



An initiative funded by the Clean
Hydrogen Partnership



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Study on accelerating the deployment of
Guarantees of Origin Schemes for Hydrogen
and for the design of a Voluntary Scheme for
compliance with RED II targets

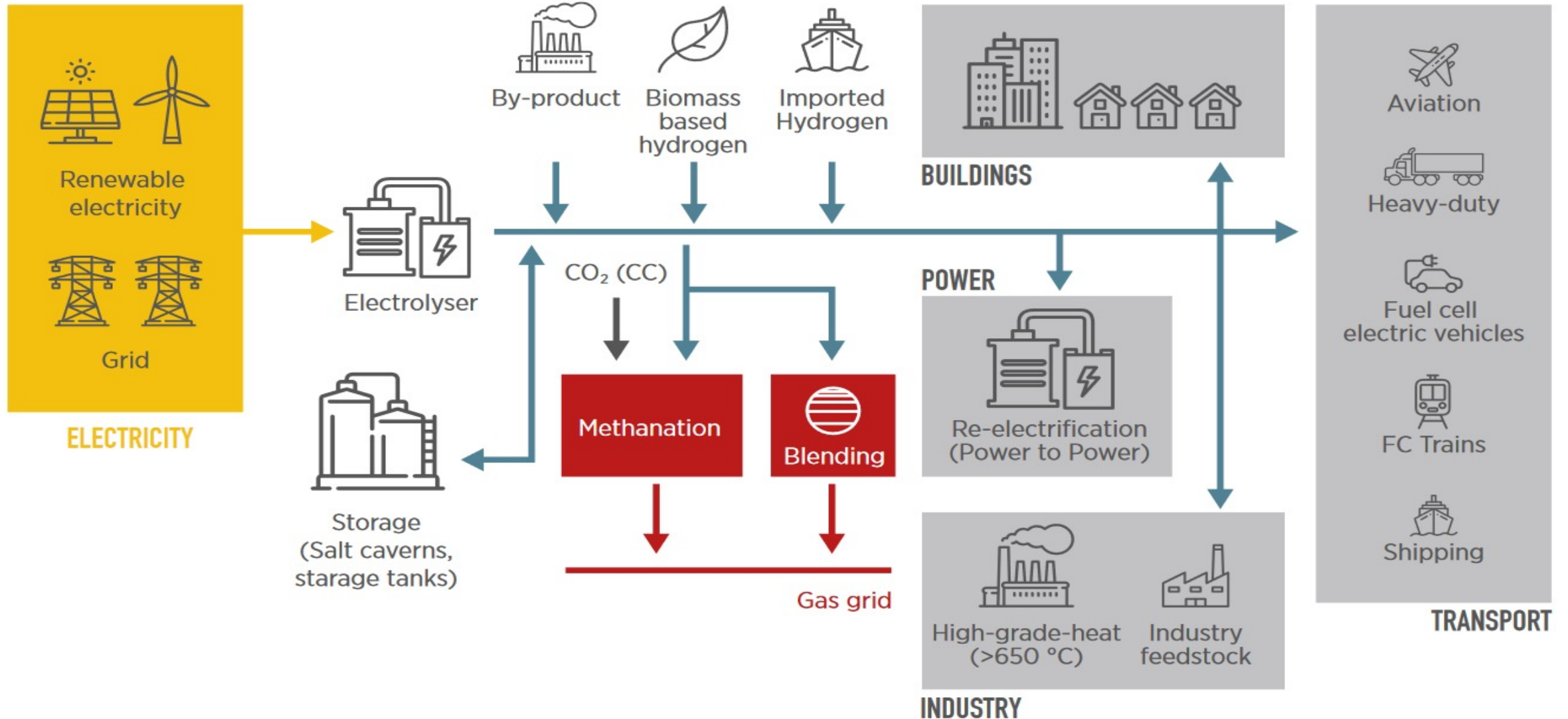
Call for tenders no. FCH / OP / CONTRACT NO. 278

- CertifHy 3 -

28/04/2022

CertifHy 3 Plenary Session

Hydrogen is an important piece of the puzzle for the energy transition and sectoral integration



Hydrogen is not just a molecule anymore, it is a product that is characterized by its environmental attributes

Today ...

... and tomorrow?

Voluntary Market

Hydrogen consumers need a solution to make informed decision with regards to their H2 procurement, for CSR and GHG corporate reporting purposes (RED2 Art. 19).

