AIB and EECS

(European Energy Certificate System)

AIB
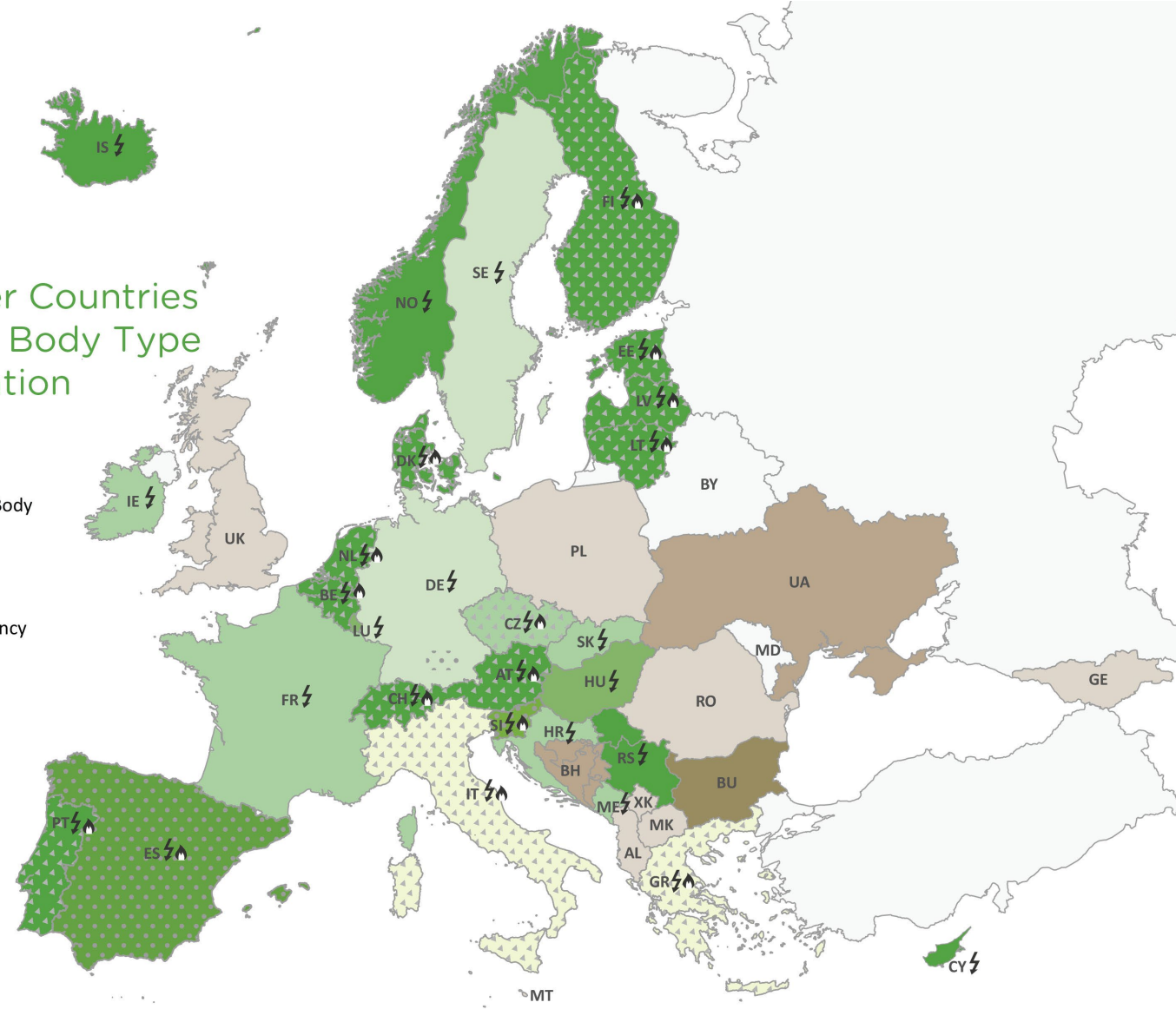association of issuing bodies

01

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

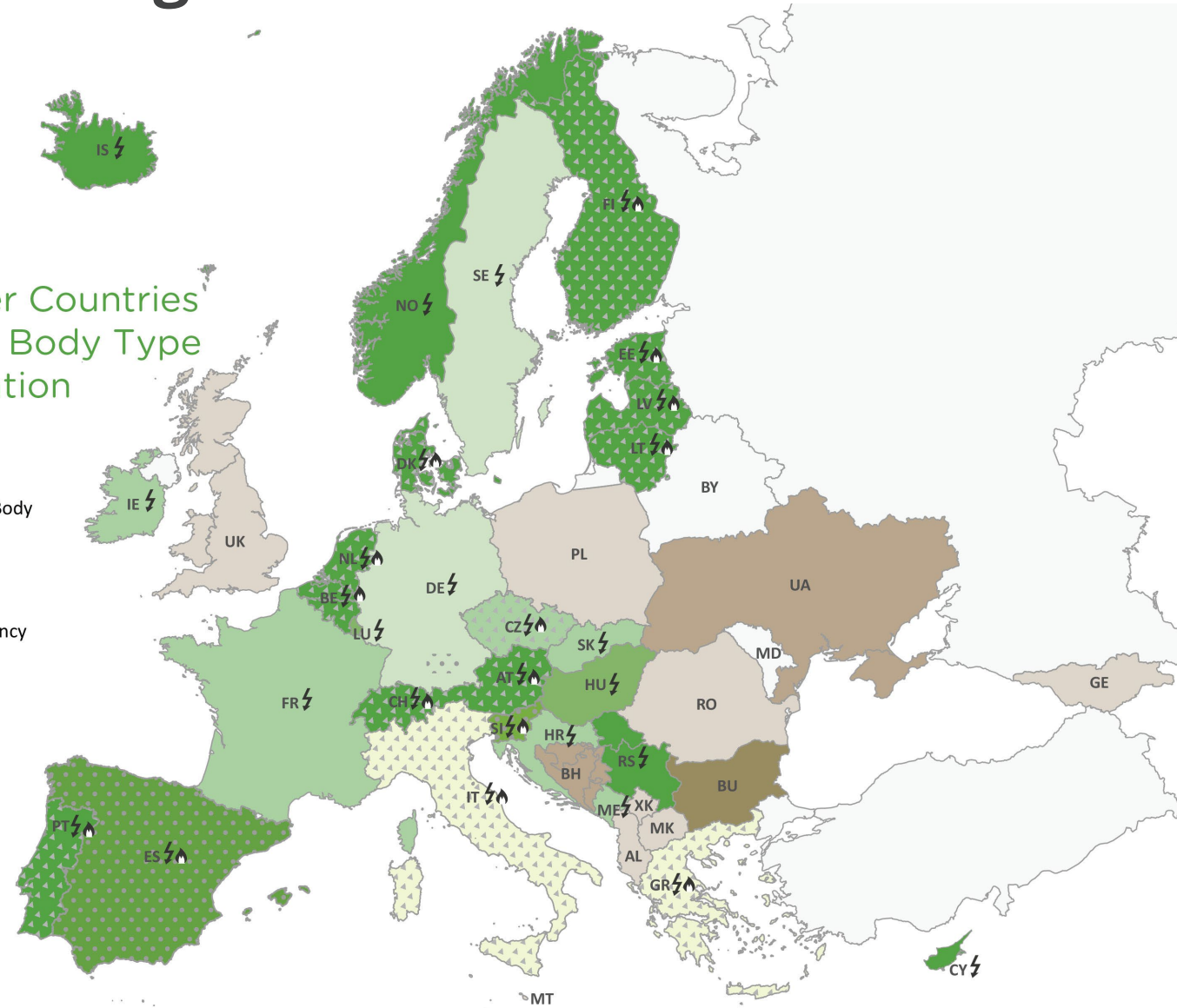AIB Member Countries and Issuing Body Type of Organisation

