

WIC MEETING DECEMBER 1, 2022

Welcome to the WIC meeting!



AGENDA

10.00-10.05: [Introduction North Sea Port & WaterstofNet](#)

10.05-10.40: [New members presentation](#)

10.40-11.00: [Key note](#)

Bert den Ouden, Project Director, HyXchange project NL

11.00-11.20: [News from WIC members](#)

Cummins, Bosal updates

11.20-11.30: [WIC WG combustion](#)

Position on future applications of combustion technology H2

11.30-12.00: [WIC news](#)

12.00-14.30: [Boat tour in the port](#), with presentations NSP on H2 projects, including lunch

HyXchange

Bert den Ouden

The Hydrogen market perspective and development

- Waterstof Industry Cluster Meeting Waterstofnet
- Nieuwdorp, North Sea Port, 1 December 2022
-
- Drs. Bert den Ouden, HyXchange project director
- bdnouden@wxs.nl
- www.hyxchange.org

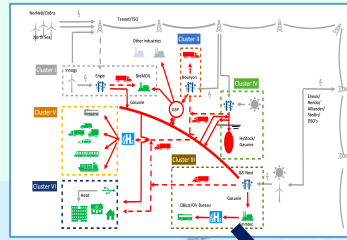
About HyXchange

Initiative by Gasunie TSO and 4 Sea Ports. 60 Market parties involved

One strand of multi-pipeline gas network in NL repurposed for H2. First stage 2026; Completed in 2030 Including salt cavern H2 storage



Global H2 carrier market



Salt Caverns

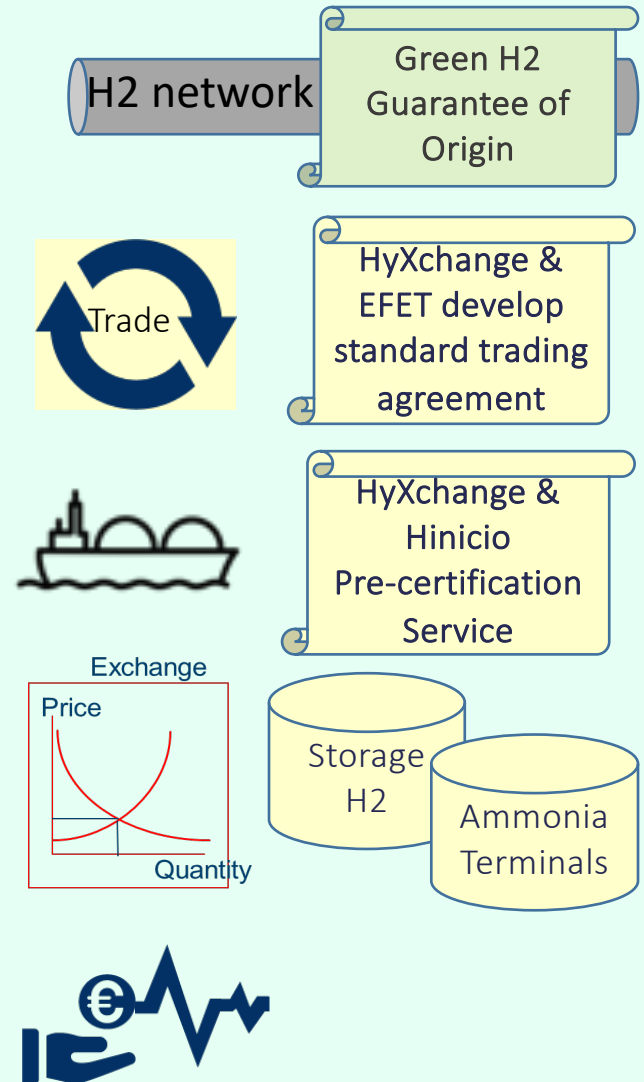
EU Gateway im/exports



Development activities HyXchange

- ❖ Pilot preparing Green Hydrogen Guarantees of Origin (GOs) now available in NL
 - Standard contract for trading of Hydrogen GOs
- ❖ Pre-certification hydrogen carrier imports into Europe
 - Simulation hydrogen spot market on national H2 grid
 - Exploration of a price index product

❖ *These activities conducted in co-operation with Hinicio*





The Dutch green Hydrogen guarantee
of origin system:

- HyXchange pilot early 2022
- Go live October 2022

The EU certification challenge
- Import Pre-certification initiative

HyXchange H2 certificate pilot: 18 parties, 3 months dry run End report finalized. Findings used to improve live system.



