete independence from fossil-fuels by 2050. Landsnet is committed to protecting the integrity of the system and to be an enabler in supporting the transition to a sustainable energy future." Thorvaldur Jacobsen, EVP System Operations.

Links to relevant sections of our website https://landsnet.is/english

Landsnet Annual report: https://landsnet.is/english/finance-and-ir/financial-and-annual-reporting/

Scope of national participation in EECS

Number of registered scheme participants	9
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	-	-
Electricity - wind	2	3.6
Electricity - hydro	65	2,112
Electricity - biomass	12	753.9
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	19,696	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	19,723	
National electricity production from fossil sources	4.2	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company SEMO (Single Electricity Market Operator)

Area of operation Ireland and Northern Ireland

EirGrid plc, The Oval, 160 Shelbourne Road, Ballsbridge Dublin, D04 FW28 Ireland <u>www.sem-o.com</u>



AIB membership assures SEMO that the high standard of GO transactions taking place among members is met. It enables SEMO to adopt a reliable and efficient approach to GO transactions in Ireland and Europe through adherence to the EECS Rules.

Area of operation, information on the market, member of the AIB

Operates in Ireland and Northern Ireland Member since 2015 Account Holders: 79 GOs issued annually: 3 million (approximately)

Profile of the organisation

SEMO facilitates the operation and administration of the Single Electricity Market (SEM), the all-island wholesale electricity market operating in Ireland and Northern Ireland.

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 by the Commission for the Regulation of Utilities (CRU) in Ireland and the Utility Regulator (UR) in Northern Ireland.

SEMO is the Issuing Body for GOs in Ireland to generators of electricity from renewable sources. SEMO is responsible for operating the registry for issuance, transfer and cancellation of GOs.

SEMO is the Competent Body for Fuel Mix Disclosure (FMD) for Ireland and Northern Ireland, on behalf of the CRU and UR.

SEMO conducts the verification mechanism for the regulation of green source products in the electricity retail market in Ireland on behalf of the CRU.

Activities, both within the AIB and associated activities

SEMO was represented by Amber Ruat and Ronan Byrne and will continue to be represented by Ronan Byrne in General Meetings, the Electricity Scheme Group and the EECS Unit.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

As more renewable generation comes out of renewable support schemes, interest in the GO scheme is growing in Ireland, with a 17% increase in registered scheme participants in 2023 and a 22% increase in registered Production Devices.

REPORT FROM SCHEME MEMBER

Scope of national participation in EECS

Number of registered scheme participants	79
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	6	324
Electricity - wind	94	1,340.52
Electricity - hydro	41	974.59
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	2,480.47	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	14,346.41	
National electricity production from fossil sources	20,472.72	
National electricity production from nuclear reactions	-	
National gas production from RES	17,820.46	



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

Area of operation Italy



Viale Maresciallo Pilsudski 92 00197 Rome Italy <u>www.gse.it</u>



Joining the Association ensures the reliability and the efficiency in the transactions of GOs with the other AIB member states through the AIB Hub.

Area of operation, information on the market, member of the AIB

Italy Member since 2011. GOs issued: 78 MLN GOs (data updated 1st March 2024) Approximate number of Account Holders: 3,400

Profile of the organisation

GSE is a public company, promoting and supporting renewable energy sources. GSE is also in charge of promoting energy efficiency, RES for heating and cooling and biofuels for transport. The sole shareholder of GSE is the Ministry of Economy and Finance, which exercises its rights according to the strategic guidelines indicated by the Ministry for the Environment and Energy Security and according to the regulatory provisions by the Authority.

Activities, both within the AIB and associated activities

General Meeting: Emanuele Del Buono EECS, ESG: Floriana Furno; Gianmarco Piamonti GSG: Floriana Furno

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The Legislative Decree No.199 of November 2021 transposed the 2018/2001 Directive into the Italian legislative framework. GSE is implementing GOs in new sectors like: Gas, Heating and Cooling and Hydrogen.

From a technical point of view, in 2023 GSE developed a new Platform called "CERTIGY" with Unicorn Systems and it is working on implementing for all energy carriers.

What are the benefits of the company being part of AIB?

"Being part of the AIB means being part of European network that works towards a common goal ensuring the respect of the requirements of the EU directives. Moreover, participating actively at the meetings and working groups organised by AIB is a valuable opportunity to share knowledge, best practices, point of views and experiences with members from other countries especially with regard to the new sectors foreseen by the Directive (EU) 2018/2001."

Floriana Furno, member of EECS Unit and GSG.

Links to relevant sections of our website Transactions (plus4u.net)

Scope of national participation in EECS

Number of registered scheme participants	4,249
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	4,784	7,476
Electricity - wind	710	10,926
Electricity - hydro	1,105	16,325
Electricity - biomass	147	4,660
Electricity - other	34	912
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	72,504	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	112,668	
National electricity production from fossil sources	142,170	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company AS Augstsprieguma tīkls (AST)

Area of operation Latvia



86 Darzciema str Riga, LV-1073 Latvia <u>https://www.ast.lv/en</u>



The increase in market participants and transaction volumes demonstrates the reliability and efficiency of the system set up by AST and AIB.

Area of operation, information on the market, member of the AIB

Latvia Member since December 2020. 231 Account Holders and approximately 5.4 million GOs issued in 2023.

Profile of the organisation

Independent Transmission System Operator engaged in providing electrical power transmission network services and ensuring the balancing and stability.

Activities, both within the AIB and associated activities

Aigars Sīlis : ISU and Board Member

Kalvis Ertmanis, Asnāte Kalniņa and Kristīne Ļeonova with Aigars Sīlis: General Meeting, ESG, EECS Unit and ISU.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In 2024, the next major step in the management of the Guarantees of Origin (GO) system developing the functionality of the existing GO registry and the management of the system as a whole. Account Holders have been surveyed for their experiences and suggestions on the use of the GO system, on the basis of which, and with the transition to the current v80 standard, there are plans to update the Domain Protocol to allow Account Holders to receive certificates for electricity generated and used for on-site consumption and GOs for storage output.

What are the benefits of the company being part of AIB?

AST has been working closely with AIB for more than four years to manage and develop the system of certificates of origin for electricity in Latvia. Participants in the GO system have access to the expertise and practical experience of AIB members. This is useful at a time when the share of renewable energy sources is growing rapidly, and the public is being encouraged to be more aware of their electricity consumption.

