EnergyTag

GC Scheme Protocol Template

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Introduction

This document aims to describe the Granular Certificate (GC) Scheme protocol of the Issuer [name]. It enables assessment with a view to becoming accepted as an EnergyTag Compliant Granular Certificate Issuer by proving compliance with the EnergyTag Granular Certificate Scheme Standard.

Identification

- Name of the GC issuer, address, and contact data.
- Geographical area for which certificates are being issued.
- Types of certificates being issued.
- Energy carriers for which certificates are being issued (electricity/gas/hydrogen/thermal energy/other).
- Technology of GC Issuance (wind, solar PV, cogen).

Legal/Regulatory Framework

- Description of (interaction with) legal framework for energy certificates (if any): [INFO]
    - How does the interaction with the legal framework avoid double-counting? [REQUIREMENT]
    - What are the known areas for further improvement? [RECOMMENDATION]
    - When is it intended that these improvements will be implemented?
- Purpose of the certification system:
    - Is the purpose of the certification system to inform consumers of the origin of the energy they consume? [REQUIREMENT]
    - How/where is this purpose determined?
    - Are there additional purposes for the certification system? If so, which? [INFO]
- Market set-up and level of market liberalization:
    - Description [INFO].
    - Does the market model support the certificate system's trustworthiness and avoidance of double-counting of the same attributes of energy? [REQUIREMENT]
    - Harmonisation of GC Schemes with interconnected markets: Description [INFO].
    - Linkage with public/financial support systems: description [INFO].
    - Cross-purpose double counting is avoided through the certificate/market design [REQUIREMENT].

GC Scheme Configuration (Include Schematic If Possible)

- Description of the underlying EAC System: [INFO]
    - Does the underlying EAC system avoid double-counting? [REQUIREMENT]
    - How does it do so?
    - Which independent third party audited it to confirm this? What was the last audit approval date?
- Clarification of the GC Scheme configuration and interaction with the EAC System: [INFO]
    - How does the GC Scheme interaction with the EAC system avoid double-counting in all areas? [REQUIREMENT]
    - Depending on configuration: [REQUIREMENT]
        - What necessary Agreements are in place OR
        - Has the EAC evolved into GC?
    - Does the IT connection GC-EAC work? [REQUIREMENT]
- Clarification of interaction with other certificate systems: [REQUIREMENT]
    - Do the GC and related EAC system have exclusivity in certificate issuance, cancellation, and certificate allocation to consumption within their domains?
    - If not, then what other certificate systems are known to exist in this domain?
    - Is there an authority that supervises the energy source disclosure of energy supplied within your domain?
    - Where such an authority exists, then is it informed that GCs are cancelled for energy consumption in its domain, and if so, how does this take place?

Governance and Roles

- Describe roles and explain: which roles are allocated to what type of organisation, how are they separated, with what organisation are they integrated (issuer, EAC issuing body, production device inspections, production registration, measurement, consumption verification, supervision, …) [INFO]
    - Are roles adequate to cover all responsibilities and liabilities? [REQUIREMENT]
    - How does the interaction between these roles ensure trust in the overall system? [REQUIREMENT]
    - What are the known areas for further improvement? [RECOMMENDATION]
    - When is it intended that these improvements will be implemented?

- Independence of the issuer from parties with commercial interest in trading and in producing certificates:
    - Ownership structure of the issuer company: Description [INFO].
    - Integrity: Is the issuer independent of parties with commercial interest in trading and in producing certificates? [REQUIREMENT]
- Liability framework:
    - Issuer's Liability: How is the issuer ensuring its liability against loss of certificates/value for account holders?
    - Account Holders' Liability: What liability is vested in account holders?

Granular Certificate Issuing

- Production registration:
    - Process description of Production Device registration and of measurement data registration [INFO].
    - Producer data required by the standards is provided to the GC Issuer [REQUIREMENT].
    - Issuance only for Net (of auxiliaries) energy production? [REQUIREMENT]
    - The process of measurement registration ensures the correct volumes are measured [REQUIREMENT].
    - Process of measurement reporting ensures that the correct measurements are reported [REQUIREMENT].
    - Verification of energy source:
        - Reliable process in place to ensure the verification of the energy source [REQUIREMENT].
        - In case of biomass/biogas: fraud-proofness mechanisms for energy source reporting [REQUIREMENT].
    - Type of energy eligible for the GC issuance.

