



CertifHy– Developing a European Framework for the generation of guarantees of origin for green hydrogen

GO scheme

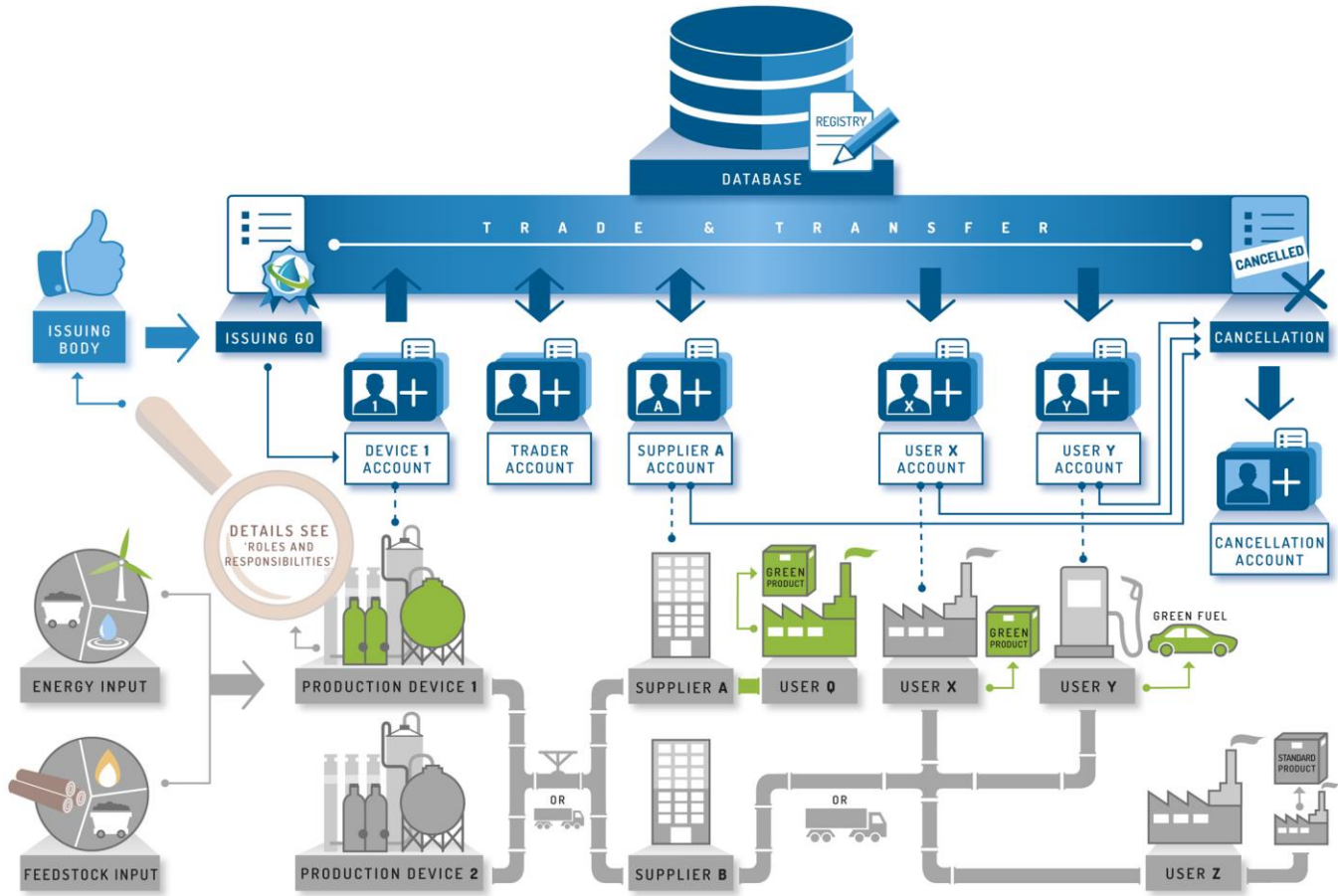
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