"The increase in market participants and transaction volumes demonstrates the reliability and efficiency of the system set up by AST and AIB. These indicators confirm the wisdom of AST's decision to partner with AIB, which has proven to be a reliable collaborator in the field of electricity origin verification." Aigars Sīlis Head of Market Surveillance and Data Analysis Group of AST and AIB Board member.

Links to relevant sections of our website

Statistics on national production are available here: <u>https://www.ast.lv/en/electricity-market-review?year=2023&month=13</u> Statistics on national GO activity are available here: <u>https://grex.grexel.com/en/public/reports/transactionstatistics</u> And here: <u>https://www.ast.lv/en/content/guarantees-origin</u>

Scope of national participation in EECS

Number of registered scheme participants

231

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	25	57.62
Electricity - wind	42	119.20
Electricity - hydro	78	1,578.44
Electricity - biomass	77	135.21
Electricity - other	25	875.08
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	3,900	
EECS electricity production from fossil sources	484	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	4,720	
National electricity production from fossil sources	1,363	
National electricity production from nuclear reactions	-	
National gas production from RES	-	

REPORT FROM SCHEME MEMBER

CONEXUS BALTIC GRID

Name of the company Conexus Baltic Grid AS (Conexus)



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Stigu iela 14 Riga, 1084 Latvia <u>https://www.conexus.lv/en</u>



Conexus gains highly valuable access to a network of experts and other Issuing Bodies, fostering collaboration and harmonization of the gas GO system.

Area of operation, information on the market, member of the AIB

Member since 2022. Gas Scheme Group member since December 2023. Expecting the first operational biomethane producers and the first EECS GOs in 2024.

Profile of the organisation

Independent unified natural gas Transmission and Storage System Operator. Conexus is the governmentally appointed Issuing Body for biogas, biomethane or synthesis gas since the 1st of July 2023, and has been a full AIB Gas Scheme Group member since December 2023. Looking forward to the first GO registry Account Holders—biomethane producers and traders, being registered in the Conexus registry (provided by Finnish company "Grexel Systems Oy") in 2024. Annual assessment report is on the <u>website</u>.

Activities, both within the AIB and associated activities

Ance Ansone and Jānis Eisaks- General Meeting, GSG and EECS Unit Ance Ansone- Task Force- EECS products (Chair)

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Conexus became GO IB for gas; implementing a GO registry and creating national GO rules to transpose the EECS Rules.

Conexus will continue to develop its GO system to adapt to new market needs and concepts and will facilitate cross-border trade and cooperation in the European gas market. This is also in line with the regional cooperation objectives to have harmonized approaches for renewable gas development and promoting renewable and low-carbon energy sources, while ensuring security of supply.

What are the benefits of the company being part of AIB?

Conexus gains highly valuable access to a network of experts and other Issuing Bodies, fostering collaboration and harmonization of the gas GO system. It is crucial for the development of renewable gas. There are opportunities for strategic partnerships and staying in line with the latest developments in energy tracking and certification. Given Latvia's pioneering role as one of the first countries to become a full Gas Scheme Group member, we urge others to follow with system implementation. This exciting market development will ensure a reliable and efficient gas GO system across Europe.

Links to relevant sections of our website

For more information, please visit https://www.conexus.lv/guarantees-origin_





Name of the company Litgrid AB

Area of operation Lithuania

K. G. E. Manerheimo g. 8 Vilnius, 05131 Lithuania <u>www.litgrid.eu</u>





Being part of the AIB allows us to discuss the relevant changes in EU legislation and to respond to market demands by initiating changes.

Area of operation, information on the market, member of the AIB

Member of the AIB since 2018 (import only). Full Electricity Scheme Membership since the 1st of January 2021.

In 2023, the number of registered scheme participants grew significantly. The total EECS production in 2023 is 2510,863 GWh compared to 1027,058 GWh in 2022.

Profile of the organisation

Litgrid AB, the electricity Transmission System Operator of Lithuania, maintains the stable operation of the national power system, controls electricity flows and enables competition in an open, domestic electricity market. Litgrid was also appointed as the Issuing Body for electricity Guarantees of Origin (GOs).

Activities, both within the AIB and associated activities

Ricardas Ternovojus – representative at the GM, EECS Unit and ESG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The audit of Litgrid AB and periodic review of the Domain Protocol was completed including an on-site visit on the 25th of October 2023.

The new features in the Lithuanian domain include the issuance of EECS for storage devices and the facilitation of energy carrier conversion.

What are the benefits of the company being part of AIB?

Litgrid AB, as Issuing Body, is responsible for providing a platform and the administration of Guarantees of Origin. Participation within the AIB hub ensures secure and efficient transactions between producers and suppliers.

Scope of national participation in EECS

Number of registered scheme participants	175
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	20	78.65
Electricity - wind	117	1,195.26
Electricity - hydro	67	1,025.03
Electricity - biomass	10	122.70
Electricity - other	18	20.74
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	2,510.86	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	3,828.63	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company Institut Luxembourgeois de Régulation (ILR)

Area of operation **Luxembourg**



17, rue du Fossé L-2922 Luxembourg www.ilr.lu



ILR decided to join the AIB in 2009 and made an online registry available for registration of PDs and handling of certificates.

Area of operation, information on the market, member of the AIB

Luxembourg (Registry operational since 1 January 2010). Member of the AIB since 2010.

Profile of the organisation

ILR is an independent public authority in charge of the regulation of electricity and natural gas markets, as well as telecommunications, railways, airport taxes, postal services, radiospectrum and networks' information system security.

ILR is the national Issuing Body for Renewable Electricity Guarantees of Origin (RES GOs), for CHP GOs, for gas GOs, and for heating and cooling GOs and it is also responsible for electricity disclosure.

Annual reports: electricity and gas.

Activities, both within the AIB and associated activities

Pamela Boeri and Claude Hornick participate in the EECSU, ESG, and GSG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

ILR issues GOs to certify the share of electricity produced from renewable energy sources and shall issue CHP GOs upon request of an electricity producer using CHP technology.

In 2023, 3.8 million GOs were cancelled in the registry, representing 60% of total electricity consumed.

ILR was appointed as IB for gas, heating and cooling GOs.

What are the benefits of the company being part of AIB?