- January – May 2022, conducted by HyXchange assisted by Hinicio (Certifyh designer)
- Dry run new H2 GO system by Vertogas, certifying body (biogas, now also H2)
- GO test for green hydrogen, prepare go-live of system based on Dutch law
- GO low-carbon hydrogen: same format
- Pilot included registration, cancellation, splitting and trade

Example Dutch GoO

Serial number: Unique number refers to the specific certificate order, automatically generated by the production system.

EEB status: Has the quantity of green gas (that takes up the EEB) been used to submit an application to the production system. Accepted EEBs of input for production of H2.

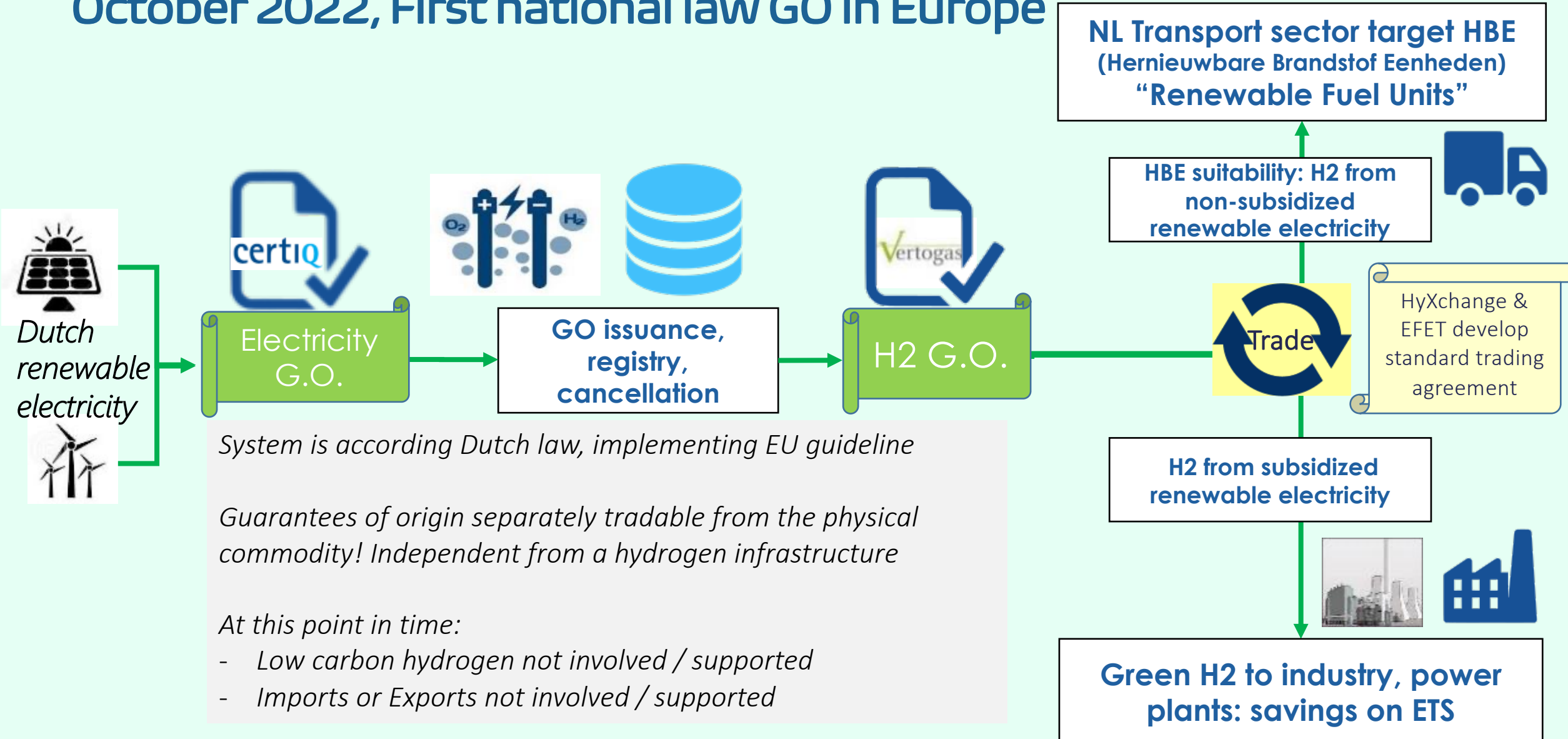
Green gas installation data	Green gas installation data
Name of green gas installation	Name of the green gas installation (includes the green gas producer's name and the green gas production installation on the green site).
Production volume	Volume of green gas production of the green gas producer.
Approval code	Number of approval certificates of the green gas producer.
Production installation	Number of installations including the green gas producer's name, serial number, etc. This is necessary to verify if the green gas is produced on the green site.
Production volume	Total number of green gas production installations connected to the green gas installation.
Production volume	Number and year of production.
Green production	Volume of green gas production of the green gas producer, including the green gas production volume of the green gas producer's name, serial number, etc. This is necessary to verify if the green gas is produced on the green site.

