AIB and EECS

(European Energy Certificate System)
The Association of Issuing Bodies (AIB) operating EECS
The AIB

AIB Facts & Statistics

- AIB was founded in 2002
- International Non-Profit Association
- Headquarters in Brussels
- Developer and custodian of the EECS™ standard

AIB Member Countries’ and Issuing Body Type of Organisation
AIB and its Member Countries / Regions

AIB Facts & Statistics

→ 28 countries connected (36 members)
→ Geographical scope: EU - EFTA – Energy Community
→ All current AIB members are issuing bodies for Guarantees of Origin
→ Very diverse: regulator, market operator, TSO, ministry, power exchange etc.
→ Several members are also competent bodies for the supervision of electricity disclosure
→ Already 20 AIB members assigned by their government for issuing gas GO

- Austria (E-Control), Belgium Brussels (Brugel), Belgium Flanders (VREG), Belgium Wallonia (SPW), Croatia (HROTE) Czech Republic (OTET), Denmark (Energinet), Estonia (Elering), Finland (Gasgrid Finland), France (EEX), Greece (Daopee), Italy (GSE), Latvia (Conexus Baltic Grid), Lithuania (Amber Grid), Luxembourg (ILR), Netherlands (VertiCer), Portugal (REN), Slovenia (AGEN-RS), Spain (Enagas GTS), Switzerland (Pronovo), more to follow
AIB and its Member Countries / Regions

Pillars of the European Energy Certificate System (EECS©)

I. EECS Rules: engaging into quality and harmonisation

II. IT hub: enables GO transfer between national/regional Domain registries

III. Peer reviews and audits
Book and Claim Certificate System

Supply

Gas Market

Demand

Physical gas market

GO System

• Enables consumer choice
• Promotes market efficiency and simplicity
• Protects liquidity
• Supports the internal market
The AIB HUB

Framework

→ International transfers of electronic documents
  • Statistics are available on the AIB website
  • 28 Domains

→ How
  • Standardised
  • Automated
  • Jointly operated

→ Why
  • Efficiency
  • Trust
  • Fraud prevention
Size of the market for electricity GOs

AIB Facts & Statistics (status 14/11/2023)

Annual EECS transactions by transaction date (TWh)
Size of the market for electricity GOs

AIB Facts & Statistics (status 14/11/2023)

Annual EECS transactions by production date (TWh)

Production: Issue
- 2019: 694 TWh
- 2020: 790 TWh
- 2021: 854 TWh
- 2022: 859 TWh
- 2023: 593 TWh

Production: Cancel
- 2019: 620 TWh
- 2020: 719 TWh
- 2021: 798 TWh
- 2022: 770 TWh
- 2023: 58 TWh

Production: Expire
- 2019: 0 TWh
- 2020: 0 TWh
- 2021: 27 TWh
- 2022: 0 TWh
- 2023: 0 TWh
AIB organised to facilitate multi-energy

→ AIB Hub facilitates cross-registry transfer of gas certificates from 2023 on.

→ EECS Energy Carrier Conversion Rules
  • Since September 2019
  • Gas issuing bodies will be enabled to import electricity GOs, Electricity issuing bodies (31) will be enabled to import gas GOs. Issuing EECS Gas GOs requires membership to EECS Gas Scheme Group.

→ Separate decision making for Electricity and Gas specifics
  • Since February 2020
    o Electricity Scheme Group
      • Electricity Scheme = section N of the EECS Rules
      • Voting members
    o Gas Scheme Group
      • Existing members
      • Observer - Scheme co-developer status
      • Forum for discussion and resolution of challenges
      • EECS Gas Scheme: Chapter O of the EECS Rules (since nov 2019)
The Guarantee of Origin as an EECS Product
### Transparency enhances empowered consumer choices

#### Data on generic EECS Certificates

- **Energy Carrier**
  - Electricity / Energy Gas / Hydrogen

- **Product**
  - GO / Support Certificate / Target Certificate / Independent Criteria Scheme
  - Product name

- **Unique certificate number**

- **Production period (start and end dates)**

- **Energy source**

- **Type of installation**

- **Production device info**

- **Identity and country of originating member**

- **Issue date**

- **Identity and country of relevant competent body**

- **Purpose**
  - Disclosure, Support and/or Target
  - Support received by type

- **Dissemination level**

- **Face Value**

- **Conversion Tag & Storage Tag**

- **Label(s) ***
  - Carbon Footprint *
  - Timestamp *
  - Production Device Module *
  - Radioactive waste *