AIB

⚡ Electricity Issuing Body
- TSO
- Regulator
- Market operator
- Governmental agency
- Other
- Formal applicant
- Active observer
- Awaiting

🔥 Gas Issuing Body
- Gas TSO
- Gas Other

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 (OTE), Denmark (Energinet), Estonia (Elering), Finland (Gasgrid Finland), France (EEX), Greece (Dapeep), 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

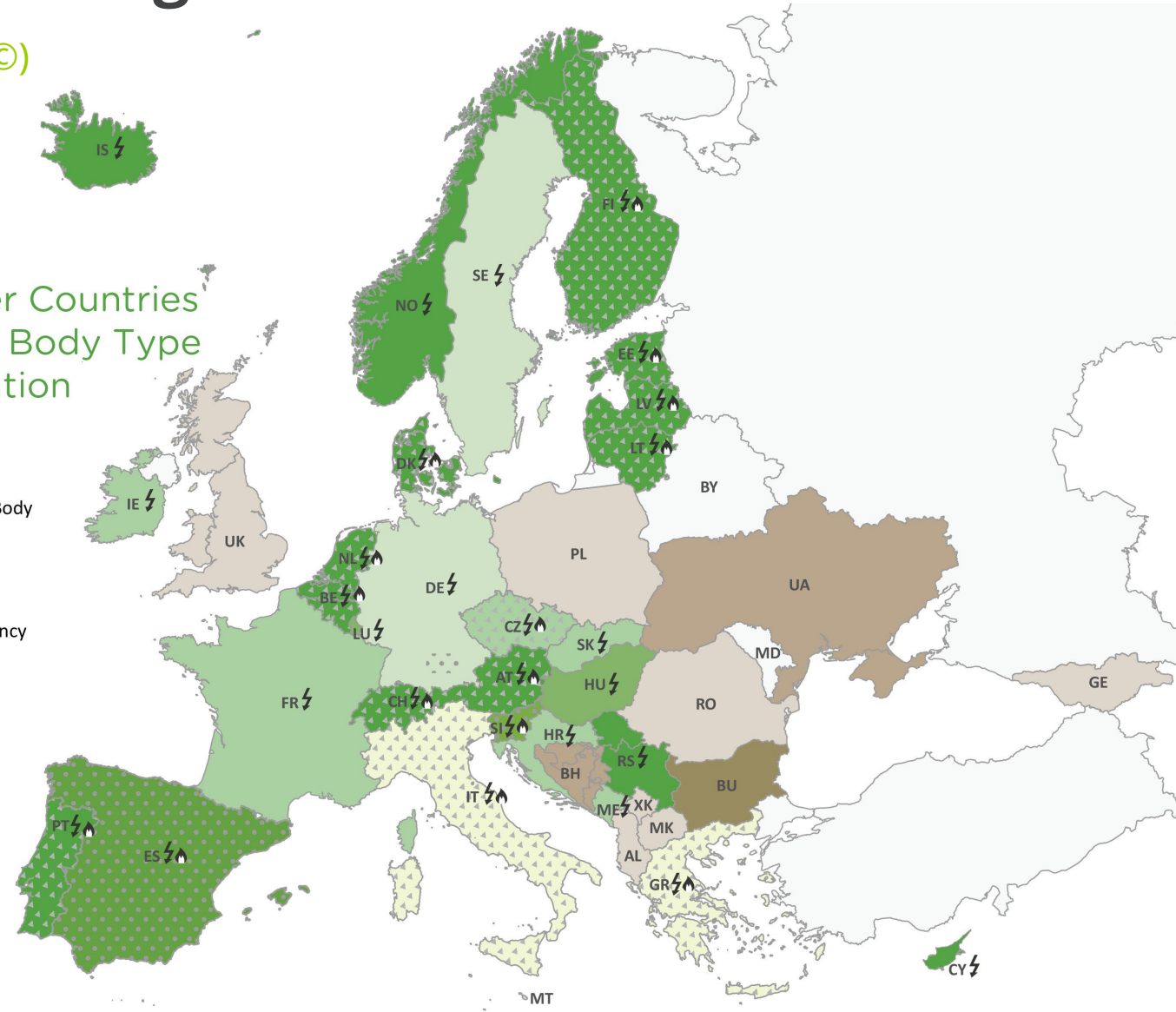**AIB Member Countries and Issuing Body Type of Organisation**

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🔥 Gas Issuing Body
- Gas TSO
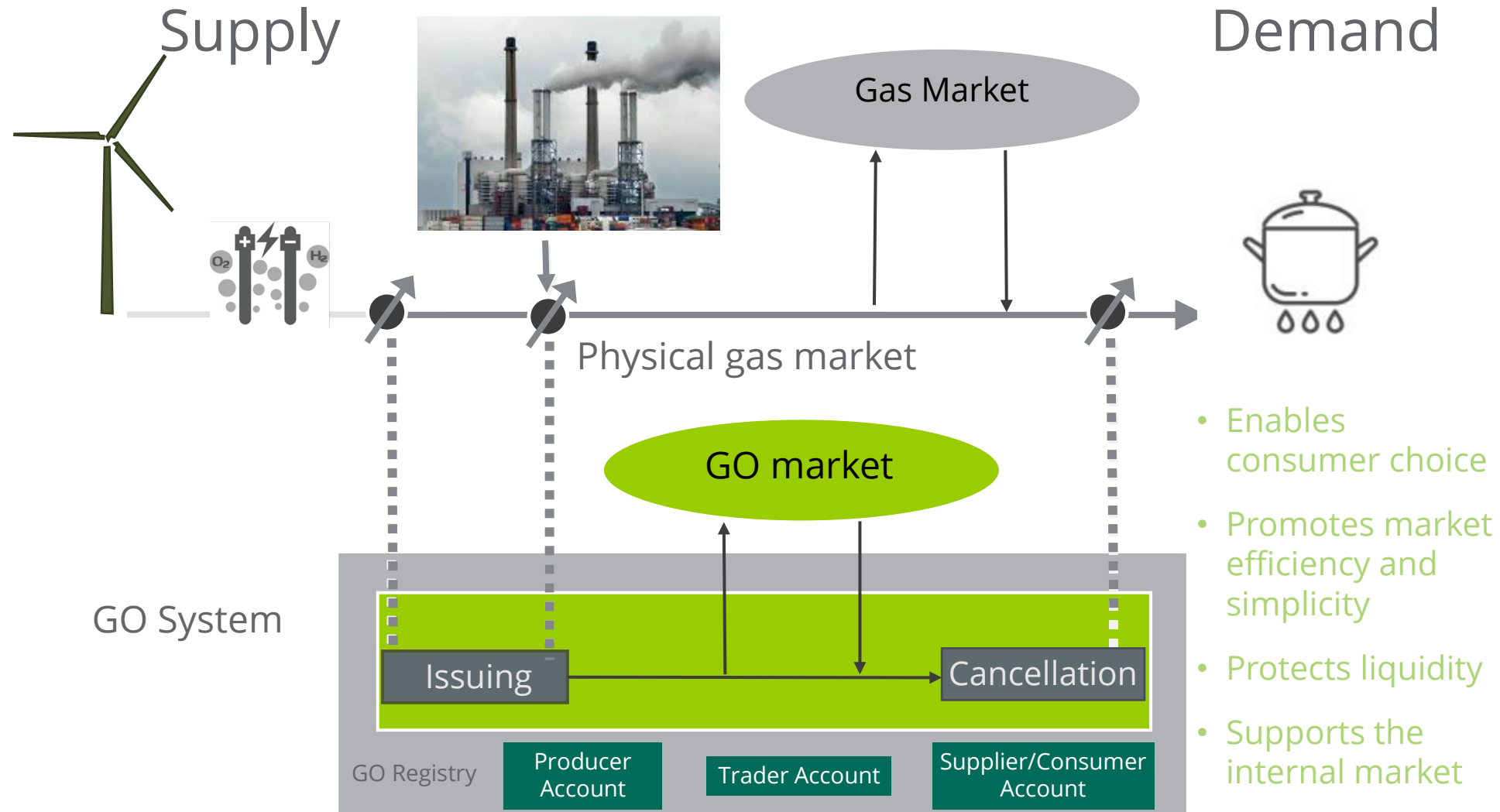- Gas Other