Green gas sustainability data

Information of sustainability criteria	Information of sustainability criteria
Date of issue	Date of issue of sustainability certificate (DDMMYY or YYYYMMDD).
Issue date	Issue date of sustainability certificate (DDMMYY or YYYYMMDD).
Substrate energy source	Code, volume in a header and description of biomass used.
Division of origin	The Netherlands.
Sustainability criteria	None or minimum.
Green gas use estimate (in t CO2e)	CO2 reduction compared to fossil reference. This means the green gas production volume (in t CO2e) is reduced by the volume of fossil gas (in t CO2e) that is replaced by the green gas. The whole process is verified by an auditor.

Report on Website: Hyxchange.org

Dutch GO system: After pilot, system started recently October 2022, First national law GO in Europe



System is according Dutch law, implementing EU guideline

Guarantees of origin separately tradable from the physical commodity! Independent from a hydrogen infrastructure

At this point in time:

- Low carbon hydrogen not involved / supported
- Imports or Exports not involved / supported

Guarantee of Origin: separate from physical commodity. Example: application to upstream hydrogen generation

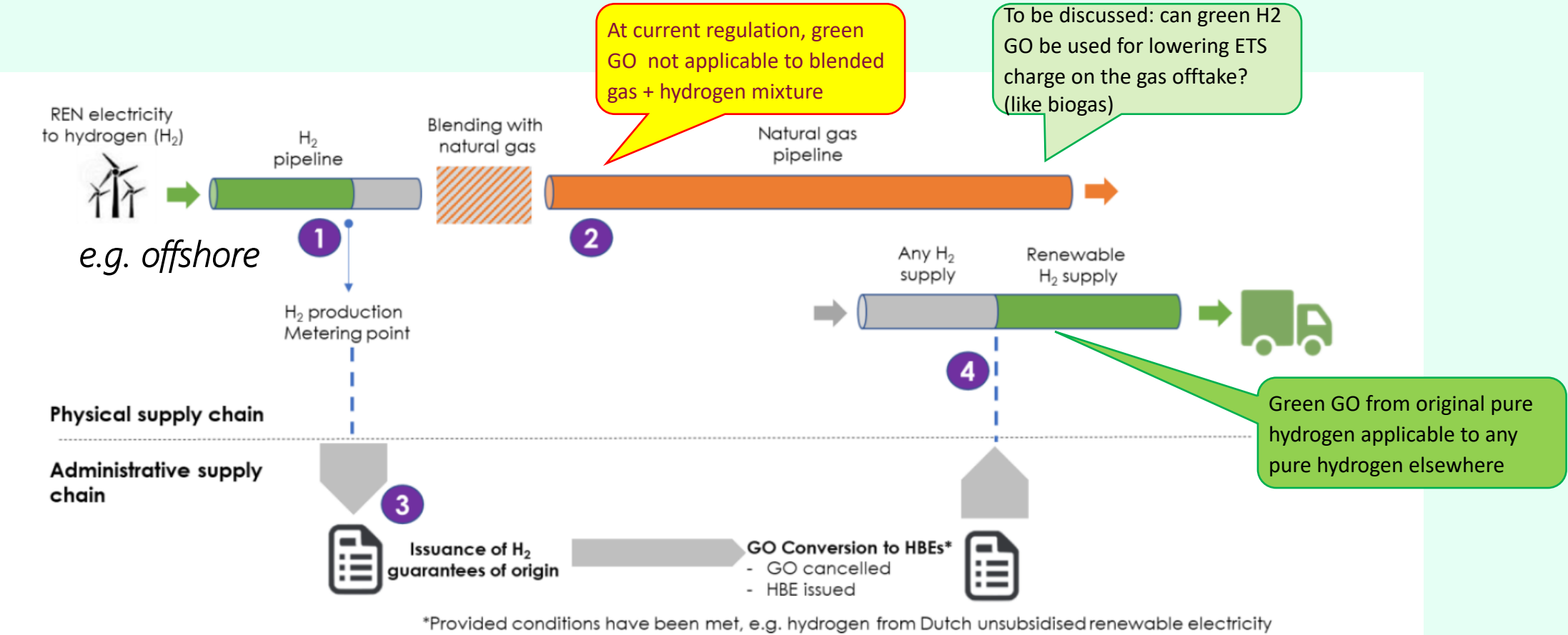


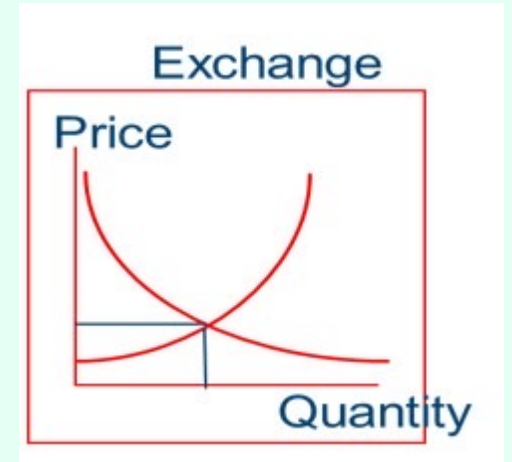