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#### Additional on Electricity certificate

**High-Efficiency Cogeneration**

- **High Efficiency Cogeneration Criterion Met?**
  - Y/N
  - If Yes, then also following fields are mandatory

- **Lower Calorific Value**

- **Use of Heat**

- **Primary Energy Savings**
  - % PES
  - Absolute PES

- **GHG Emissions**
  - %
  - Absolute

**Fossil energy sources**

- **GHG Emissions**

**Nuclear energy sources**

- **Radioactive Waste**

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#### Additional on Gas certificate

- **Type of Gas**
  - See Fact Sheet

- **Whether Higher or Lower Calorific Value**

- **GHG Emissions Saved & Produced ***
  - Methodology reference

- **Sustainability Criteria met?***
  - Y/N; requirements, scheme, name Certification Body, reference to report

- **GHG saving criteria met?***

- **Calorific value**

- **End-Use of gas category**

- **Source-Shares**

- **Production Device Module(s) ***
  - Description, capacity, date operational

- **Pre-Conversion support info**

- **PurityOfGas**

- **CompositionCriteriaReference**

- **Advanced Biofuel Criteria Met?**

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Guarantees of Origin

- Draft Gas Directive Annex 1.5

Energy source mix
- On suppliers' invoice:
  - Cancelled GOs
  - Residual Mix

Guarantees of Origin
Guarantees of Origin


  - **Guarantee of Origin**
    - **Issuing Body**
    - **Gas Disclosure**

- **Draft Gas Directive Annex 1.5**

European Legislation
Framework for cross border harmonisation of GOs

1. GOs are for disclosure - legislation

2. Reliable GO system - mandatory standard

3. Efficient and reliable GO system - voluntary standard

Note: EECS covers also other products than guarantees of origin
The European Energy Certificate System (EECS)

Framework

EECS Rules
- Certificate Administration
  - Core principles – objectives & aspirations
  - Plant registration
  - Certificate issue, transfer and cancellation
- EECS participation rules
  - Membership, admission, compliance, disputes & change
- Scheme specific rules
  - E.g., electricity, gas ...

Detail
“subsidiary documents”
- Decision-making – disputes, voting etc
- Registry system & networking standards
- Approval of agents
- Change management
- Assignment of codes
- Audit & periodic reviews

Dynamic information
“fact sheets”
- Addresses, membership details, codes, guidelines ...

Domain protocols
- Description of regulations in a specific country

Mirrored in EN16325, based on EECS
Why a generic GO system for all energy carriers?

- GO system: Methane
- GO system: Electricity
- GO system: Hydrogen

GO Conversion
Issuance
3 regulated systems – 3 purposes

EECS certificate structure enables certifying multiple purposes

- Origin
- Disclosure to end consumers (GO)
- RES
- Consumption incentive
- Financial Support system
- Target accounting
- Production incentive
- RES Production incentive
- Financial Support system
- Target accounting
- Production target based on overall consumption figures

REDII art. 19
REDII art. 4: national support systems
REDII art. 3
REDII art. 25
Certificate system design options

Facilitated by EECS

**Single multipurpose certificate?**

applicable for Support, Disclosure **and** Target counting

- Consistency,
- Simpler and
- Cheaper to operate
- Challenge: record additional information
  - Requirements for EU-ETS?
  - Mass Balancing concept: how is it to be understood?

**OR**

**One certificate for each purpose?**

Support | Disclosure | Target counting

- Flexibility
- Duplication of registration work
- Risk of Double Disclosure of the renewable origin to an end consumer (Double Perception)
Certificate Product Types under the EECS standard

For any Target Certificate Product, the corresponding Target Accounting Scheme acknowledges that the eligibility for Target accounting is transferred together with the corresponding Target certificate.
The relation between EECS Certificate types and labels

**Abbreviations**
- GO = Guarantee of Origin
- ICS = Independent Criteria Scheme
- NGC = Non-Governmental Certificate
- LC = Legislative Certificate
- EECS = European Energy Certificate System

**PRODUCT Type**
- EKOENERGY
- Better Biomass (NTA8080)
- TüvSüd
- CertifHy Low Carbon
- CertifHy Renewable

**PRODUCT Name**
- Better Biomass (NTA8080)
- EKOENERGY
- TüvSüd
- CertifHy Low Carbon
- CertifHy Renewable

**LABELS**
- EKOENERGY
- Better Biomass (NTA8080)
- TüvSüd
- CertifHy Low Carbon
- CertifHy Renewable
Don’t confuse apples with apple transport

Distinguish Purpose from Tracking Mechanism and from Consumption verification mechanism

→ Tracking Purpose
  • Disclosure /
  • Support /
  • Target accounting

→ Tracking Mechanism
  • Book and Claim /
  • Mass Balance /
  • Bundled sale of certificates and energy /
  • ...