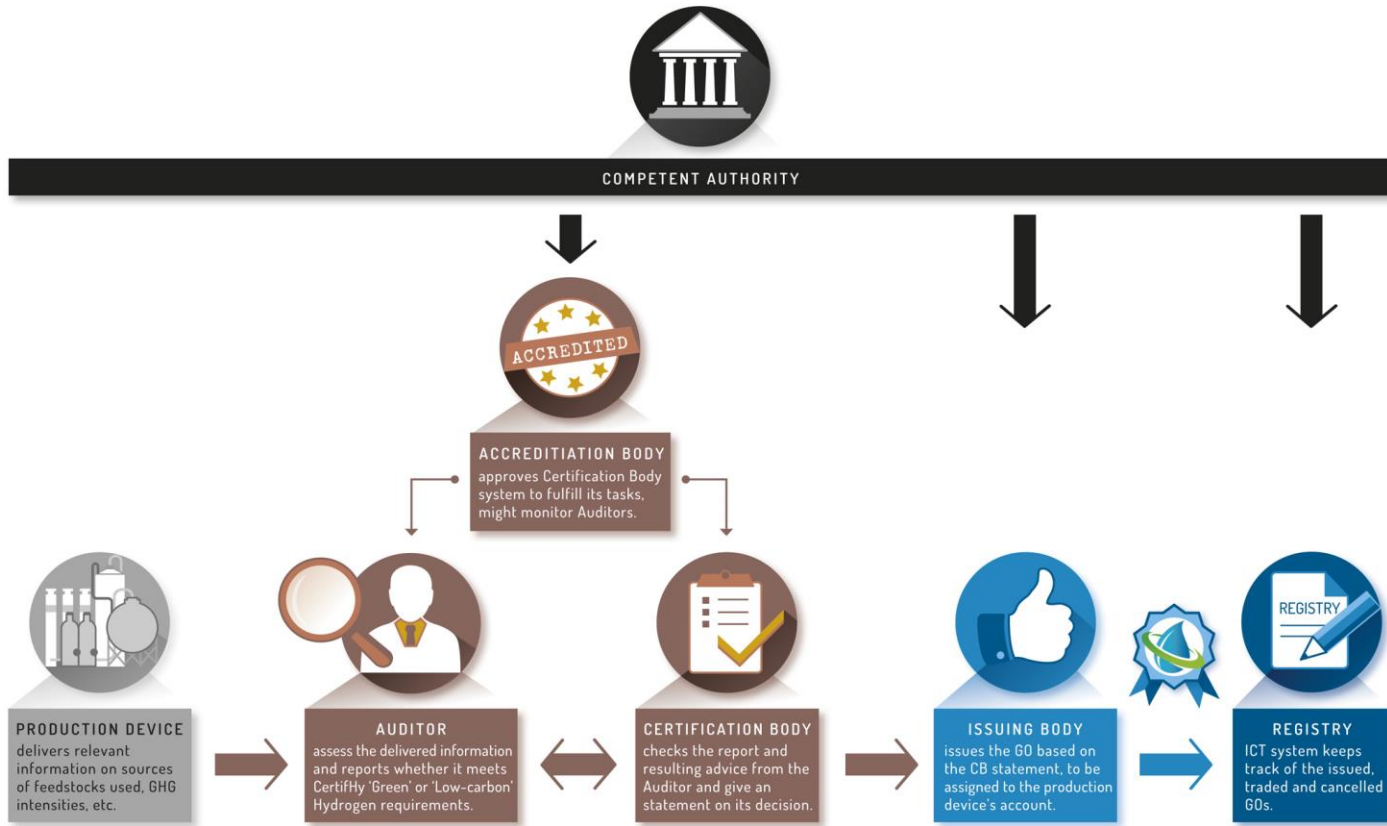
- **Scope, structure and process**
 - Principles and definitions
 - Protagonists, tasks, roles and requirements
 - Registry and reported Data
-