Figure 8: Schematic overview of Guarantees of Origin (GOs) issued and converted to Hernieuwbare Brandstof Eenheden (HBEs) for hydrogen that is blended with natural gas after renewable hydrogen production

Exploring a possible green H2 GO auction

- Standard GO trade agreement available as a basis

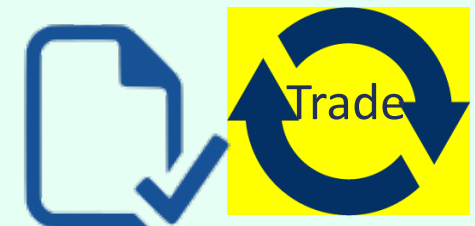
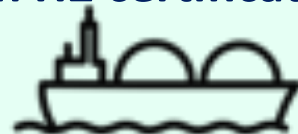
Platform / facility for:

- Producers wishing to sell their green hydrogen GOs (apart from the hydrogen)
- Purchase of green GOs for conversion into HBE or any other purpose
- Re-trade of purchased GOs, closing of GO positions
-
- If possible, generation of a Green Hydrogen GO index



2023 Develop H2 GO auction exchange product and green H2 (auction based) GO index

Later also a market for EU green H2 certificates (mass balancing based)



Why is this a problem? It doesn't need to be!

Many H2 imports are from semi-autonomous windfarms and solar farms.
EU acceptance should be easy

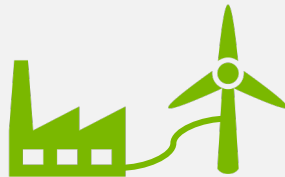
Delegated Act (DA)



Case 1
Partial renewable hydrogen

- Renewable share of grid

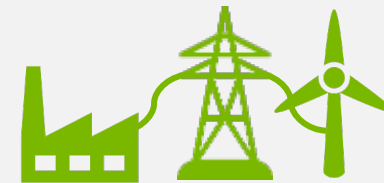
- < 3,4 kg CO_{2eq}/kg H₂ consumed



Case 2
100% renewable hydrogen

- New renewable installation

- < 3,4 kg CO_{2eq}/kg H₂ consumed



Case 3
100% renewable hydrogen

- Additionality
- Temporal correlation
- Geographical correlation

- < 3,4 kg CO_{2eq}/kg H₂ consumed



Delega - DA)