"Producers can value their renewable generation attributes; and suppliers can improve the reliability and credibility of their electricity products" says Claude Hornick. In the second half of 2018, ILR started issuing GOs for electricity produced from RES from PDs currently receiving production support in Luxembourg. Those GOs are periodically auctioned on the ILR auctioning platform: <u>https://goauction.ilr.lu/.</u> Auction revenues are used to decrease the cost of the RES public support scheme for electricity consumers. The auctions are open to any Account Holder within an EECS registry. More information on the ILR website: <u>https://goauction.ilr.lu/.</u>

Link to relevant section of our website

More information for account holders <u>available here</u> for public details of the GO registry; and <u>here</u> for description of the GO system.

Scope of national participation in EECS

Number of registered scheme participants	10
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	30	32.32
Electricity - wind	20	201.85
Electricity - hydro	3	28.25
Electricity - biomass	5	51.6
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	685.03	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	1,060	
National electricity production from fossil sources	148	
National electricity production from nuclear reactions	-	
National gas production from RES	48	

vertiCer

Name of the company VertiCer B.V.



Lange Amerikaweg 67 7332 BP Apeldoorn Netherlands <u>www.verticer.eu/en</u>



VertiCer applauds such harmonisation efforts and aims to contribute to the further integration of GO schemes for electricity and gas.

Area of operation, information on the market, member of the AIB

Netherlands

Member of Electricity Scheme since 2001.

- GOs issued in 2023: • renewable + 42 million
- non-renewable 51 million

Profile of the organisation

VertiCer is the Dutch Issuing Body of Guarantees of Origin for electricity, renewable gas (including hydrogen), and heating and cooling. It is a subsidiary of TenneT and Gasunie, the Dutch TSOs for electricity and gas, respectively.

Activities, both within the AIB and associated activities

llona Bruens: Board Treasurer Jerney Lubbers: ISU Remco van Stein Callenfels: EECSU, ESG

News and perspectives regarding the national IB and the national framework for energy tracking certificates

2023 was VertiCer's first year of operation, having formed on the 1st of January from the merger of Vertogas and CertiQ. As such, we have put our focus towards harmonising our business processes and automation. This has been quite fruitful; for example: in 2023 we issued the first Dutch Guarantees of Origin for hydrogen produced from renewable energy sources.

What are the benefits of the company being part of AIB?

Throughout its history, the AIB has strived to harmonise the GO scheme. AIB helps its members establish common ground, enabling registries to communicate and exchange GOs. VertiCer applauds such harmonisation efforts and aims to contribute to the further integration of GO schemes for electricity and gas.

Link to relevant section of our website

More detailed statistics on renewable energy in the Netherlands are published annually by Statistics Netherlands, see <u>www.cbs.nl/en-gb</u>

Scope of national participation in EECS

Number of registered scheme participants -

Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	34,846	12,133
Electricity - wind	1,786	11,378
Electricity - hydro	22	38
Electricity - biomass	248	7,135
Electricity - other	652	13,798
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	45,926	
EECS electricity production from fossil sources	42,615	
EECS electricity production from nuclear reactions	3,767	
EECS gas production from RES	-	
National electricity production from RES		
National electricity production from fossil sources	*	
National electricity production from nuclear reactions		
National gas production from RES	-	

* Published annually by Statistics Netherlands in their autumn publication 'Hernieuwbare energie in Nederland' (only in Dutch).

Website statistics Netherlands: <u>www.cbs.nl/en.gb</u>

Hernieuwbare energie in Nederland 2022: <u>https://www.cbs.nl/nl-nl/longread/</u> rapportages/2023/hernieuwbare-energie-in-nederland-2022

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Statnett

Name of the company Statnett SF

Area of operation **Norway**



Nydalen Allé 33, PB 4904 Nydalen 0423 Oslo Norway <u>www.statnett.no</u>



The new NECS registry has been fully operational for more than three years and we are still experiencing high and continuously increasing activity.

Area of operation, information on the market, member of the AIB

Norway

Member since 2001.

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

The energy production in 2023 was 154 TWh, and it issued approximately 148 TWh of EECS GOs to RES-E producers, adding up to 96% of the annual energy production.

Profile of the organisation

Statnett SF is the TSO, and the national appointed Issuing Body for the electricity Guarantees of Origin scheme.

Activities, both within the AIB and associated activities

- Ann-Christin Austang- Vice Chair/Vice Treasurer of the Board (May 2023) and representative in the EECS unit and the ESG
- Kristian Rost Hagen- representative in the ISU

News and perspectives regarding the national IB and the national framework for energy tracking certificates

We are focusing on continuous development and improved functionality, as well as preparing for upcoming changes. We have successfully implemented the new V80 format, for effective AIB hub transfers.

What are the benefits of the company being part of AIB?

Being part of the AIB provides the benefit of building a European network with colleagues working within the same field, aiming towards the future by setting common rules and guidelines. By having a common, functional and secure hub for transferring Guarantees of Origin, certificates can change owners in a safe and efficient manner. In addition, the collaboration with other members provides synergies and input on how to run and develop NECS, the Norwegian registry.

AlB is a cornerstone for the GO system in Europe and essensial to uniting the Issuing Bodies and supporting the energy transition through a trustworthy tracking system for renewable energy.

Link to relevant section of our website

Annual/current statistics: <u>NECS- Transactions (statnett.no)</u> Account holders: <u>NECS- Members (statnett.no)</u> Registered Production Devices: <u>NECS- Power Plants (statnett.no)</u>

Scope of national participation in EECS

Number of registered scheme participants	146
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	28	11
Electricity - wind	64	5,081
Electricity - hydro	1,438	33,851
Electricity - biomass	5	54
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	148,745	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	-	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



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

Area of operation **Portugal**



Avenida dos Estados Unidos, 55 1749-061 Lisboa Portugal <u>www.ren.pt</u>



We can provide Account Holders in Portugal the tools so that they can efficiently trade GOs between Members States, through the AIB Hub.

Area of operation, information on the market, member of the AIB

Portugal (Mainland) Member of the ESG since 2020. Observer of the GSG since January of 2022. Electricity consumption: 50,7 TWh (61% was guaranteed from renewable sources) Account Holders: 400 Production Devices: 850 Amount of GOs issued: 32M.

Profile of the organisation

REN is the Authorised Issuing Body and Registry Operator for GOs for cogeneration, heating and cooling energy, electricity from renewable sources and renewable and low-carbon gases.

The work unit is called EEGO-"Entidade Emissora de Garantias de Origem", the Issuing Body for Guarantees of Origin. REN also operates as a Production Auditor.

