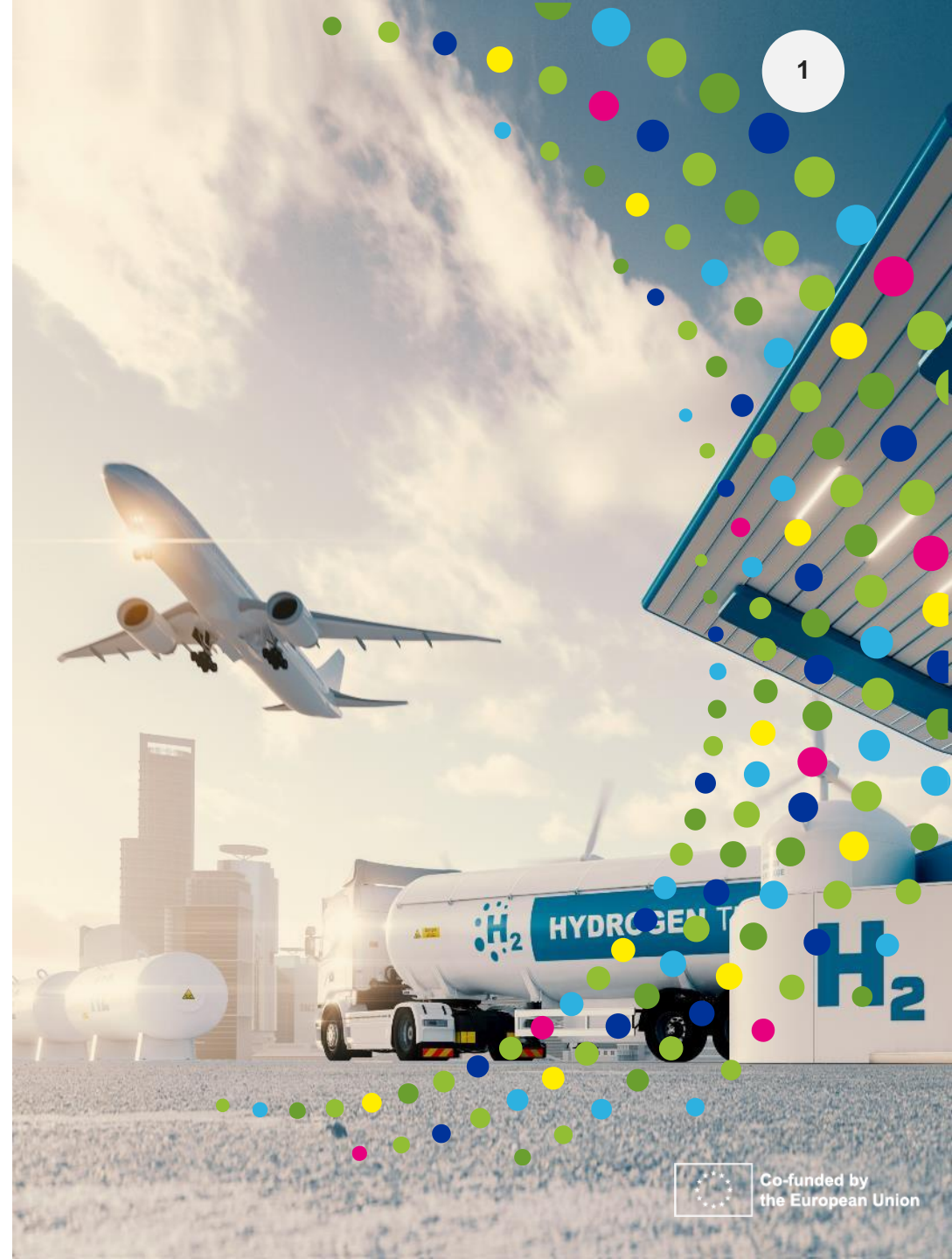


# Möglichkeiten der Zertifizierung von grünem Wasserstoff – Das Projekt CertifHy

DGAW, Stadtreinigung Hamburg, HiiCCE:  
Erneuerbare Kraftstoffe aus CO<sub>2</sub> –  
Herstellung und Einsatzbereiche  
Hamburg (hybrid), 25. Mai 2023, 09:00–13:40