- Production device
 - Entity or part of an entity that complies with the following requirements
 - Owner of the physical hydrogen; and
 - this hydrogen is ready for trading, i.e.
 - it can be injected in a pipeline or filled in a truck without further processing
- Supplier
 - Entity trading and distributing physical hydrogen

- User
 - Entity that performs the GO cancellation
 - This entity does not necessarily consume the Hydrogen
 - E.g. Hydrogen Refuelling Station
- Cancellation
 - Will be done at the moment that the GO is combined with the physical hydrogen to claim green / low carbon hydrogen

- Geographical boundaries
 - European Union
 - Possibly extended to „European Free Trade Association“
- Registry
 - Single registry or harmonized national schemes?
 - Decision to be made within the supervisory board
 - Action 5 of the CertifHy road map
- Technology
 - All technologies will be included
 - Compliance with the requirements (CertifHy green / low carbon hydrogen definition)



- The GO will be issued to a production device
- The physical flow is independent of the GO flow
- Only at the moment that an entity claims premium hydrogen (User), the physical and GO flow will meet

- Registration of production device
 - Validation of the plant (ex-post certification)
 - Request for issuance of GOs
 - Direct request to Issuing Body (ex-ante certification)
 - Verification of the amounts (ex-post certification)
 - Trading of GOs
 - Cancellation of GOs
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- **Ex-post certification**
 - Based on ISO 14065
 - Validation of production device for registration
 - Issuance after verification
- **Ex-ante certification**
 - Based on ISO /IEC 17065
 - Allows issuance without verification
 - Yearly control (verification)

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- Virtual trade
 - Separation of the attributes from the physical flow
 - Avoidance of double counting
- Unit
 - 1 MWh (based on lower heating value)
- Quality
 - H₂ available for commercial trade
- Losses
 - Not included - similar to electricity GO

- Measurement / accuracy
 - Based on best available practice
 - Compliance with national requirements - if available

For the auditing process

- Level of assurance
 - Reasonable level of assurance
 - Materiality
 - 5% of the CertifHy GOs
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ACCREDITATION BODY
approves Certification Body system to fulfill its tasks, might monitor Auditors.



PRODUCTION DEVICE
delivers relevant information on sources of feedstocks used, GHG intensities, etc.



CERTIFICATION BODY
checks the report and resulting advice from the Auditor and give an statement on its decision.



ISSUANCE BODY
issues the GO based on the CB statement, to be assigned to the production device's account.



REGISTRY
ICT system keeps track of the issued, traded and cancelled GOs.



AUDITOR
assess the delivered information and reports whether it meets CertifHy 'Green' or 'Low-carbon' Hydrogen requirements.

- **Competent Authority**
 - Managing entity of the GO system
 - **Account holder**
 - Producing Green hydrogen, Trading, Transferring and cancelling of GOs
 - **Registry administrator**
 - Registration transactions
 - **Others**
 - Measurement body
 - IT-Provider
 - Service provider
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- Application requirements
 - Entity information
 - Contract (General Terms and Conditions)
 - Appointment of authorized representative
- Specific requirements for producers
 - Technical details of the plant
 - Compliance with definition and principles
 - Ex-ante and/or ex-post certification (see certification)
- Specific requirements for suppliers
 - Warrantee of hydrogen delivery

- Scope, structure and process
 - Principles and definitions
 - Protagonists, tasks, roles and requirements
 - **Registry and reported Data**
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- HUB (inter-registry telecommunications) contract is required
- Standard basic information
 - Basic data, layout and format can be transferred within the HUB
- GO life cycle
 - Encompasses:
 - Issuance
 - Transfers / Trade
 - Cancellation

- Unique ID for each production device and for each GO
 - Harmonized creation of IDs within the HUB
 - Production device status shall be available
 - Pre-registered
 - Registered
 - Withdrawn
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- System / procedure for control of changes is necessary
 - Dynamic inclusion of new technologies
 - Procedure to be established
 - Control of double counting (cancellation account)
 - Establishment of General Terms and Conditions
 - Data transmission / communication
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- Production device information
 - Name, location, ID, etc.
 - Technical information
 - Capacity, technology, metering, etc.
 - GO information
 - GO ID
 - Link to production device (ID)
 - Production period
 - Depending on the certification approach this might be date specific
 - Technical information
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- GO information
 - Energy sources
 - Raw material sources
 - GHG information
 - By-products
 - Main product
 - Allocation method
 - Definition of the level of detail of the information is part of the road map

- Introduction
- Definition of Green Hydrogen
- GO scheme
- Implementation Roadmap

Find out more:



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[#CertifHy](https://twitter.com/CertifHy)