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**

AIB Member Countries and Issuing Body Type of Organisation

AIB

- ⚡ Electricity Issuing Body
- ■ TSO
- ■ Regulator
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- ■ Governmental agency
- ■ Other
- ■ Formal applicant
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- ■ Awaiting

- 🔥 Gas Issuing Body
- ▨ Gas TSO
- ▤ Gas Other

Book and Claim Certificate System

Supply

Demand

Gas Market

Physical gas market

GO market

GO System

Issuing → Cancellation

GO Registry

| Producer Account | Trader Account | Supplier/Consumer Account |

- Enables consumer choice
- Promotes market efficiency and simplicity
- Protects liquidity
- Supports the internal market

The AIB HUB

Framework

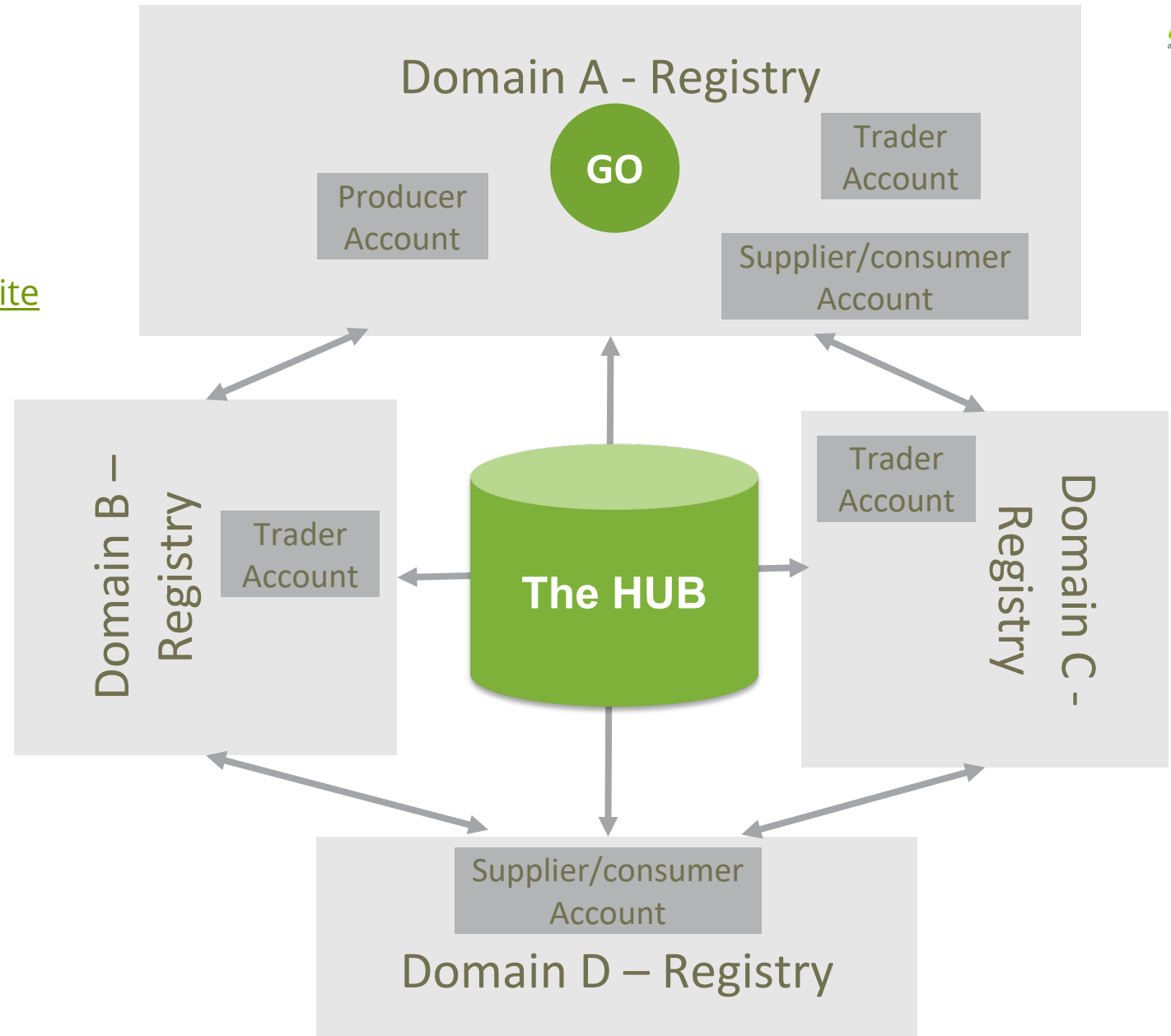→ **International transfers of electronic documents**
- Statistics are available on the AIB website
- 28 Domains

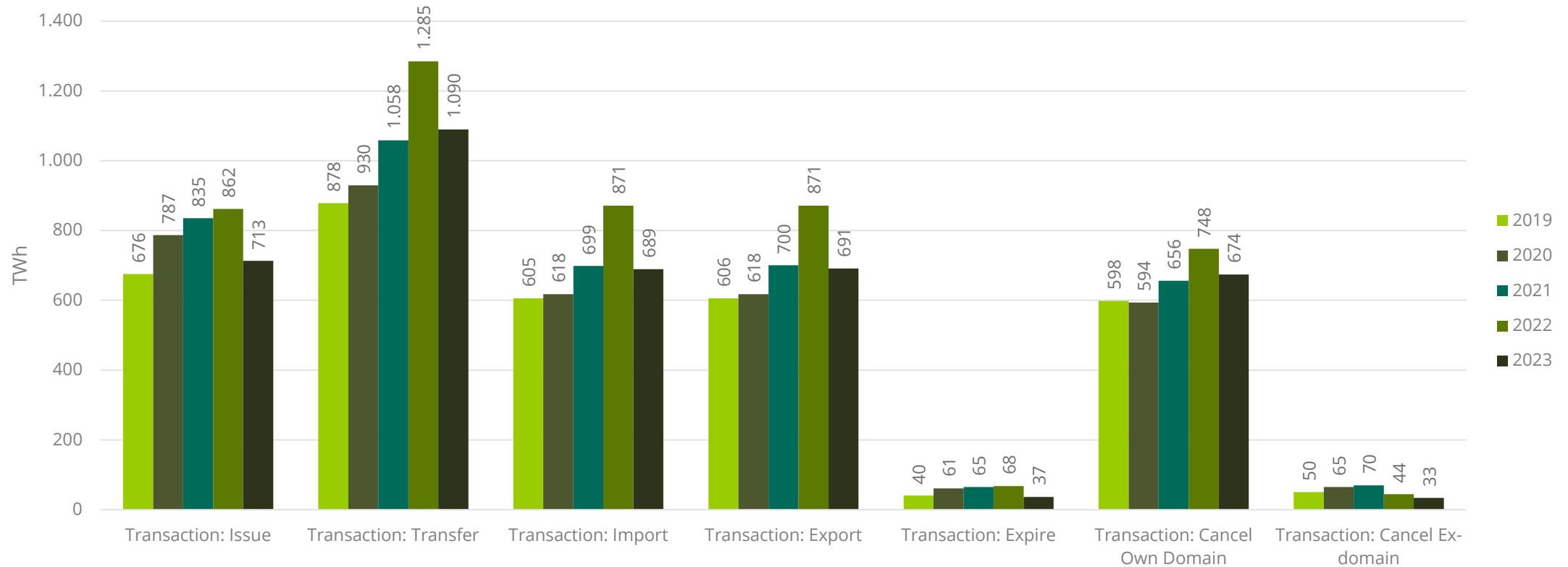→ **How**
- Standardised
- Automated
- Jointly operated