## CertifHy™ – certification of green Hydrogen and Derivatives (RFNBO) for the European Market

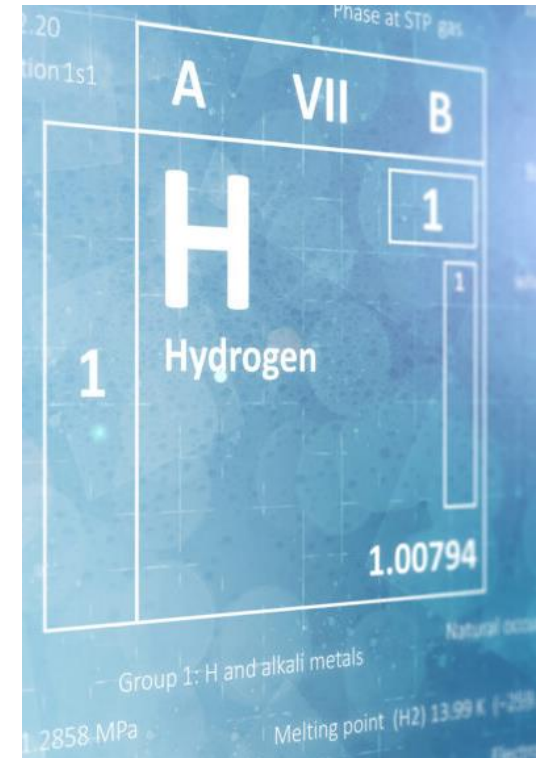
1. What is CertifHy™?
2. Current status in Europe
3. How to get CertifHy-ed?
4. Further information





## CertifHy™ : European stakeholder initiative

- CertifHy™ is a **European initiative to bring together public and private stakeholders** to develop a common understanding of renewable and low-carbon hydrogen, develop **certification schemes** and spark the European market for certified hydrogen.
- Overall, CertifHy™'s mission is to advance and facilitate the production, procurement and use of renewable, and low carbon hydrogen, fulfilling ambitious environmental criteria as well as decarbonization objectives, in order to protect the climate and improve living conditions of humankind.



## Regulatory Situation in Europe

- RED II defines “Renewable Fuels of Non-Biological Origin” – **RFNBO**, i.e. “green” Hydrogen from renewable electricity, Derivatives (e.g. ammonia, methanol, e-SAF, etc.)
- National transposition in Germany: BImSchG Art. 37a-37h; 36., 38. BImSchV; 37. BImSchV pending
- RED II Amendments (provisional agreement 6 Mar 2023): certification generally unaffected
- Certification of RFNBO for the European Market has to be carried out by so-called “**Voluntary Schemes**”, which need to be **recognized by the European Commission**
- Recognition of Voluntary Schemes for RFNBO certification is possible with the Delegated Acts related to RED II having been adopted on 10 February 2023

## CertifHy™: Voluntary Scheme to demonstrate compliance with RED II

- CertifHy™ has been developed since 2014, and is **operational since 2019**
- CertifHy has applied for recognition to the European Commission and aims to be **first to be recognized by the European Commission** as Voluntary Scheme for the certification of RFNBO
- CertifHy already carries out **pilot certifications with RFNBO producers**

### Pilot certifications by CertifHy™

- Align RFNBO producer (project operator) and all parties on the **scope and planning of the certification**
- Identify any **risks** that may impact the certification including the timeline
- Provide clarity on the **regulatory requirements** to demonstrate RFNBO compliance & provide transparency on areas that are still being discussed at EU level
- Enable the project operator to prepare for certification by **putting together all necessary documents, plans, data and measurement inputs** for the auditing phase

## RFNBO Certification Pilots to gain practical experience

CertifHy worked with the HyNetherlands project to run a RFNBO certification pilot of its e-methanol production in collaboration with TÜV SÜD