Activities, both within the AIB and associated activities

Isabel Fernandes – General Meetings

Miguel Jerónimo – ESG, EECS, ISU; Alternate for the General Meeting and GSG; Board Representative (CPAU) Joana Pereira – GSG; Alternate for the EECS and CPAU

Catarina Silva – Alternate for the ESG and ISU

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The GOs of electricity produced by renewable sources that benefit from an investment or price support mechanism are sold via auctions. In 2023, six auctions were held selling a total volume of 19.8 M GOs, generating a total revenue of €105.3M for domestic consumers.

After a public consultation, the EEGO Manual of Procedures was approved and was published the scope of the legislative context extends EEGO's activity to the issuance of GOs for the production of gases from renewable sources and low carbon gases. It also contemplates the need for integration with the electrical energy labeling rules published by the Portuguese regulator (ERSE) and AIB systems.

What are the benefits of the company being part of AIB?

In EEGO we believe AIB's greatest asset to be the sharing of knowledge and experiences between people in different geographies. "AIB is the gateway to the European GO market for renewable energy producers in Portugal." Miguel Jerónimo - EEGO representative and Board Member

Scope of national participation in EECS

Number of registered scheme participants	417
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	262	2,128
Electricity - wind	281	6,148
Electricity - hydro	154	8,537
Electricity - biomass	54	360
Electricity - other	112	1,080
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	30,639	
EECS electricity production from fossil sources	1,494	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	31,189	
National electricity production from fossil sources	10,031	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company Joint stock company, Elektromreža Srbije, Belgrade

Area of operation Republic of Serbia



www.ems.rs



The main benefit is that there are more potential participants who are willing to participate in GO trading.

Area of operation, information on the market, member of the AIB

Serbia Member since 2019.

Profile of the organisation

EMS JSC Belgrade is the Transmission System Operator (TSO), established in 2005. The company is owned by the state and it operates and maintains the transmission system network in Serbia.

According to primary and secondary legislation for the certificate scheme in Serbia, EMS JSC Belgrade is recognised as the Issuing Body for Guarantees of Origin from renewable sources, Registry Operator and Measurement Body for the Production Devices connected to the transmission grid, and the responsible party for calculating the Serbian national residual mix.

Activities, both within the AIB and associated activities

Representatives of EMS JSC Belgrade regularly attend the General Meetings of the AIB as well as the EECS and Electricity Scheme working group meetings. General Meeting: Kovica Bibić ESG and EECS Unit: Kovica Bibić

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The audit for EMS was successfully completed in January 2023. At the ESG meeting held in January 2023, AIB members approved a new Domain Protocol for Serbia. In 2023, JSC EMS Belgrade will continue with the adoption of the new Domain Protocol through the JSC EMS authorities.

Throughout 2023, the first export of GOs began. Also, when the secondary legislation of the Law on Renewable Energy Sources is completed, JSC EMS Belgrade will start issuing HEC GOs together with GOs from renewable sources.

What are the benefits of the company being part of AIB?

We have received many questions from parties about export and import of GOs. This was not the case when we only had national GOs and when we were not part of AIB. In general, being part of AIB will boost our GO market which will bring more traders but also more producers.

Links to relevant sections of our website

General info: <u>https://ems.rs/en/guarantee-of-origin-2/</u> Account Holder list and list of Production Devices: <u>https://ems.rs/en/account-holder-list-and-list-of-production-devices/</u>

Scope of national participation in EECS

Number of registered scheme participants	44
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	6	1
Electricity - wind	-	-
Electricity - hydro	28	2,218
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	11,201	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	13,383	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	



Name of the company **OKTE, a.s.**

Area of operation **Slovakia**



Mlynské nivy 48 82109 Bratislava Slovakia <u>https://www.okte.sk/sk/</u>



OKTE undertook an overhaul of its registry system to prepare for issuing a broad range of GOs, specifically nuclear GOs and GOs for own consumption.

Area of operation, information on the market, member of the AIB

Slovakia Full member since 2020 | Account Holders: 67 Production Devices: 66 | GOs issued: 8,490 GWh

Profile of the organisation

OKTE, a.s. is authorised by law to perform the activities of the short-term electricity Market Operator in the Slovak Republic. It also has the role of Issuing Body for Guarantees of Origin.

From 2011, the portfolio of services offered by the company has been gradually extended. Currently, OKTE, a.s. is an important player in the Slovak electricity market responsible for:

- Organisation and settlement of the short-term cross-border electricity market
- Metering data
- Imbalance and balancing energy settlement
- Central invoicing
- Support scheme for electricity from RES and CHP including feed-in-tariff and feed-in-premium
- Administration, transfers and market organisation for GOs for electricity

Activities, both within the AIB and associated activities

Ondrej Kulich and Matúš Mňahončák- AIB General Meetings, ESG, ISU and EECS unit

News and perspectives regarding the national IB and the national framework for energy tracking certificates

In 2023, OKTE finished updated the registry for the new v80 scheme. After the amendment of the RES law, OKTE undertook an overhaul of its registry system to prepare for issuing a broad range of GOs, specifically nuclear GOs and GOs for own consumption within the Production Device. This triggered an update of the Domain Protocol (September 2023). OKTE is in the process of updating its contracts and operational order to create an opportunity for Traders and Brokers to join the registry.

What are the benefits of the company being part of AIB?

Account Holders can efficiently trade GOs with all AIB members through the AIB Hub. It also gives OKTE the opportunity to collaborate with other competent bodies across Europe, participate in the broader discussions on GOs and contribute to the maintenance and development of the EECS rules.

"To be a member has accelerated the development of the GO awareness in Slovakia and the Account Holders are satisfied with the ease of use of the registry". Ondrej Kulich, Specialist for Guarantees of Origin at OKTE.

Scope of national participation in EECS

Number of registered scheme participants	67
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	22	6
Electricity - wind	2	3
Electricity - hydro	37	1,558
Electricity - biomass	3	169
Electricity - other	2	2,475
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	4,153	
EECS electricity production from fossil sources	0	
EECS electricity production from nuclear reactions	4,338	
EECS gas production from RES	-	
National electricity production from RES	7,104	
National electricity production from fossil sources	4,549	
National electricity production from nuclear reactions	18,344	
National gas production from RES	-	



Name of the company **Agencija za energijo**

Area of operation **Slovenia**



Strossmayerjeva ulica 30 2000 Maribor Slovenia <u>www.agen-rs.si</u>



Membership provides us with an opportunity to actively participate in creating new European standards for certifying electricity and other energies.

