



An initiative funded by the Clean
Hydrogen Partnership



Co-funded by the
European Union



Certification system for EU RED2 compliant hydrogen and e-fuels

World Hydrogen Summit

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Manager, France

Computer science engineer specialized in energy markets and energy attribute tracking systems with 10 years of experience in the energy sector.

Renewable energy & certification expert.

Project Coordinator for European Commission supported Standard on Green H2 Certification.

Coordinator since 2020



Contributor



EXPERIENCE



Development of a green H2 certification scheme in Chile



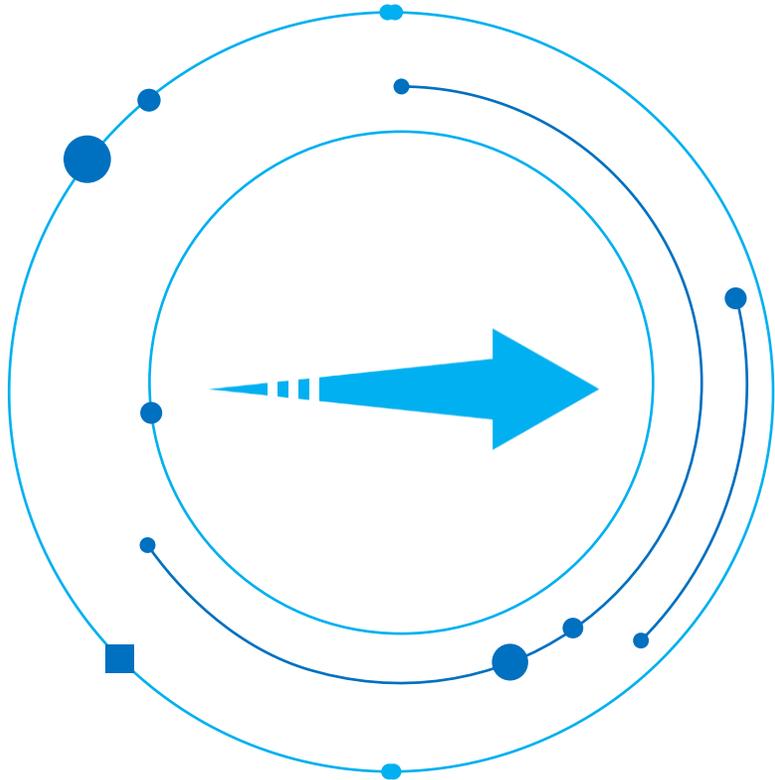
Design of H2 certification & market framework in Morocco



Guarantees of Origin for biomethane in France: Lead Consultant



Future Guarantees of Origin ICT procurement for gas & hydrogen: Lead Consultant



H2 & e-fuels certification expertise since 2014

Stakeholder Consultation platform: Working Groups, Training, Conferences

Easy to use platform for all certification matters

1. Register your production devices
2. Find Certification Bodies to perform audits and get certified
3. Trade your products by generating sustainability declarations
4. Claim the premium value of your products through easy and fast regulatory reporting (UDB, National Databases)



Phase 1

- 1 Define a widely acceptable definition of green hydrogen
- 2 Determine how to design and implement a robust EU wide GO scheme

Affiliated partners:



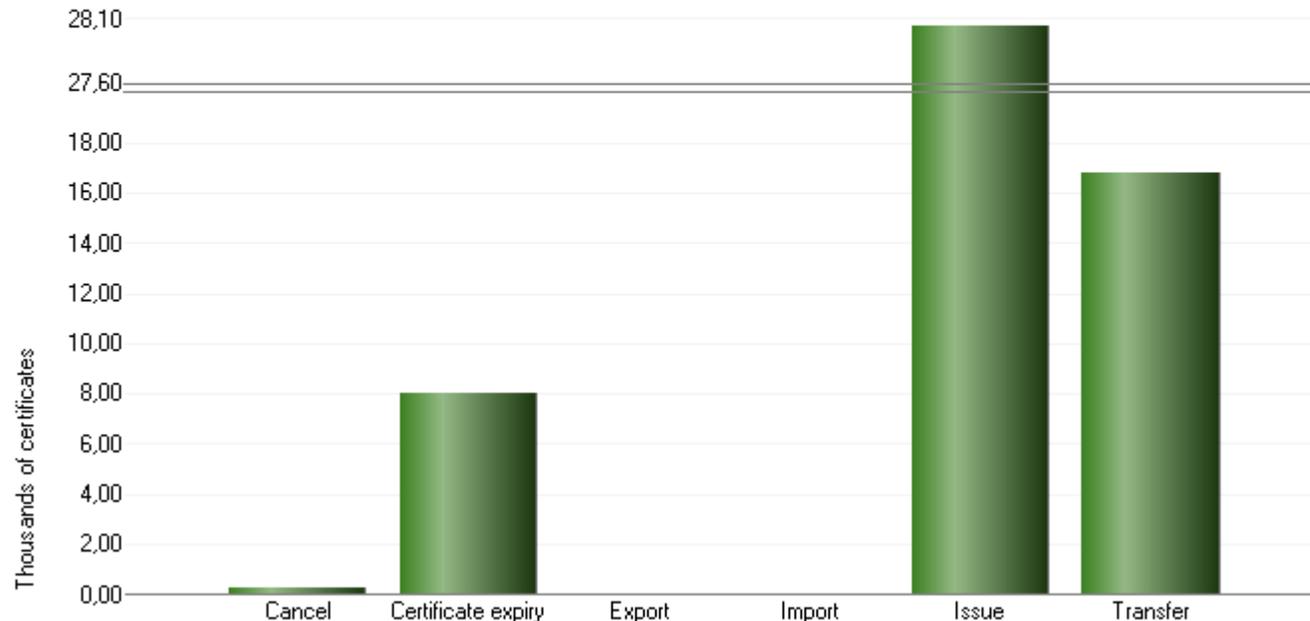
Phase 2

- 1 Set-up a hydrogen GO Stakeholder platform
- 2 Finalise the scheme design ensuring it can be the **main route to guarantee the origin of green & low carbon hydrogen across EU Member States**
- 3 Run a pilot scheme to test the proposed design
- 4 Identify actions which need to be undertaken after the completion of the study **to achieve an EU wide deployment of the scheme**

Phase 3

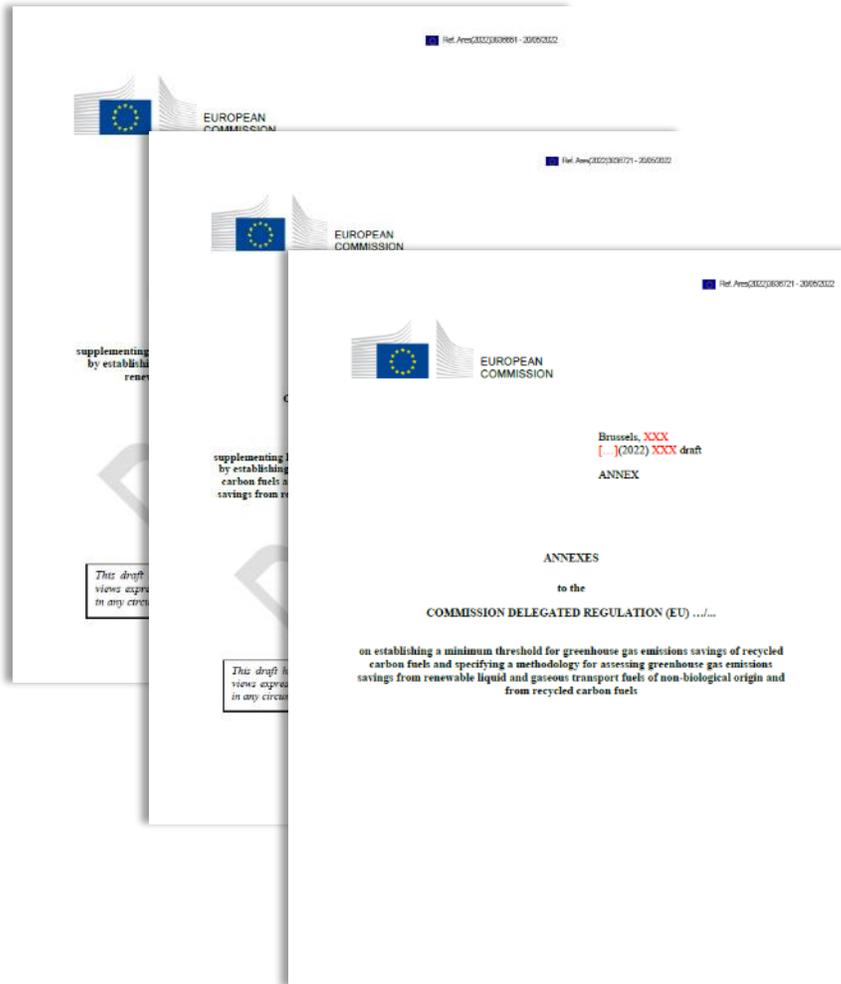
- 1 Prepare EU wide deployment:
Implement Scheme:
 - Gas Scheme Group of AIB
 - Voluntary Issuing Body
 - Expand Stakeholder Forum with WG on Issuing Bodies
- 2 Expand from GOs to RFNBO certification