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.**

# RFNBO Certification of economic operators

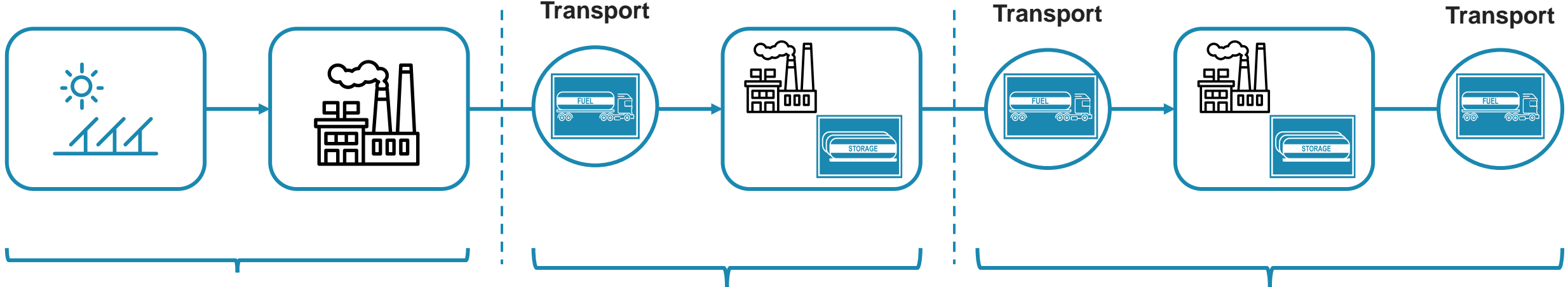


Electricity  
producer

First processing  
unit

Further  
processing units  
and/ or storage

Final processing  
unit  
and/ or storage



  
Proof of  
Sustainability

  
Proof of  
Sustainability

  
Proof of  
Sustainability

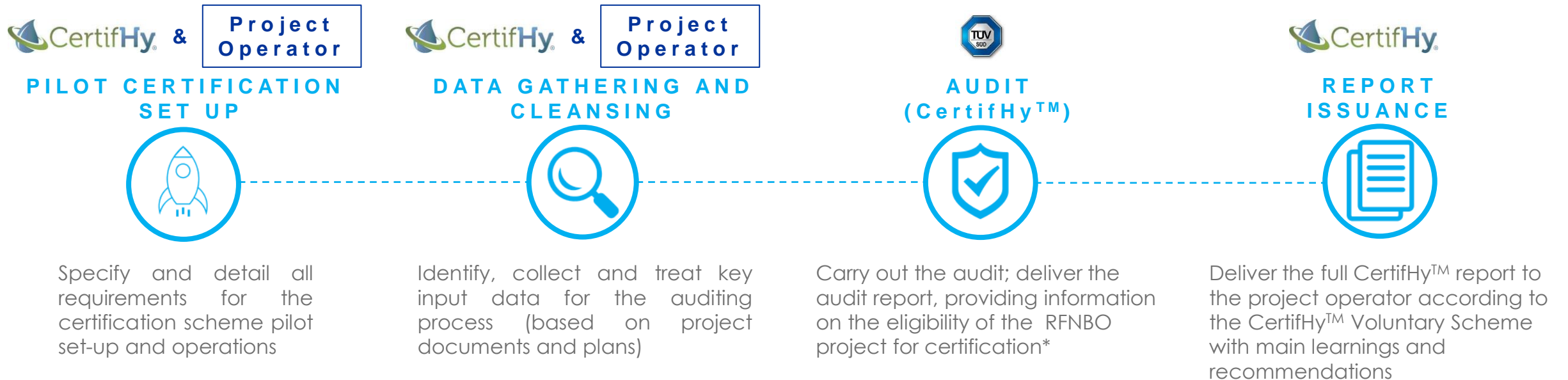
## CertifHy™ assists H<sub>2</sub> project developers in preparing for their future certifications

Our **certification pilots** are destined for existing and aspiring producers, with the following objectives:

- Help to **understand shortfalls or gaps** in the production processes, supply chain, feedstocks, etc. with regards to RED II requirements
- **Prepare for compliance:** preview of data sets to be made available to demonstrate compliance (technical data, data on electricity procurement, data for GHG emissions calculation, etc.)
- **Identify actions** that can be taken on the production setup or planning
- For early-stage projects (feasibility, FEED study, Project Design), the results report from the certification pilot – including the full audit report by our recognized Certification Body TÜV SÜD – constitutes a **solid tool for convincing** internally (board members, decision-makers) and externally (investors, prospective clients, insurance companies, etc.)