Area of operation, information on the market, member of the AIB

Slovenia

Member since 2004

EECS GOs issued:

- 4,574.902 EECS RES (GWh)
 2,737.492 EECS fossil (GWh)
- 5,323.359 EECS nuclear (GWh)

Registered Account Holders: approximately 1,530

Profile of the organisation

National Regulatory Authority for electricity, gas and district heating and Issuing Body of GOs for renewable electricity, non-renewable electricity and electricity from high efficiency CHP. Competent Authority for issuing renewable, non-renewable and CHP production declarations, required to enter the support scheme. Competent Authority for the disclosure scheme. <u>Annual reports on the energy sector in Slovenia</u> <u>Energy Agency reports (in Slovene)</u>

Activities, both within the AIB and associated activities

Dejan Tasic - Representative at the GM, EECS Unit and ESG.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The Energy Agency intends to remain an AIB member to offer producers and traders the opportunity trade internationally.

It cooperates with stakeholders, including the Ministry responsible for energy and for national GO legislation.

The Energy Agency will follow the development in of European energy legislation and will take on responsibilities as per national implementation of this legislation.

In accordance with the Decree on support for electricity generated from renewable energy sources and high-efficiency cogeneration of heat and electricity, the Energy Agency performed two tendering procedures for the selection of new entrants to the national support scheme in 2023.

What are the benefits of the company being part of AIB?

The Energy Agency ensures the necessary conditions for market participants to benefit from the electricity market which allows a competitive, secure and environmentally sustainable market for all market participants, including customers, traders and suppliers. Customers can select between various electricity products, the origin of which is guaranteed by reliable instruments – EECS GOs.

Scope of national participation in EECS

Number of registered scheme participants	5
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	1,126	107
Electricity - wind	2	3
Electricity - hydro	187	1,071
Electricity - biomass	3	1
Electricity - biogas	11	10
CHP	82	31
Fossil	4	928
Nuclear	1	696
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	4,575	
EECS electricity production from fossil sources	2,737	
EECS electricity production from nuclear reactions	5,323	
EECS gas production from RES	-	
National electricity production from RES	5,965	
National electricity production from fossil sources	3,121	
National electricity production from nuclear reactions	5,323	
National gas production from RES	-	



Name of the company **CNMC**

Area of operation **Spain**

Alcala, 47 Madrid 28014 Spain www.cnmc.es



Interactions have begun between the Electricity Guarantee of Origin System and the Renewable Gas Guarantee of Origin System in the electricity injected in the electrolizers

Area of operation, information on the market, member of the AIB

Spain (Electricity). More than 65,000 Account Holders. AIB Member since 2016.

Profile of the organisation

CNMC is the Spanish Regulator for the energy sector, as well as telecoms, audiovisual media, transport and postal sectors, and the Spanish Competition Authority. CNMC is also the Issuing Body for electricity and Competent Body for the disclosure scheme for electricity in Spain.

Strategic Plan: https://www.cnmc.es/sobre-la-cnmc/plan-estrategico

Action Plan: https://www.cnmc.es/sobre-la-cnmc/plan-de-actuacion

Activities, both within the AIB and associated activities

CNMC participates in AIB meetings and is usually represented by Jose Miguel Unsion. CNMC is also part of Regulator's Associations including CEER, MEDREG and ARIAE.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Interaction between the Electricity Guarantee of Origin System and the Renewable Gas Guarantee of Origin System in the electricity injected in the electrolizers in order to get renewable Hydrogen.

What are the benefits of the company being part of AIB?

"Another benefit is to enhance the management system for exports and imports of Guarantees of Origin, using the AIB platform or Hub". Fernando Hernandez, Former CNMC Director General for Energy

Scope of national participation in EECS

Number of registered scheme participants	66,744
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	62,188	24,447
Electricity - wind	1,665	30,017
Electricity - hydro	1,856	19,861
Electricity - biomass	248	1,224
Electricity - other	939	5,500
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	40,770	
EECS electricity production from fossil sources	0	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	131,733	
National electricity production from fossil sources	66,379	
National electricity production from nuclear reactions	54,276	
National gas production from RES	-	



Name of the company Enagas GTS

Area of operation Spain (Gas)



Paseo de los Olmos 28005 Madrid Spain <u>https://www.gdogas.es/en/public-portal/home</u>



Enagás GTS became a Gas Scheme Member in December 2023, by the end of the year the Registry included 13 Production Facilities.

Area of operation, information on the market, member of the AIB

Spain Member- Gas Scheme Group since 2023. Account Holders: 129 | Production Devices: 13 | Issued GOs: 95,148

Profile of the organisation

Technical Manager of the gas system and Issuing Body for GOs for renewable gases, including hydrogen and Competent Body for the disclosure scheme. Link to <u>Annual Report</u>.

Activities, both within the AIB and associated activities

Representative at the General Meeting, GSG and EECSU: Carmen Rodríguez Representative at ISU: Cecilia Pérez

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The gas registry came to life in January 2023; the first Production Device (biomethane plant) was registered in May. In August, a proposal for modifying the Management Procedure of the GO System for renewable gases was under public consultation; GOs shall include information regarding sustainability criteria and GHG emissions.

In September, guidelines were published for emissions accounting; requiring the cancellation of GOs as proof of consumption of renewable gases for facilities subject to the EU ETS system from January 2024.

The recommendation had a direct impact on the paper and food industry and fostered the registration of eight biogas self-consumption facilities in December. The implementation of the new features of the GO System on sustainability and emissions is expected in 2024, once the Ministerial Order is published.

What are the benefits of the company being part of AIB?

"Reaching the decarbonization targets requires the development of renewable gases to their maximum potential and certification plays a key role in their promotion. The already complex certification framework for renewable gases is evolving, not necessarily for the better. The integration between the GO Registries with the UDB presents a major challenge for Issuing Bodies. AIB has the experience, the knowledge and the credibility to claim a strong voice in this discussion."

María Junco (Enagás GTS General Manager)

Links to relevant sections of our website

www.gdogas.es

Scope of national participation in EECS

Number of registered scheme participants 129

Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	-	-
Electricity - wind	-	-
Electricity - hydro	-	-
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	2	40.6
Gas - hydrogen from RES	1	2.5
Gas - other	10	89.3

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	-	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	15*	
National electricity production from RES	-	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	240.8	

* GOs were issued for 112 GWh of renewable gas production, but only 15 GWh of these GOs (December's production) are EECS certificates.