→ **Why**
- Efficiency
- Trust
- Fraud prevention

Size of the market for electricity GOs

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)

Legend:
- 2019
- 2020
- 2021
- 2022
- 2023

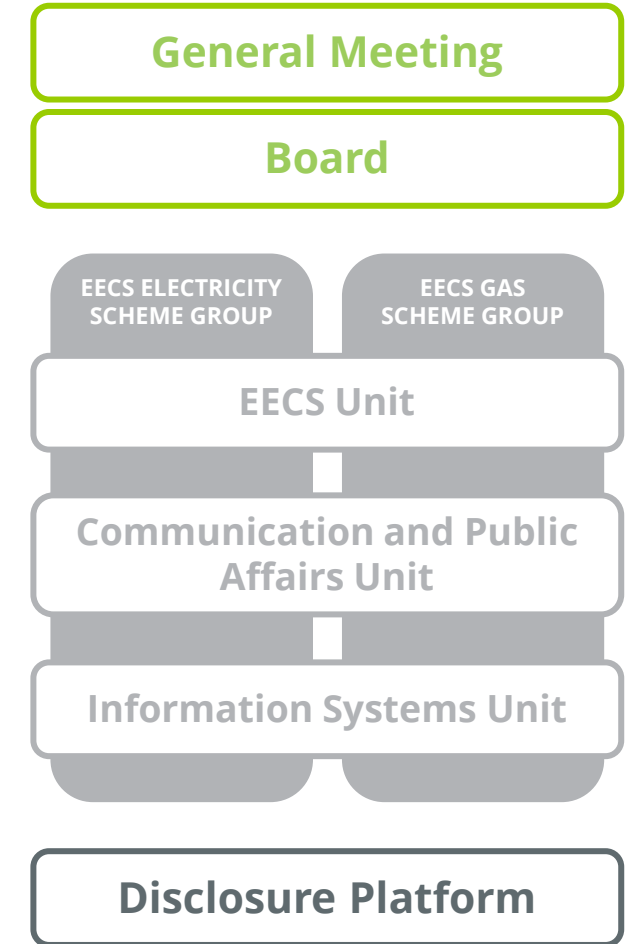|	2019	2020	2021	2022	2023
Production: Issue	694	790	854	859	593
Production: Cancel	620	719	798	770	58
Production: Expire	64	65	51	27	0
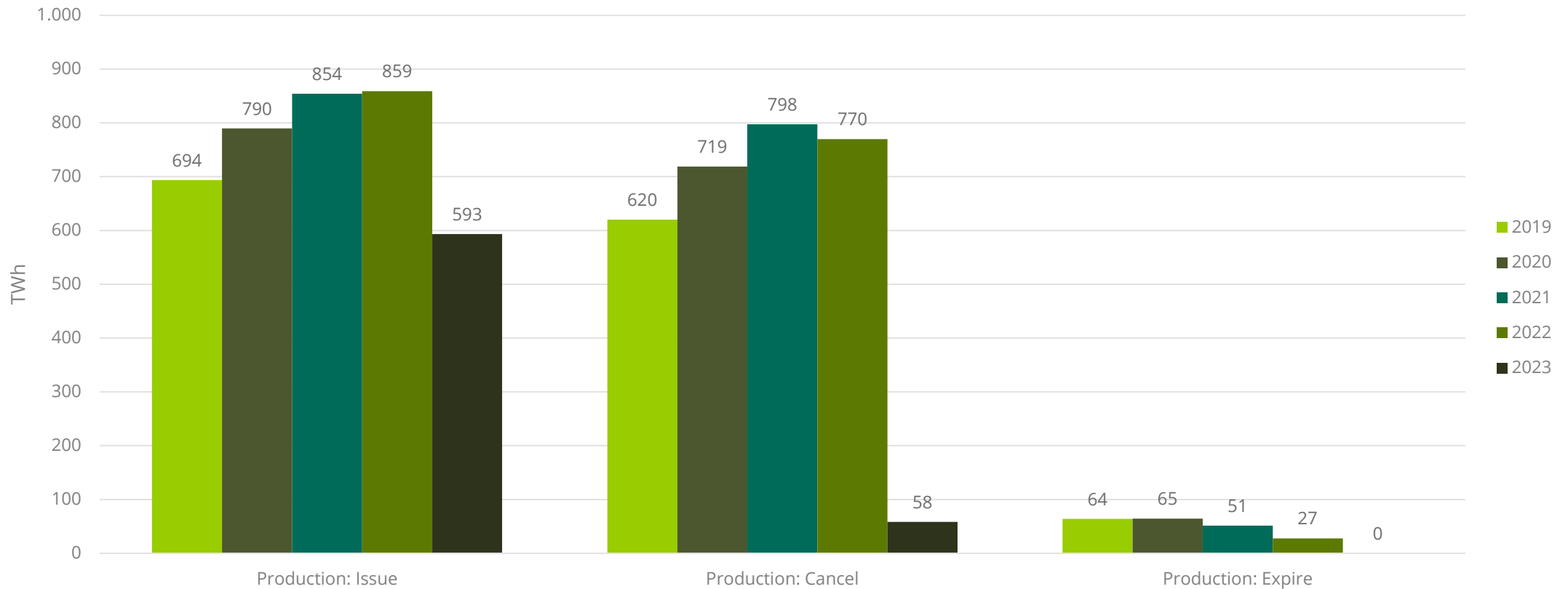
AIB organised to facilitate multi-energy

→ 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
  - Electricity Scheme Group
    - Electricity Scheme = section N of the EECS Rules
    - Voting members
  - 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)

General Meeting

Board

EECS ELECTRICITY SCHEME GROUP

EECS GAS SCHEME GROUP

EECS Unit

Communication and Public Affairs Unit

Information Systems Unit

Disclosure Platform

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 *

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

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? *

Legend:
Mandatory information field
*Optional information field

European Legislation

Guarantees of Origin

Renewable Energy Directive
2018/2001 (EU) Art. 19

Guarantee of Origin

Internal Energy Market Directive
2019/944 (EU) Annex 1.5
Draft Gas Directive Annex 1.5