70%

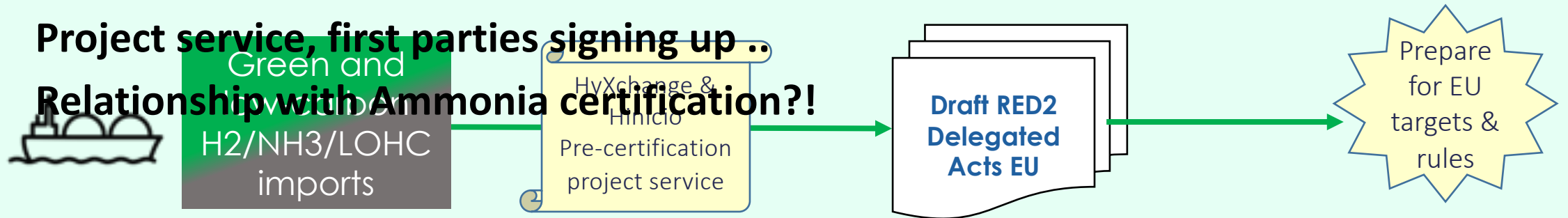
certificate



Pre-certification project service by HyXchange

- **Certification key enabler for international imports, trading of hydrogen counting for:**
 - targets for RFNBO hydrogen
 - targets for percentage of renewable hydrogen in the industry
 - exemption from CBAM charge
- **Pre-certification: doing the homework for important projects – ahead of the final rules**
- **We enough about the draft rules to prepare for readiness; then hit the ground running**
- **Both green and low carbon Hydrogen (with same -70% criterion), Certifhy based**
- **Taking into account steps in between like ammonia conversion & transport**

- **Project service, first parties signing up ..**
- **Relationship with Ammonia certification?!**