Name of the company The Swedish Energy Agency

Area of operation **Sweden**



Gredbyvägen 10 632 21 Eskilstuna Sweden www.energimyndigheten.se/en/



The Swedish certificate system Cesar has been updated.

Area of operation, information on the market, member of the AIB

Sweden Member since June 2017. EECS GOs issued: approximately 94 million EECS Account Holders: 607

Profile of the organisation

Government Agency Competent Body and Issuing Body for Guarantees of Origin (GOs) for electricity

Activities, both within the AIB and associated activities

- Eva Nordlander: GM representative, member of the EECS unit, ESG Chair
- Nina Emanuelsson: Member of the ISU
- Johan Forsman: GSG member
- Johan Nilsson: Member of the EECS unit, ESG and GM representative
- Elin Alexandersson: Member of the ISU

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The Swedish Domain Protocol went through a periodic member audit during the year. The process is expected to be finalised at the beginning of 2024.

As from 1st November, Production Devices are obliged to measure the feed in of electricity every 15 minutes. It is still possible to measure hourly until the end of 2024, if metering data is reported as 15 minute values.

The Swedish certificate system Cesar has been updated; some functions are still under development. Cesar complies with the new V80 protocol.

What are the benefits of the company being part of AIB?

AIB, and the AIB Hub, provide for an efficient and reliable transfer of Guarantees of Origin between its members. The collaboration with other AIB members facing the same challenges is an important part of our membership. This helps to develop good practices and gain experience from lessons learned which strengthens the confidence and consistency in the European Energy Certificate System.

Links to relevant sections of our website

English website on GOs: Guarantees of origin (energimyndigheten.se)

Scope of national participation in EECS

Number of registered scheme participants	607
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Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	5	8
Electricity - wind	2,093	13,180
Electricity - hydro	369	12,507
Electricity - biomass	12	890
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	93,694	
EECS electricity production from fossil sources	290	
EECS electricity production from nuclear reactions	14,322	
EECS gas production from RES	-	
National electricity production from RES	116,000*	
National electricity production from fossil sources	2,064**	
National electricity production from nuclear reactions	47,000***	
National gas production from RES	-	

* source: https://www.energimyndigheten.se/nyhetsarkiv/2024/

** source: https://www.statistikdatabasen.scb.se/

*** source: https://www.energimyndigheten.se/nyhetsarkiv/2024/

pronovo

Name of the company **Pronovo AG**

Area of operation **Switzerland**

Dammstrasse 3 5070 Frick Switzerland www.pronovo.ch



With the implementation of an integrated GO System in Switzerland, Pronovo will benefit from the AIB's EECS Scheme extension.

Area of operation, information on the market, member of the AIB

Switzerland Member since 2002. Active users: 3,090 Production Devices registered: 199,421 Total installed capacity: 25,708 MW GOs issued (renewable and non-renewable electricity): 64.2 TWh

Profile of the organisation

Pronovo is a 100% subsidiary company of Swissgrid, which is the Transmission System Operator (TSO) of Switzerland. Pronovo is responsible for the issuing of Guarantees of Origin for electricity and the financial support of renewable energy production in Switzerland.

Activities, both within the AIB and associated activities

- Lukas Groebke: Board (Chair), GSG
- Andrea Miksch: ESG, EECSU
- Milada Mehinovic: CPAU (Chair)
- Sabrina Philipp: ISU

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Pronovo is currently in the realisation phase of a project to replace its current GO registry. The new system, which is based on the G-REX product provided by Grexel, is planned to be operational by the end of 2024.

In addition, Pronovo has been mandated to be the Issuing Body for renewable liquid and gaseous energy carriers as of 2025. The GO system for renewable fuels and combustibles is based on the same product, which was procured for the GO registry for electricity. The goal is to have one fully integrated GO registry for all energy carriers in Switzerland by the beginning of the 2025.

What are the benefits of the company being part of AIB?

"The AIB's extension of the EECS Scheme to other energy sources is the success factor for a Pan-European harmonisation of standards and infrastructure for Guarantees of Origin for all energy sources.

With the implementation of an integrated GO System in Switzerland, Pronovo will benefit from the AIB's EECS Scheme extension and will be able to issue and provide GOs which are compatible for trading in the European market." Lukas Groebke, Board Member, Pronovo

Links to relevant sections of our website

https://pronovo.ch/de/services/berichte/

Scope of national participation in EECS

Number of registered scheme participants 3,090

Registered EECS production devices and total capacity installed per energy carrier and type

Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	197,185	4,566
Electricity - wind	66	88
Electricity - hydro	1,497	16,206
Electricity - biomass	435	307
Electricity - other	238	4,541
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	40,626	
EECS electricity production from fossil sources	210	
EECS electricity production from nuclear reactions	23,345	
EECS gas production from RES	-	
National electricity production from RES	40,626	
National electricity production from fossil sources	210	
National electricity production from nuclear reactions	23,345	
National gas production from RES	-	

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Name of the company Energy Regulatory Authority

Area of operation **Albania**

Viktor Eftimiu Tirana, 1023 Albania <u>www.ere.gov.al</u>



We believe the participation of ERE in AIB and its Hub will give more added value to the GOs of Albanian producers.

Area of operation, information on the market, member of the AIB

Albania Member of the AIB since January 2024.

Profile of the organisation

Electricity and natural gas Regulator, Issuing Body and Competent Authority for Guarantees of Origin for renewable energy sources. Link to the Annual Report

Activities, both within the AIB and associated activities

GM representative – Elton Radheshi ESG and EECSU representative – Gledis Kalemi ISU representative – Jurgen Myrtaj CPAU representative – Erato Sinani

News and perspectives regarding the national IB and the national framework for energy tracking certificates

ERE is in the process of approving the new regulations on the issuing, transferring, disclosure and withdrawal/cancellation of Guarantees of Origins for the electricity produced from renewable sources. After joining AIB, we are looking forward to completing the process of full membership of the Electricity Scheme Group.

What are the benefits of the company being part of AIB?