Hydrogen producers need a certification system to disclose environmental information to their customers.



Guarantees of Origin

Regulatory market

The European Commission has set binding targets and specific criteria for the development of the renewable hydrogen market (RED2 art. 25 - 30)

Fuel suppliers and industrial players need a certification system to show compliance with the EU target and criteria.



RFNBO certificates

Other use cases?

Hydrogen certification could become the preferred tool for H2 consumers to claim CO2 emissions reduction and mitigate the CO2 price rise in Europe.

???

CertifHy 3 is looking to develop certification schemes for both the voluntary and regulatory markets.

- Contrary to renewable electricity, we are yet to have a legal basis for describing renewable hydrogen
 - How to document the renewability of hydrogen on certificates?
- The carbon content of a MWh of H₂ will be crucially important, however we are lacking clear standards and guidelines
 - How to address multiple production pathways?
 - How to avoid market distortion in the future?
- Hydrogen will be the first product covered at the same time by a book & claim system (Guarantees of Origin) and a mass balance system (RFNBOs)
 - How to avoid double counting and administrative burden?

Voluntary schemes

Certification

- ▶ Ensure RFNBO compliance = +/- rules for auditors
- ▶ Issue certificates usable by economic operators = +/- back office of accounts

Incentivization

- ▶ Recognition of RFNBO production, import, consumption
- ▶ Multipliers, quota, obligations, feed in tariffs, etc.

National legislation

Credit market

- ▶ Creation of a RFNBO certificate market based on quota / obligation (per RED3)

Reporting system

- ▶ Solutions for economic operators to show compliance

- ▶ Known EU Voluntary schemes are **built around the biofuel industry**
- ▶ Interfaces need to be built between H2 certification and national systems to **avoid administrative burden**
- ▶ The H2 certification architecture must consider the **new interplay between guarantees of origin and RFNBO certification to avoid double counting**

CertifHy 3 aims at accelerating
the development of hydrogen
certification in Europe



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Westendstr. 199
80686 Munich, Germany
- AIB**
Association of Issuing Bodies IVZW (AIB)
Koning Albert II-Laan 20 bus 19
1000 Brussels, Belgium
- cea**
Commissariat à l'énergie atomique et aux énergies alternatives (CEA)
25 rue Leblanc Bat Le Ponant
75015 Paris, France

- ECN replaced by CEA
- CEA to be link with IPHE/CEM
- AIB added as partner
- ERGAR contribution in kind assured

2014 2016 2017 2018/9 2020s..

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

Steering Group

- Takes decisions regarding platform governance and organization
- Endorses the important scheme decisions
- Convenes plenary sessions

- Working group chairs and co-chair
- Various DG's of the EC will be re-invited as in CertifHy 2 to become Observer

	<div>  </div> <div>WG1: GO scheme and procedures</div> <div> <ul style="list-style-type: none"> Define the scheme Provide input to and interface with standardization with regards to structure and content </div>	<div>  </div> <div>WG2: GO issuing (Producers)</div> <div> <ul style="list-style-type: none"> Define the requirements that will apply to the H2 production sites </div>	<div>  </div> <div>WG3: GO commercialization and use (Users)</div> <div> <ul style="list-style-type: none"> Specify the features that are needed to address market needs in terms of GO product and commercialization </div>	<div>  </div> <div>WG4: Regulatory Framework</div> <div> <ul style="list-style-type: none"> Ensure alignment between GO scheme and the pertinent regulation, especially at EU level </div>	<div>  </div> <div>WG5: Issuing Bodies (IBs)</div> <div> <ul style="list-style-type: none"> WG in process of being created </div>	
Role	<ul style="list-style-type: none"> Act as a discussion forum for stakeholders Endorse the overall scheme 					
Composition	<ul style="list-style-type: none"> All pertinent stakeholders 	<ul style="list-style-type: none"> GO Scheme experts (including industry) Standardization experts 	<ul style="list-style-type: none"> Operators of H2 production sites 	<ul style="list-style-type: none"> All actors involved with the distribution and the use of GOs (fleet operators, industrials from the automotive, steel, glass, etc. sectors, industrial gas companies,...) 	<ul style="list-style-type: none"> Public affairs experts of the stakeholder group Representatives of the Commission 	<ul style="list-style-type: none"> Competent Issuing Bodies from Member States

Thank you for your attention

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