Double Counting is Avoided Within the GC Scheme

- Issuance avoids double counting: [REQUIREMENT]
    - Configuration description.
- Transfer of ownership is facilitated:
    - Unique ownership registration of every certificate [REQUIREMENT].
    - Visualization of ownership is unambiguous and not open to interpretation [REQUIREMENT].
    - IT set-up for avoiding duplication during transfer [REQUIREMENT].
    - International transfer, cross-registry transfer:
        - Reach of transfer: How far is transfer enabled? And how is it controlled? [INFO]
        - Money laundering and tax fraud prevention? Risk visualisation? [INFO]

- Cancellation:
    - Unique registration of cancellation of every certificate [REQUIREMENT].
    - Unique visualization of allocating a GC cancellation to a beneficiary, ensuring unique beneficiary [REQUIREMENT].
    - Cancellation for usage in another domain: transparency?
- Expiry /Validity:
    - Description of expiry rule for GC.
    - GCs expire in accordance with the Standard [REQUIREMENT].
    - GCs expire no later than the expiry date of the underlying EACs.

GC Attributes

- List and description of the attributes available on the GCs [INFO].
- The attributes required by the standard (see here) are available on the GCs [REQUIREMENT].
- GCs are immutable once issued [REQUIREMENT].
- GCs replicate attributes from any underlying EACs [REQUIREMENT].
- GCs use UTC time zone for expressing production timestamp [REQUIREMENT].

Double Claims are Avoided – Disclosure Framework

- Description: How is it avoided that the same attributes, represented on GCs, are claimed more than once in relation to energy consumption?
- What is the maximum age of GCs that are allowed for consumption claims?

Fraud Prevention and Detection Measures

- How is metering fraud at the production or consumption site prevented? [INFO]
- Energy source reporting fraud [INFO].
- Manipulation of registry data [INFO].
- VAT carousel fraud, money laundering, and market manipulation prevention measures [INFO].
- Adequate fraud prevention and detection measures are in place: [REQUIREMENT]
    - What are areas for further improvement? [RECOMMENDATION]
    - When is it intended that these improvements will be implemented?

Error Handling

- Error handling/correction measures in place for: [REQUIREMENT]
    - Erroneous measurement,
    - Erroneous issuing,
    - Erroneous transfers,
    - Erroneous producer data.
- Description of error handling procedures: [INFO]
    - Including a description of the mechanism to handle corrections of metering data after GC issuance, and their impact on the number of issued GCs for past and future production periods.
    - Elaboration of how any unjust enrichment of any involved stakeholder is annulled after the detection of an error. Particularly, when dealing with corrections in measurement data for which GCs have been issued.
- Complaint procedure and contact data for addressing complaints.

Storage

- Data management of stored energy avoids double claims of the same attributes of energy [REQUIREMENT].
- Registers charging and discharging adequately into Storage Charging Records and Storage Discharge Records with the relevant time interval [REQUIREMENT].
- Matches cancelled GCs adequately with SCRs for the relevant time interval [REQUIREMENT].
- SDRs are adequately allocated to a beneficiary, being either an SD-GC or an end-user [REQUIREMENT].
- Handles losses in a credible way [REQUIREMENT].
- Process description [INFO].
- Clear and transparent handling?

IT Security

- Adequate Measures in place to ensure IT security [REQUIREMENT].

Account Holder Behaviour Control and Transparency

- Description of conditions to become an Account Holder, incl. who can be an Account Holder.
- Description or reference to the engagement that an Account Holder makes when admitted as a GC Account Holder.
- Description: How is it avoided that Account Holders cannot transfer the GCs, or the attributes represented by them, outside of the GC registry?

- Link to Account Holder user manual.
- Process for becoming an Account Holder.
- Information displayed to an Account Holder regarding the GCs in its portfolio.
- Process for Account Holders to initiate transfer.
- Process for Account Holders to initiate cancellation.
- Alerts are available to Account Holders regarding the upcoming expiry of certificates.