We believe the participation of ERE in AIB and its Hub will give more added value to the GOs of Albanian producers and will have also an impact on the overall process in the Southeastern Europeregion, being that almost all generation in Albania is liable to GOs. Elton B. Radheshi – Secretary General ERE



Name of the company Sustainable Energy Development Agency

Area of operation **Bulgaria**

Serdika Sofia, 1000

Bulgaria https://www.seea.government.bg/bg/



The partnership with AIB increases the international prestige of SEDA.

Area of operation, information on the market, member of the AIB

Bulgaria Approximate number of GOs issued: 7.6 million Account Holders: 5,800 Member of the AIB since 2023

Profile of the organisation

SEDA is the Issuing Body for Guarantees of Origin (GOs) for electricity in Bulgaria. SEDA is also the administrator of the GO Registry. SEDA's functions are defined by The Renewable Energy Sources Act and The Energy Efficiency Act. SEDA is responsible for the implementation of the state policy on increasing energy efficiency, as well as promoting the production and consumption of electricity, heat and cooling energy from renewable sources. Data available <u>here</u>.

Activities, both within the AIB and associated activities

SEDA is following all AIB projects and initiatives while also being on its way to becoming a member of the ESG and other relevant communities.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

SEDA aims to connect to the AIB Hub and trade with other AIB member states. Bulgaria is making consistent efforts to liberalise the electricity market and support GO trade activities. The GO trading mechanism is expected to start operating on the Bulgarian Stock Exchange.

What are the benefits of the company being part of AIB?

The partnership with AIB increases the international prestige of SEDA and gives us the opportunity to study and apply the best practices related to the issuance and transfer of GOs. The AIB Hub is a reliable tool for the secure exchange of GOs, which would provide national producers with access to new partners.

APPLIC

REPORT FROM APPLICANT

Amber Grid

Name of the company AB Amber Grid

Area of operation **Lithuania**



Laisvės ave. 10 04215 Vilnius Lithuania <u>https://ambergrid.lt/en</u>



Connection to the AIB Hub is planned to ensure cross-border trade for market participants.

Area of operation, information on the market, member of the AIB Lithuania

In July 2023 the first biomethane producer started operating in Lithuania. During 2023 GOs were issued for more than 47 GWh of locally produced biomethane. In 2023, the import of GOs amounted to more than 40 GWh and was consumed by the transport sector in Lithuania.

AB Amber Grid has been an AIB Gas Scheme Observer since 2022.

Profile of the organisation

AB Amber Grid is the Gas Transmission System Operator in Lithuania. It is the designated Issuing Body for issuing GOs from renewable gas in Lithuania. Annual reports can be found at the following link: www.ambergrid.lt/en

Activities, both within the AIB and associated activities

Lina Rudzianskiene - Representative in the Gas Scheme Group.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

The new registry for administering GOs became operational in 2024. Connection to the AIB Hub is planned, to ensure cross-border trade for market participants.

Hydrogen GOs will be integrated into the existing system in Lithuania.

What are the benefits of the company being part of AIB?

AIB works towards the establishment of a trustworthy GO system in Europe. It is of key importance to have a platform that allows national Issuing Bodies to cooperate and exchange information. Being a part of this Association provides valuable knowledge and information for recent developments in biomethane markets, policy and legislative updates, etc.

Link to relevant section of our website

https://ambergrid.lt/en/green-gas/guarantees-of-origin/626





Name of the company Montenegrin electricity market operator (COTEE)

Area of operation **Montenegro**



Bulevar Svetog Petra Cetinjskog 130 81000 Podgorica Montenegro www.cotee.me



The benefit is that our company is a member of such a good organization that can teach us best practices related to GOs.

Area of operation, information on the market, member of the AIB

The Market Operator is a legal energy entity, responsible for organizing and managing the electricity market and renewable energy sources (including feed-in tariffs) and administering the system for issuing Guarantees of Origin for renewable energy in Montenegro. We issue approximately 2,000,000 GOs annually and have 27 Account Holders. We have been a member of AIB since 2021.

Profile of the organisation

Electricity Market Operator and Issuing Body for renewable electricity Guarantees of Origin in Montenegro.

Activities, both within the AIB and associated activities

- Formal member representative in the General Meeting: Dusan Vucic; Alternate: Branislav Banovic
- Representative in the Electricity Scheme Group: Danilo Simovic; Alternate: Branislav Banovic
- Representative in the EECS unit: Dusan Vucic; Alternate: Danilo Simovic
- Representative in the Information Systems Unit: Ana Zarkovic;
- Representative in the CPAU: Branislav Banovic; Alternate: Danilo Simovic

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Since December 2021, COTEE has been a member of the regional system of GOs supported by the Energy Community.

In the coming months, COTEE expects to begin working on the electronic registry software for GOs in Montenegro.

What are the benefits of the company being part of AIB?

The benefit is that our company is a member of such a good organization that can teach us best practices related to GOs. Unfortunately, because of the REDII directive, we cannot export GOs from our country to EU countries, so when this decision in the directive changes in the future, we expect many benefits and the development of the GO market in Montenegro.

Link to relevant section of our website

https://cotee.me/pages/registar-garancija-porijekla-2/





Name of the company CertifHy

Area of operation **Europe**



www.certifhy.eu

CertifHy promotes the production, procurement, and use of low-carbon and renewable hydrogen and e-fuels.

Area of operation, member of the AIB

Europe Observer of the AIB since 2020.

Profile of the organisation

CertifHy promotes the production, procurement, and use of low-carbon and renewable hydrogen and e-fuels. CertifHy developed two certification systems that allow economic operators to capture premium value for their products.

The CertifHy EU RFNBO Voluntary Scheme is for economic operators seeking to certify their products according to REDII requirements and criteria for Renewable Fuels of Non-Biological Origin in the context of EU targets.

The CertifHy Non-Governmental Certification (NGC) Scheme allows economic operators to demonstrate that volumes of hydrogen meet the criteria and carbon footprinting (as per the scheme) for disclosure purposes. CertifHy NGC is available in EU Member States where a H2 GO system is not yet available. Our certification solutions are developed jointly with our Stakeholder Platform members.

Activities, both within the AIB and associated activities

Matthieu Boisson – Representative, Gas Scheme Group Emma Andersson – Representative, Gas Scheme Group

News and perspectives regarding the national IB and national framework for energy tracking certificates

CertifHy monitors the design and implementation of hydrogen GO Schemes across EU Member States.

It also provides a framework for implementing national hydrogen GO Schemes. For example, VertiCer (formerly Vertogas), IB for hydrogen GOs in the Netherlands, have used the NGC Scheme as the basis for the methodologies, criteria and requirements.