CertifHy NGC Transactions in 2022



Source: cmo.grexel

- **CertifHy NGC issuances grew by 231% year to year**
- **CertifHy NGC transfers grew more than 10x year to year**
- **CertifHy NGC cancellation volumes relatively low** in comparison. This will be investigated



CertifHy EU RFNBO Scheme

CertifHy Scheme Documents

- Governance
- Risk Management
- Traceability & Chain of Custody
- GHG emissions & Renewability
- Logos & Claims
- Certification Body Requirements
- Grievance, Complaint & Appeal
- Registration & Certification Procedures

GHG Emissions & Renewability

Traceability and Chain of Custody

Certification Bodies Requirements

- Auditor competencies
- Accreditation of certification bodies
- Adequate standards
- Duties and responsibilities of CBs
- Quality management

Governance

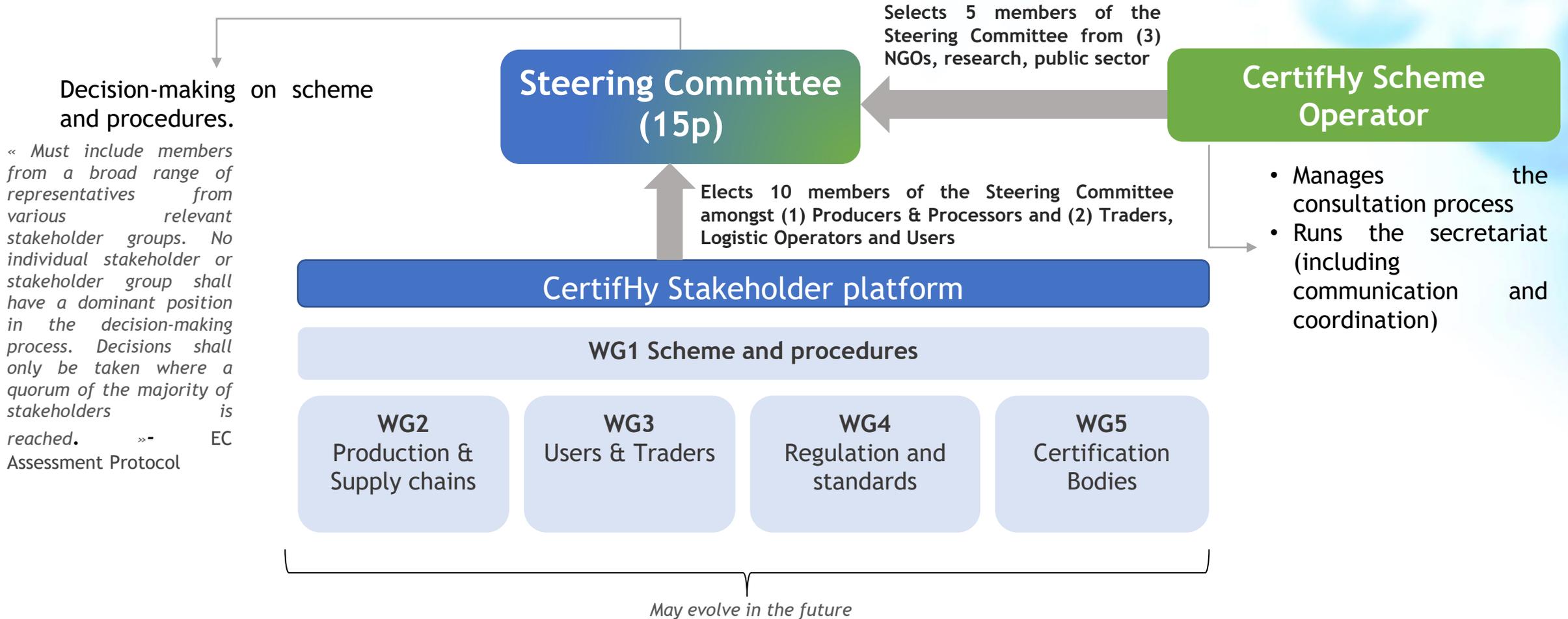
Registration and Certification procedure

- Document management
- Transparency

Risk Management

- Risk management when conducting audits
- Level of assurance in conducting audits

Grievance, Complaint & Appeal procedure Logos, Labels & Claims



HyNetherlands was the first CertifHy RFNBO certification pilot. Other pilots have followed: RFNBO H2 production in the Nordics for export to NL, H2 to Ammonia to H2 in Europe, international projects in LATAM and MENA, use of RFNBO H2 in refineries

hynetherlands



A gigawatt scale green hydrogen value chain

HyNetherlands selected CertifHy™ for a RFNBO certification pilot of its e-methanol production