Electricity / Gas
Disclosure

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

European Legislation

Renewable Energy Directive 2018/2001 (EU) Art. 19

Guarantee of Origin

Issuing Body

Draft Gas Directive Annex 1.5

Gas Disclosure

€ —

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

REDII

EN16325
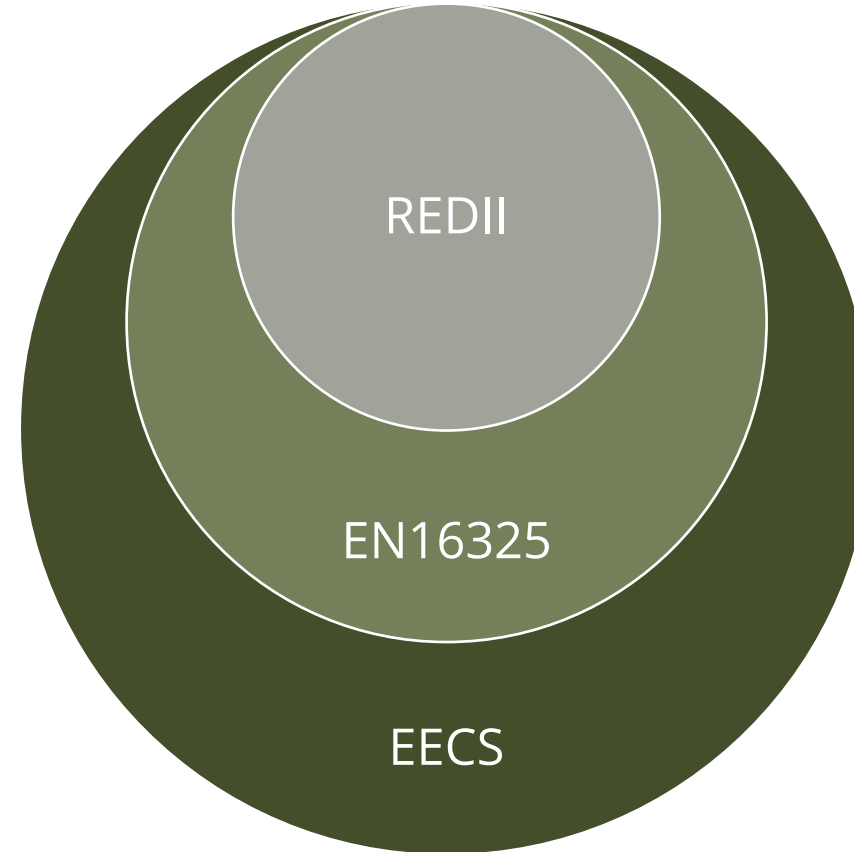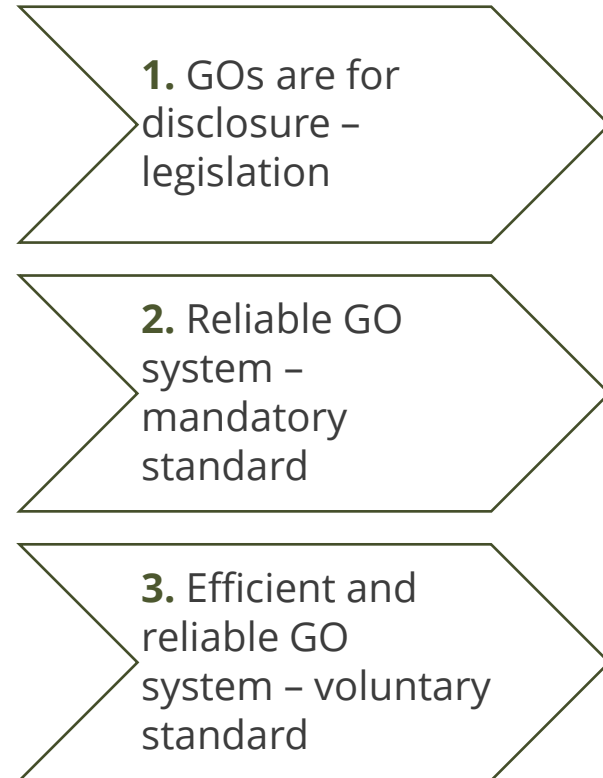
EECS

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

EECS
EUROPEAN
ENERGY
CERTIFICATE
SYSTEM

Why a generic GO system for all energy carriers?

GO Conversion Issuance

GO system
Methane

GO system
Hydrogen

GO system
Electricity
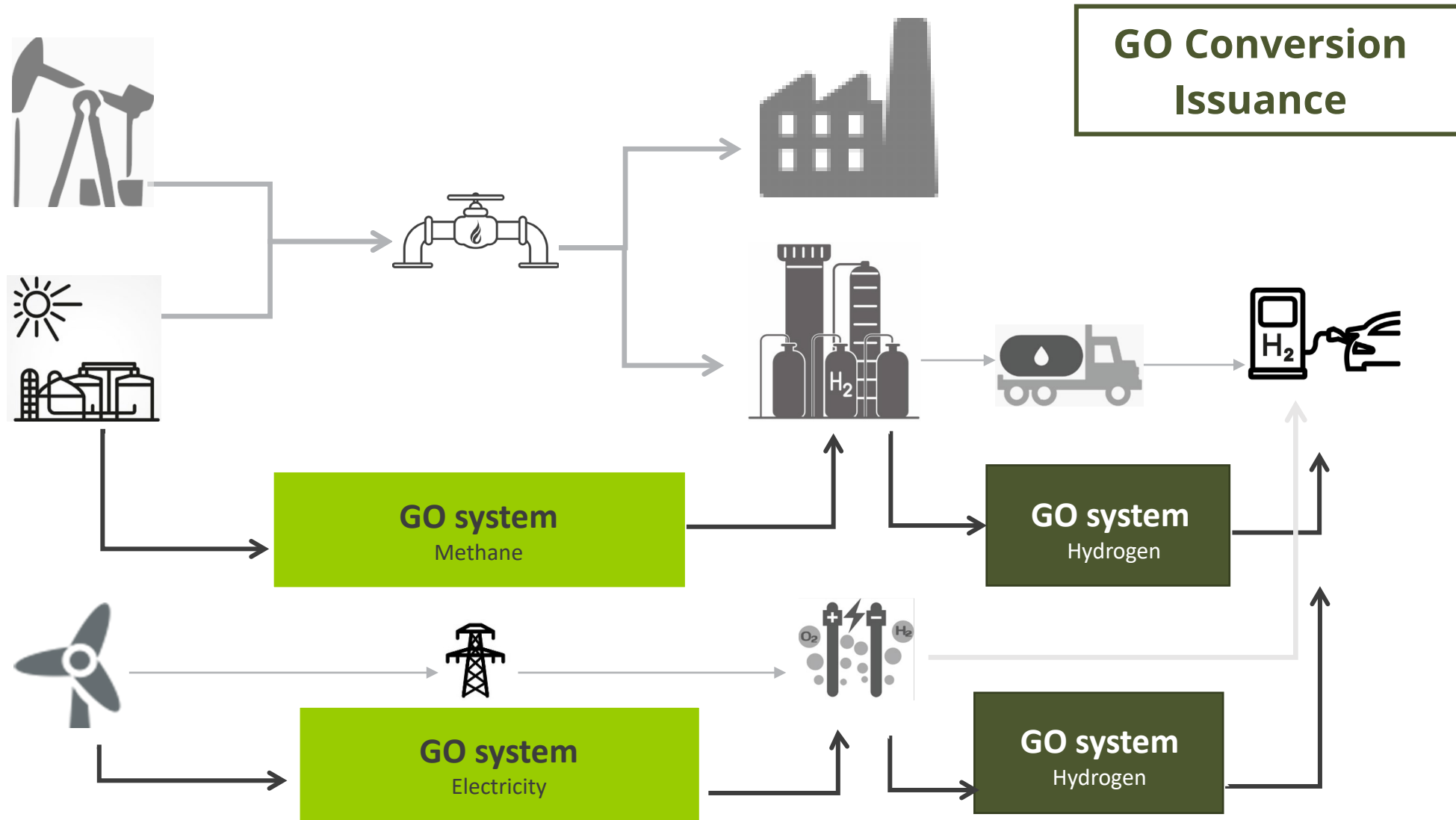
GO system
Hydrogen