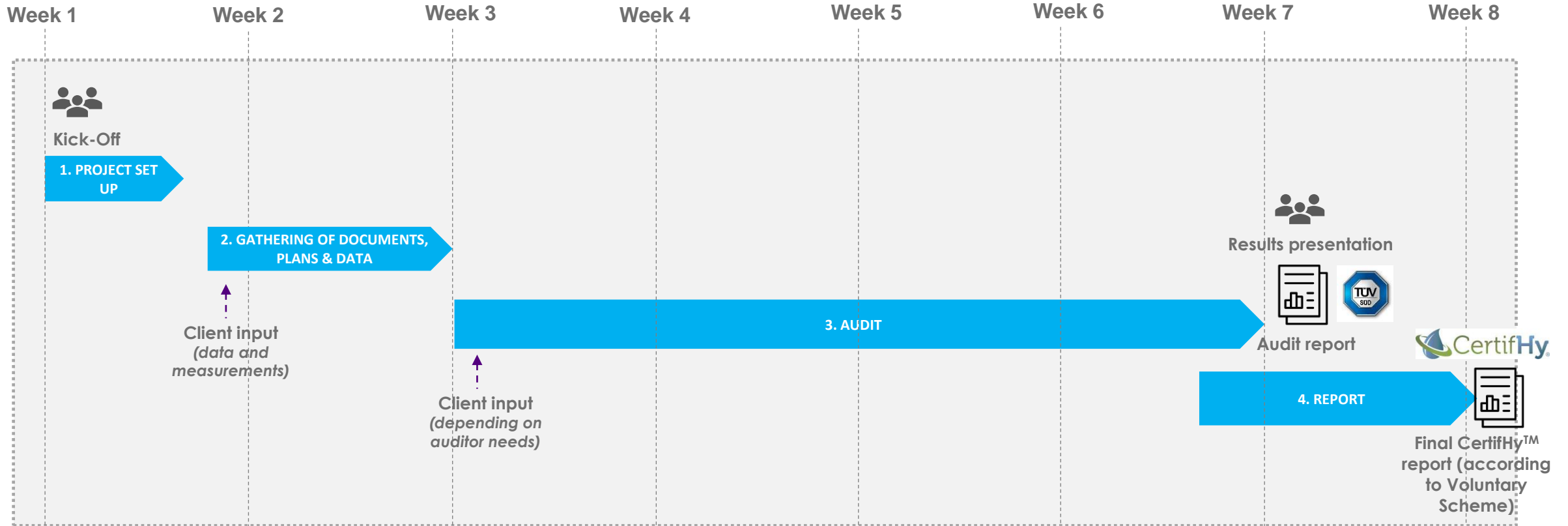
## CertifHy™ pilot certifications support project operators to prepare for certification



\* The audit for the certification pilot will validate *planned* plant data, *plans* and other relevant documents. For the plant and its products to be officially certifiable, it will have to go through full validation and verification once the plant is operational. For the time being, audits are carried out by TÜV SÜD as Certification Body recognized by CertifHy™. In the future, further Certification Bodies are anticipated to be recognized by CertifHy™.