“Certification of renewable-based hydrogen is key to ensure product qualification, while growing parallelly the maturity of infrastructure projects. The process HyNetherlands went through, jointly with the partners, strongly increased its ability towards effectively delivering certified products to customers once legislation is in place.” **Gregory Bartholomé, Project Manager HyNetherlands**

“This certification process will help us ensure circularity by using biogenic CO2 from non-recyclable waste to contribute to achieving renewable energy targets as set by the European Union with the production of renewable fuels.” **Bernard Kemper, CEO EEW Energy from Waste GmbH, 100% shareholder of EEW Energy from Waste Delfzijl B.V.**

STEP 1 PROJECT SETUP



- Specify and detail all requirements for the certification scheme pilot set-up and operations

STEP 2 DATA GATHERING AND CLEANSING



- Identify, collect and treat key input data for the auditing process (based on project documents and plans)

STEP 3 AUDIT (CERTIFHY™)



- Audit by CertifHy recognized Certification Body
- Deliver the audit report, providing information on the eligibility of the planned plant for certification

STEP 4 REPORT ISSUANCE



- Deliver the full CertifHy™ report according to its EU Voluntary Scheme with main learnings and recommendations



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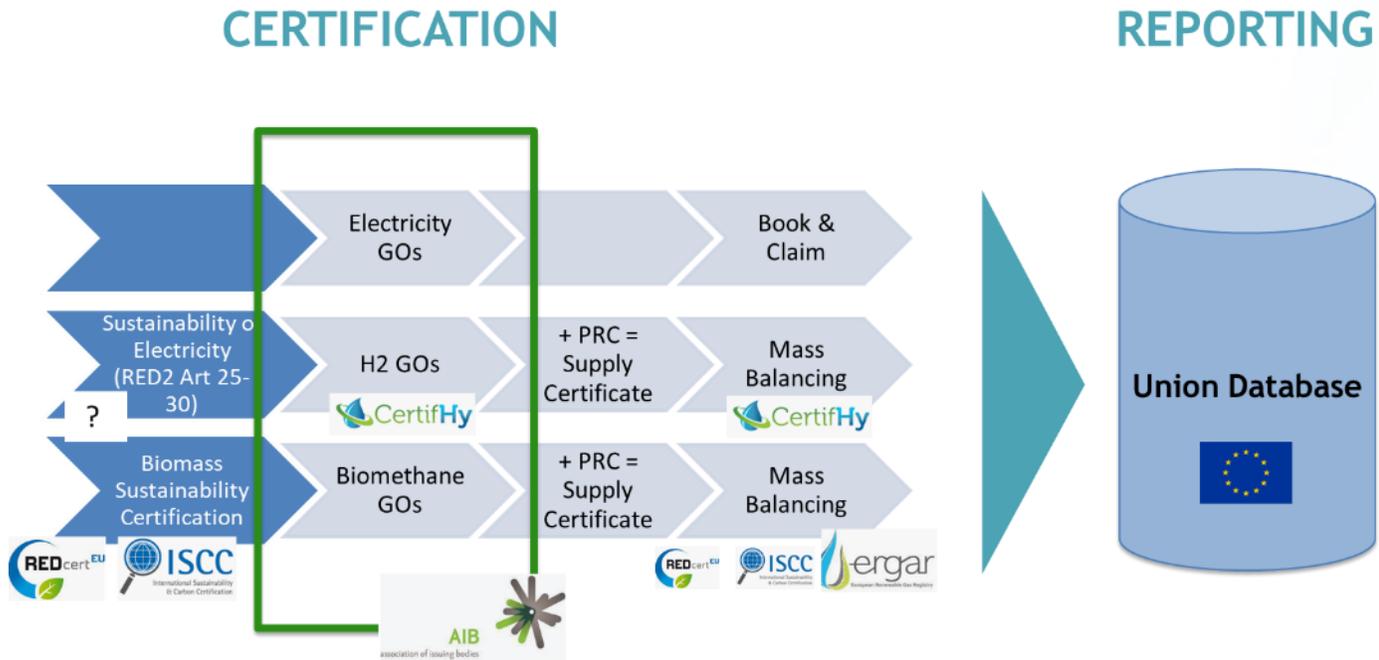


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Thank you

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CertifHy proposes a certification architecture where sectoral experts (EU Voluntary Schemes) facilitate reporting in the Union Database

- The Energy Attribute Tracking System (EATS) architecture designed by CertifHy 3 allows for the combination of book & claim (GOs) and mass balance (RFNBOs)
- Guarantees of Origin should participate to the improvement of RFNBO certification by providing further evidence to Voluntary Schemes
- Maximum flexibility should be provided to economic operators by keeping GOs « alive » until the consumption of the H2 molecule