3 regulated systems – 3 purposes

EECS certificate structure enables certifying multiple purposes

RES **Consumption** incentive

REDII art. 19

Origin
Disclosure
to end consumers
(GO)

Financial
Support
system

Target
accounting

RES
Production
incentive

Production
target based on
overall
consumption
figures

REDII art. 4:
national support systems

REDII art. 3
REDII art. 25
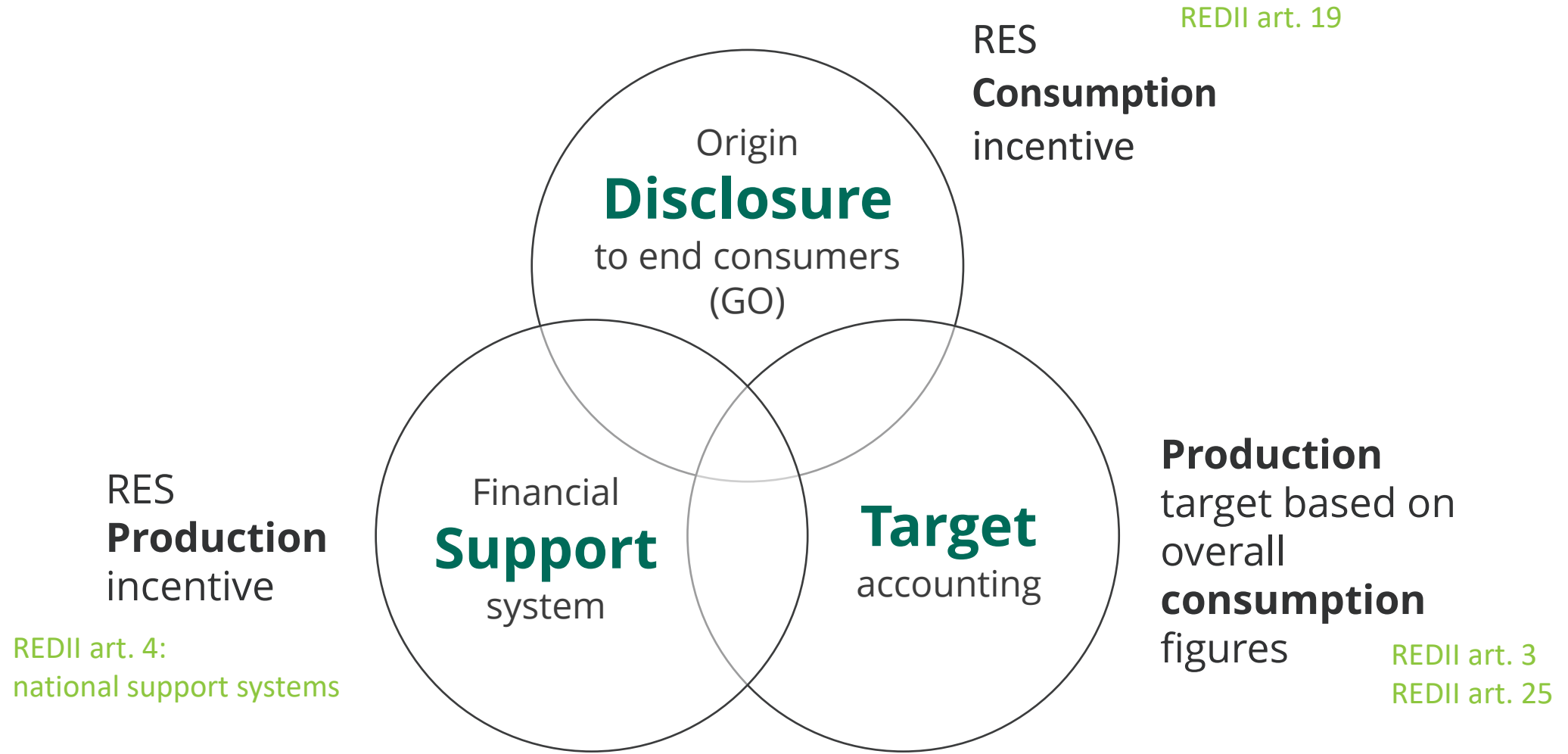
Certificate system design options