→ Consumption verification mechanism
  • Disclosure supervision on suppliers /
  • Mass Balancing Voluntary Scheme confirming consumption category /
  • ...
Relation with Independent Criteria Schemes
Independent Criteria Schemes as EECS Products

Categories of ICSs

→ Operator of the ICS:
  • AIB
  or
  • External Scheme operator

→ Legal status
  • Non-Governmental Certificate
  or
  • Legislative Certificate
Independent Criteria Scheme: agreement between ICS operator and AIB

EECS Rules Section D ‘EECS Products’

D2.4 ICS Certificates

D2.4.1 For a type of ICS Certificate to be accepted as an EECS Product:

a) the type of ICS Certificate must relate either to:
   i. the energy source for the associated Output;
   ii. the technology used in producing the associated Output;

b) the Scheme Operator of the relevant ICS Scheme must have entered into an agreement with the AIB regarding the operation of that ICS Scheme.

Independent Criteria Schemes may only be added to or removed from the Fact Sheet “Independent Criteria Schemes” by the General Secretary and with the support of the relevant Scheme Group.

Criteria for the agreement between AIB and ICS operator

1. Clear Scope
2. Shared Geographical Scope
3. EECS Compliance
4. Not competing with GO schemes and other legislative schemes
5. Clear authorisation and compliance criteria for issuing bodies under the ICS Scheme
6. Framework description for Scheme Update and Maintenance
7. Legal entity operating the Scheme
8. Clear Exit Conditions

Note: Issuing Bodies using the AIB Hub for cross-registry transfer shall comply with the EECS Rules.
Guarantees of Origin
Joining Process
Setting up AIB infrastructure in your country

Joining Process

**Issuing Body**
- Appoint an Issuing Body.
- If you are already appointed as Issuing Body, start finding insurance and check disclosure legislation.

**Agents**
- If required, appoint agents to support the activities of the Issuing Body.

**Software**
- Select, implement and configure registry software
- Develop software or use commercially available software

**Application**
- Fill in the Application Form and the Use of HUB Questionnaire and send it to the Secretary General

**Domain Protocol**
- Draft a Domain Protocol, describing how the market will operate in your country

**Test**
- Test the interconnection of your registry with the AIB Hub

**Approval**
- Gain the approval of the AIB Board
- Gain the approval of the relevant AIB Scheme Group

**Start**
- Start registering plants, and issuing and transferring certificates
### Orientated time schedule

#### Joining Process

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Your Contacts

Joining Process

Joining Documentation

Procedural Matters

Technical Matters

IT Matters

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Membership
Benefits of Joining AIB

Membership

EECS standard developed jointly by all members according to EU Directives and member state needs.

- Both EECS and the AIB Hub are continuously **improved**
- **Harmonised certification** with specifics for gas/electricity
- **Independent decision-making** regarding specifics for gas/electricity
- Dealing with **one Hub connection** instead of a lot:
  - Cuts down prices
  - Reduces workload
  - More safe/reliable 58 eyes are much better than 2
- Part of a “**accredited authority**”
- Peer-to-peer exchange of **reliable information**
- Continuous best practices **training**
- Strong **networking**
- Tailor-made **advice and expertise**
Benefits of Joining AIB

Membership

Becoming and being a member of the AIB

Being part of the process

Tailor made advice and expertise
Observer Status

Observer

The Observer status can be granted to Issuing Bodies (legislative or voluntary certificates).

Process

Application

• Application to be sent to Secretary General or Board Chair

Approval

• Board grants Observer status

Agreement

• Written Observer agreement incl. confidentiality and non-competition

Rights

✓ Limited access to website and meetings
✓ No voting rights
✓ First calendar year a free or cost-covering fee
Thank you for your attention!

You are welcome to become a member of the AIB and we look forward to a pleasant cooperation.
Let’s together continue to strengthen energy tracking!

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