What are the benefits of the company being part of AIB?

"CertifHy brought the "hydrogen lense" since 2020 to the AIB, highlighting specificities around hydrogen certification and contributing to ensuring harmonized and standardised processes across Europe. This is particularly important as certification systems are being designed and implemented across Member States. Our contribution to making sure the EECS rules are adapted for gas and hydrogen is an important step in the right direction.

In 2024, CertifHy NGC plans to finalize its recognition as AIB EECS compliant Independent Criteria Scheme then to prepare its full membership as part of the AIB GSG to further facilitate the transition from CertifHy NGC to national hydrogen GO systems in AIB domains."

Contact: platform@certifhy.eu





Name of the company Operator za OIEiEK

Area of operation Federation of Bosnia & Herzegovina



Adema Buća 34 88 000 Mostar Bosnia and Herzegovina www.operatoroieiek.ba







Being a part of this organisation is especially important for Georgia, which is a European Union Candidate Country and Energy Community Contracting Party.

Name of the company JSC Georgian State Electrosystem

Area of operation **Georgia**

2, Baratashvili Street, 0105 Tbilisi Georgia <u>https://gse.com.ge/home_ge</u>



Area of operation, information on the market, member of the AIB

Georgia. Observer since 2023. Approximately 6 million GOs issued annually.

Profile of the organisation

Established in 1998, JSC "Georgian State Electrosystem" (GSE) is the single electricity Transmission System Operator (TSO) and the Electricity Market Operator. The company owns and operates 4,406 km transmission lines and 93 substations.

GSE is also the Issuing Body for electricity RES GOs. There is a legal framework and a basis for the introduction of the GO certificate system and GSE's obligation to manage a registry. GSE signed a Registry Service agreement with GREXEL and has been issuing certificates for over a year.

Activities, both within the AIB and associated activities

Scheme Observer Representative: Zviad Gachechiladze. ESG Representative: Onise Chichinadze, Salome Bekauri.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

Here are the key highlights from 2023:

- Signed an observer member agreement with AIB
- Began issuing RES electricity GOs
- Substantial growth in renewable energy, particularly in hydroelectric power.
- Approximately 6 million GO certificates were issued
- Undertaking the development of a residual mix calculation methodology

What are the benefits of the company being part of AIB?

As renewable energy generation experiences rapid growth, it presents a significant opportunity.

"We would like to thank AIB for providing GSE with the chance to become an Observer. Being a part of this organisation is especially important for Georgia, which is a European Union Candidate Country and Energy Community Contracting Party and ensures the issuance of GO certificates in accordance with European standards. AIB allows us to connect with European countries and transfer our certificates." Mr Zviad Gachechiladze,

Member of the Board of Directors of JSC Georgian State Electrosystem

Scope of national participation in EECS

Number of registered scheme participants	49
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Energy carrier and type	Number of production devices	Total capacity installed per technology (MW)
Electricity - solar	-	-
Electricity - wind	1	20.07
Electricity - hydro	48	6,224.36
Electricity - biomass	-	-
Electricity - other	-	-
Gas - biomethane	-	-
Gas - hydrogen from RES	-	-
Gas - other	-	-

Certified EECS production as compared to national production (GWh)		
EECS electricity production from RES	-	
EECS electricity production from fossil sources	-	
EECS electricity production from nuclear reactions	-	
EECS gas production from RES	-	
National electricity production from RES	-	
National electricity production from fossil sources	-	
National electricity production from nuclear reactions	-	
National gas production from RES	-	

INFORMAL OBSERV



State Agency on Energy Efficiency and Energy Saving of Ukraine

Name of the company State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE)



Ukraine

Krakivska Street, 17 02094 Kyiv Ukraine https://saee.gov.ua/en



The mission is to implement energy transformation, decarbonization and green transition in accordance with the principles of European policy.

Area of operation, information on the market, member of the AIB

Ukraine. The SAEE joined as an Observer in the Electricity and Gas Scheme Groups in January 2023.

Profile of the organisation

Hanna Zamazieieva – Head Viktor Bilko – Deputy Head Olena Lenska – Head of Department of Alternative Energy Development

The State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) is the central executive authority, responsible for the implementation of a comprehensive and integrated state policy in energy efficiency, renewable energy sources and alternative fuels.

The SAEE is the Authorised Body for issuing GOs for biomethane and for the administration of the biomethane registry in accordance with the law of Ukraine. As GOs must meet the single EU standard CEN-EN16325, the SAEE's aim is that the Ukrainian biomethane registry complies with the standardised energy certification system, ensures the effective exchange and reliable functioning of the international exchange of GOs.

The SAEE participated in events organised by the AIB without the right to vote in decision-making.

News and perspectives regarding the national IB and the national framework for energy tracking certificates

An effective electronic Biomethane GO Registry will be an incentive for the production, consumption and export of biomethane to EU countries and will make the industry competitive and attractive for investors.

What are the benefits of the company being part of AIB?

The SAEE understands that electronic systems that ensure the circulation of Guarantees of Origin must meet strict criteria of objectivity, non-discrimination, transparency and effective cost savings. Due to the implementation of Biomethane GO Registry, AIB's experience in the standardised circulation of Guarantees of Origin in Europe is of great value to the SAEE.

"Green energy and energy efficiency technologies are Ukraine's path to recovery and prosperity".



Sustainability Statement

As an international organisation dedicated to the energy transition, AIB strives to lead by example. We take responsibility for our activities, aiming to make our structures and operations environmentally and socially friendly, including our communications and meetings across Europe. Since 2012, AIB has committed to sustainability and enhanced its impact through the following steps:

- Flights Sustainable aviation fuel is used whenever possible.
- Other Travel- Public transport is mandatory for all other travel.
- Carbon Offsetting- All travel (by plane, train, car) from the Secretariat, reviewers, and members to AlB meetings, onsite audits, and conferences is carbon offset using atmosfair services.
- Printing Publications For publications like the EECS Rules and Annual Report (until 2019), we use an environmentally dedicated printer.
- For physical meetings, we choose venues with environmental management certification, prioritizing those that improve energy efficiency, reduce environmental impact, and support social responsibility. We also prefer regional food with ample vegetarian and vegan options.



Association of Issuing Bodies ivzw

The AIB is a non-profit-making international association

Telephone: +32 (0) 486 558 301 Website: www.aib-net.org Email: info@aib-net.org

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