Facilitated by EECS

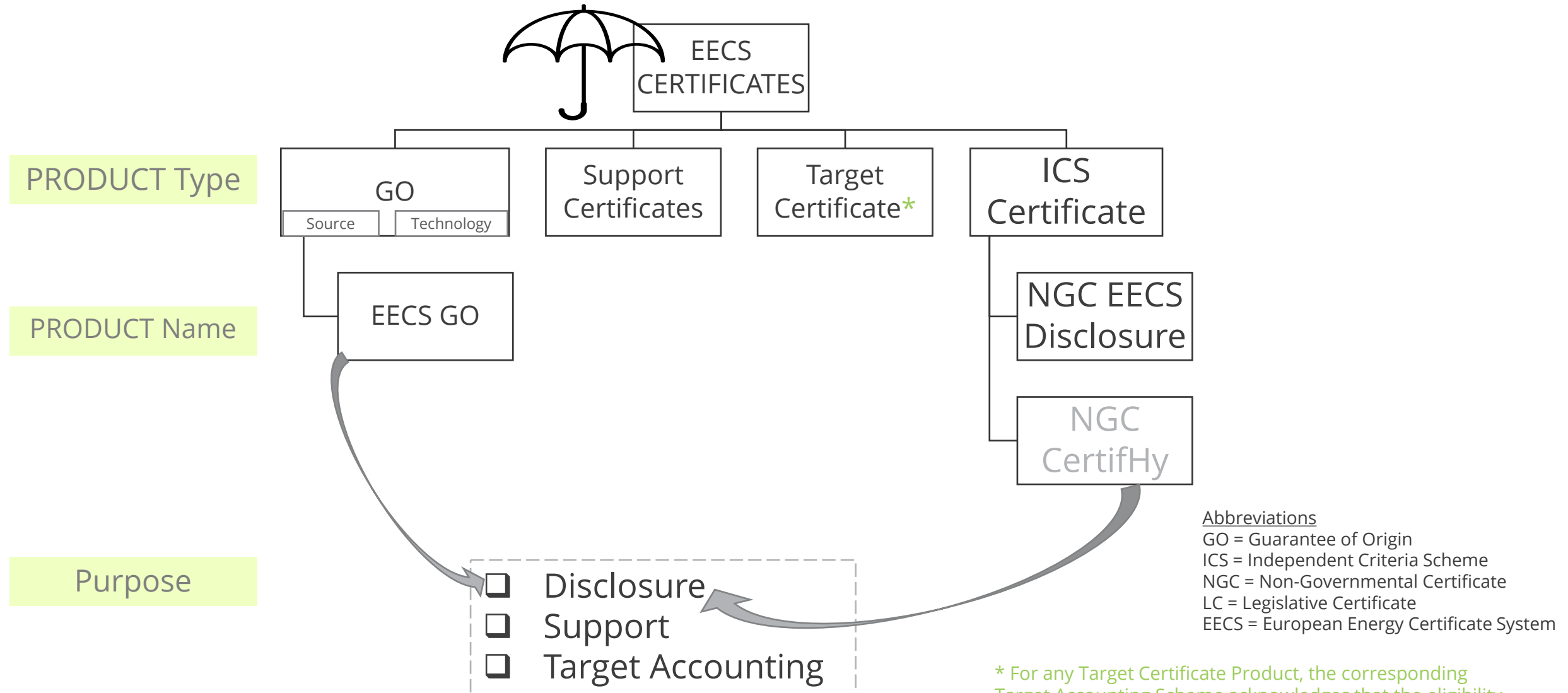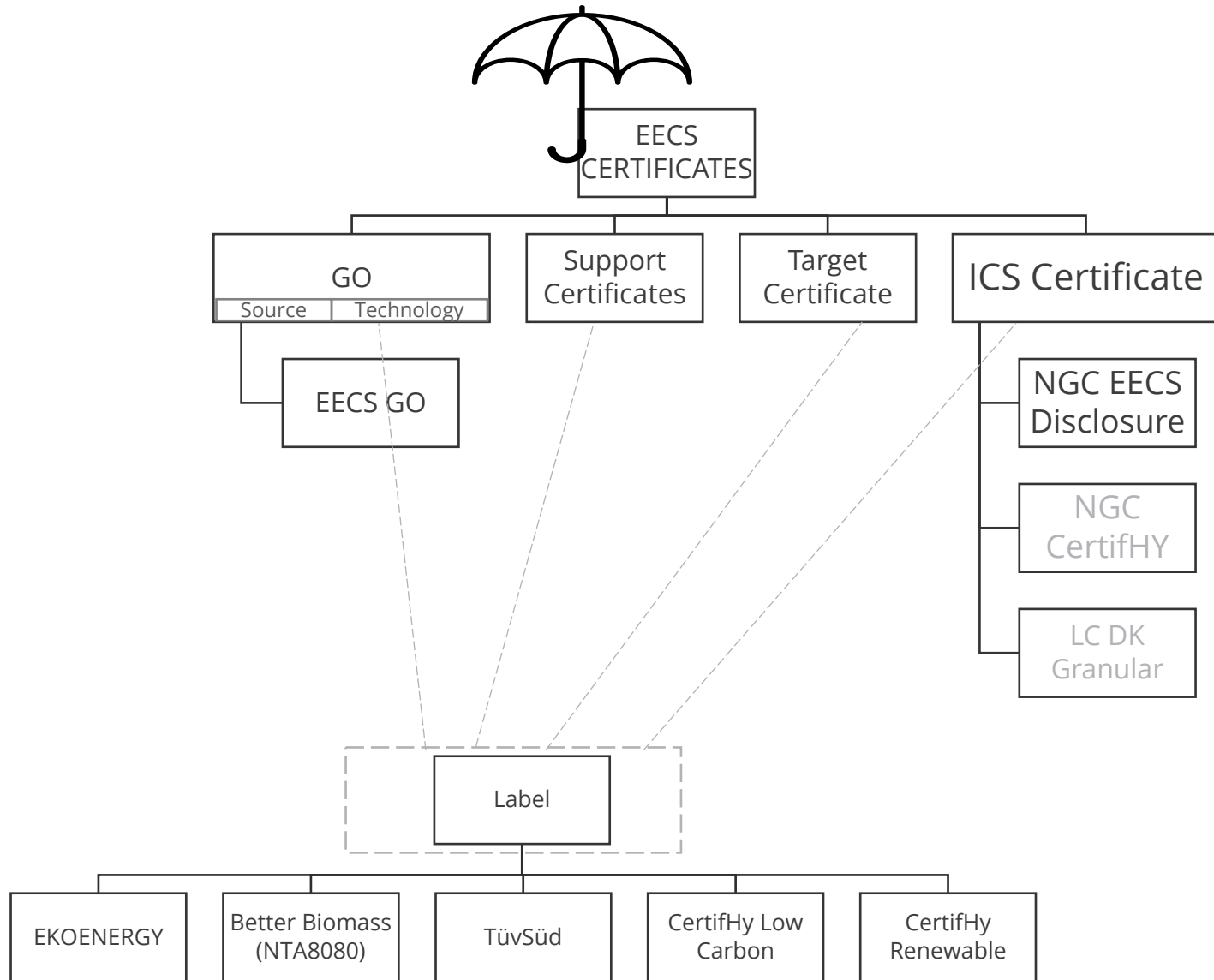| **Single multipurpose certificate?** applicable for Support, Disclosure <u>and</u> Target counting | OR | **One certificate for each purpose?** Support | Disclosure| Target counting |
|---|---|---|
| • Consistency,
 • Simpler and
 • Cheaper to operate
 • Challenge: record additional information
     ○ Requirements for EU-ETS ?
     ○ Mass Balancing concept: how is it to be understood? | | • 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

PRODUCT Type

PRODUCT Name

Purpose

EECS CERTIFICATES

GO
- Source
- Technology

Support Certificates

Target Certificate*

ICS Certificate

EECS GO

NGC EECS Disclosure

NGC CertifHy

☐ Disclosure
☐ Support
☐ Target Accounting

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

* 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

PRODUCT Type

PRODUCT Name

LABELS

EECS CERTIFICATES

GO — Source | Technology
EECS GO

Support Certificates

Target Certificate

ICS Certificate
- NGC EECS Disclosure
- NGC CertifHY
- LC DK Granular

Label
- EKOENERGY
- Better Biomass (NTA8080)
- TüvSüd
- CertifHy Low Carbon
- CertifHy Renewable

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

Don't confuse apples with apple transport

Distinguish Purpose from Tracking Mechanism and from Consumption verification mechanism
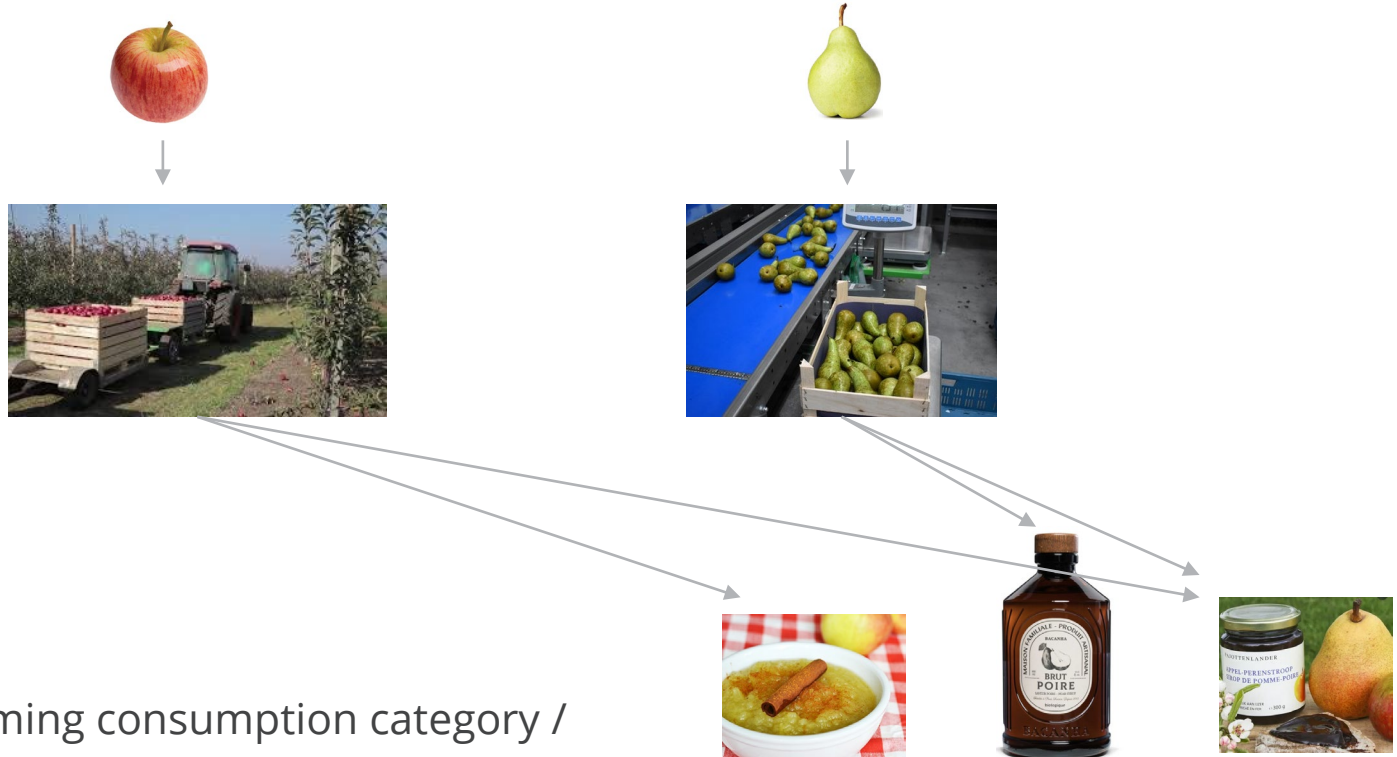
→ **Tracking Purpose**
- Disclosure /
- Support /
- Target accounting