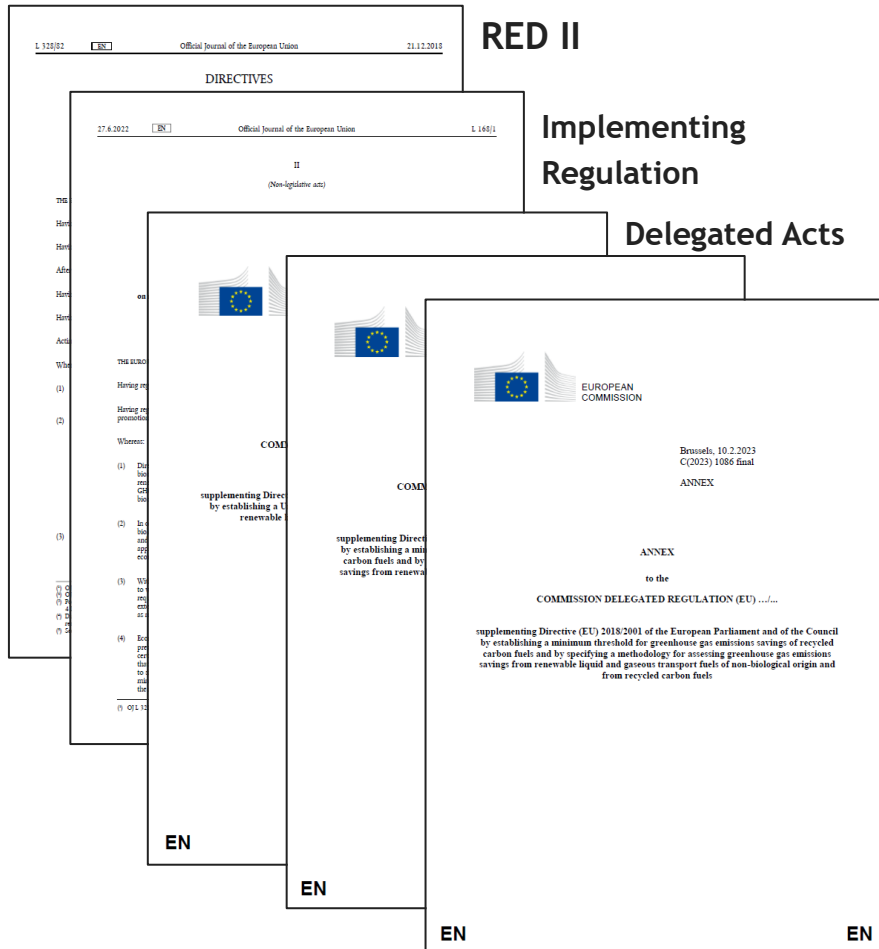


# Pilot certification timeline: example



**TO BE NOTED:**

The timeline will largely depend on the availability of the required documents, plans, data and resources (people) on the client's side. It is important that any risks regarding these factors are raised at the project kick-off meeting.



## CertifHy Voluntary Scheme document structure

### Scheme basics

#### CertifHy Scheme Document

- Governance structure
- Scheme doc update procedures
- Authority, reporting, other schemes
- Transparency
- Quality & risk management
- Non-conformities, sanctions

### Requirements

#### GHG Emissions & Renewability

#### Traceability & Chain of Custody

#### Requirements for Certification Bodies and Auditors

- Requirements for Certification Bodies
- Duties & Responsibilities of CBs
- Requirements for Auditors
- Change of Certification Body

#### Risk Management

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

### Procedures

#### Registration and Certification procedure

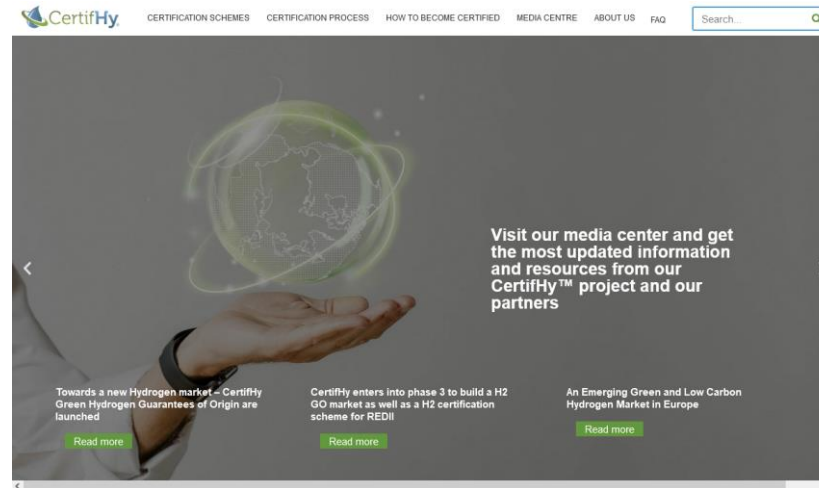
- Document management
- Transparency

#### Grievance procedure

#### Logos, Labels & Claims

## CertifHy™ website:

- Link: <https://www.CertifHy.eu/>



## CertifHy™ video:

- Link: <https://youtu.be/zd-MCMLTUdA>



## Thank you for your attention!

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### For general questions, please contact

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