→ **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 /
- ...

03

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.
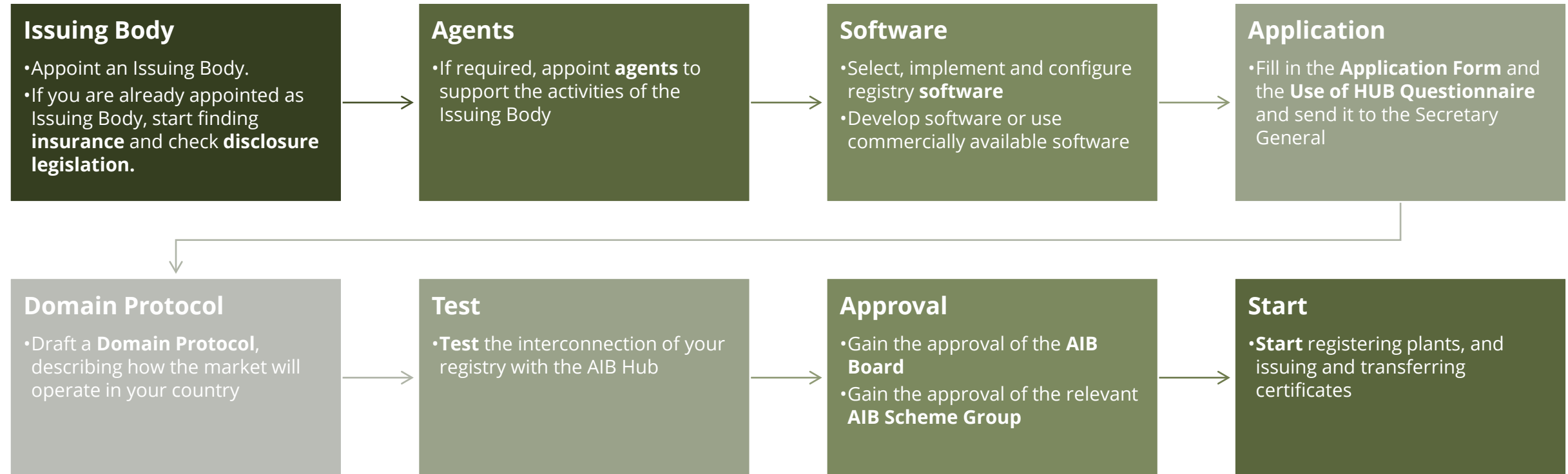
Guarantees of Origin

04

Joining Process

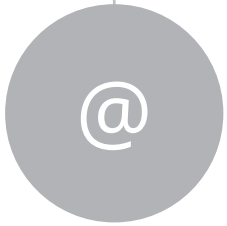# Setting up AIB infrastructure in your country

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

Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Get in contact with AIB	██											
Appoint agents	██	██										
Select, implement and configure registry software		██	██	██	██	██	██	██				
Apply for AIB membership	██	██										
Draft domain protocol		██	██									
Review domain protocol				██	██	██	██	██	██	██	██	
Test interconnection Your Registry ↔ AIB Hub						██	██	██	██	██	██	
Membership Approval of AIB board						██	██	██	██	██		
Scheme Membership Approval of AIB Scheme Group												██
AIB Support	∞ (ongoing, Month 1 – Month 12)											

Your Contacts

Joining Process

Joining Documentation	Procedural Matters	Technical Matters	IT Matters
@	CPAU	SG	ISU
www.aib-net.org	cpau@aib-net.org	liesbeth@aib-net.org	info@aib-net.org
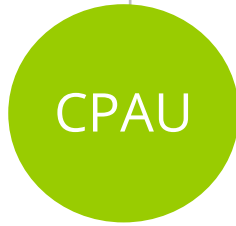
05

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
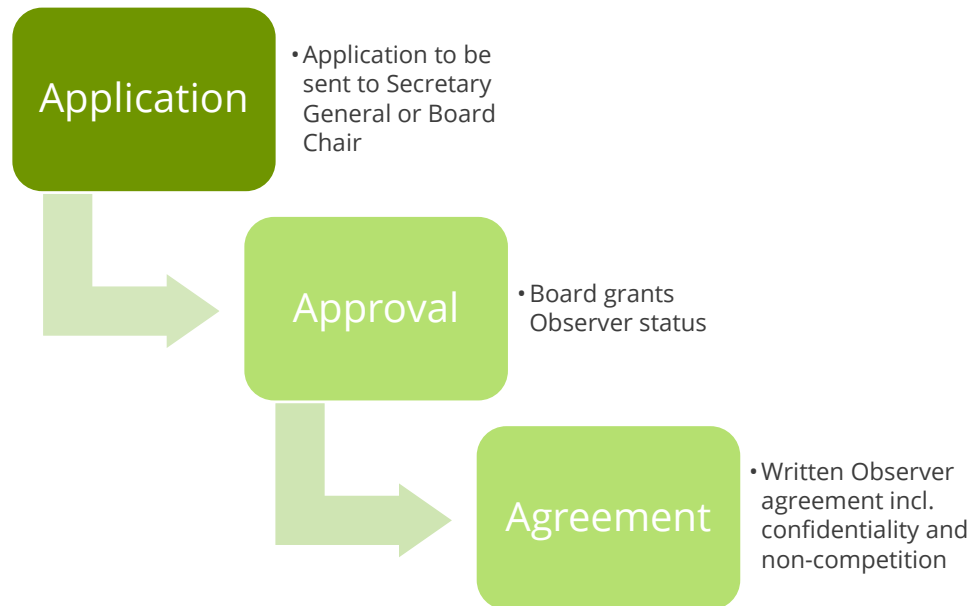
Membership

Becoming and being a member of the AIB

Being part of the process

Tailor made advice and expertise

06 **Observer**

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!

www.aib-net.org

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info@aib-net.org