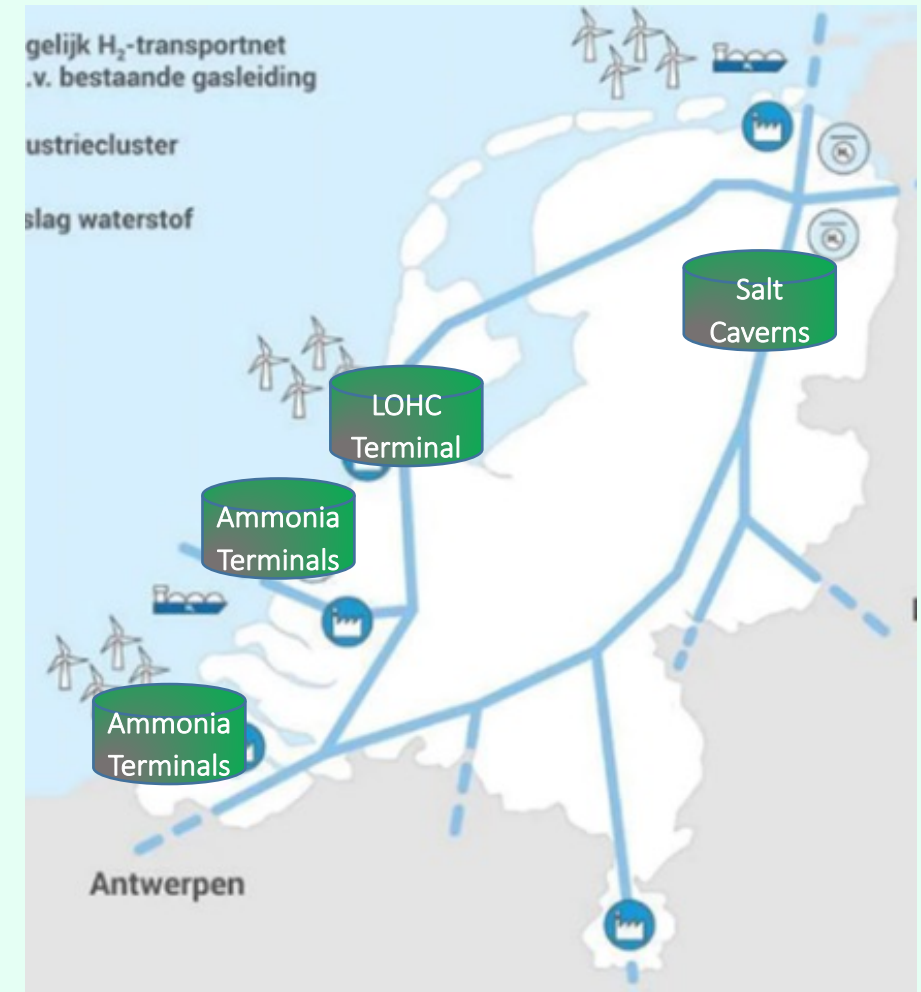


Hydrogen spot market simulation, now ongoing

- Hydrogen network and storage
- Balancing role of ammonia

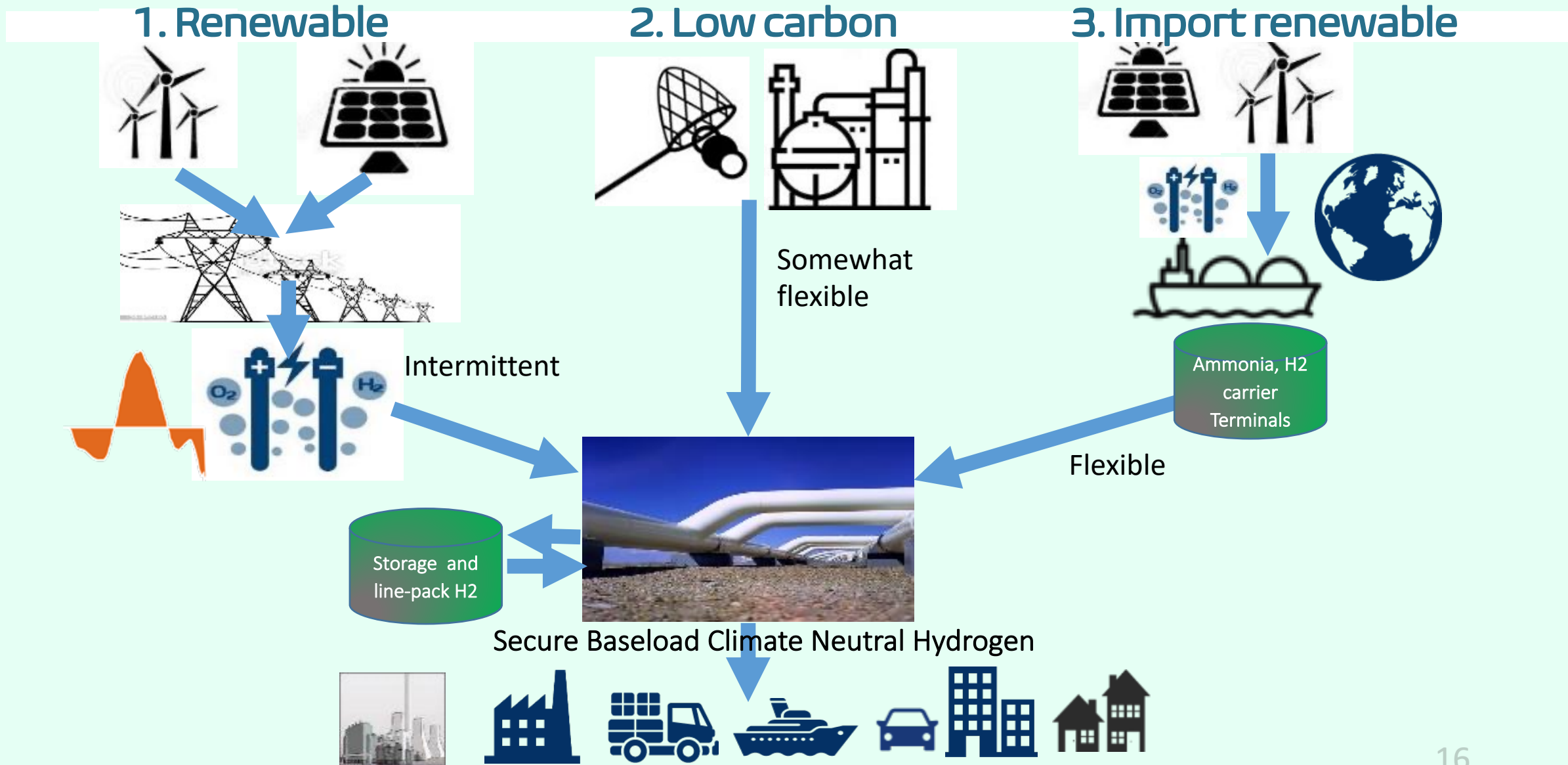
H2 spot market/balancing simulation on a (inter) national hydrogen grid. Unique in the world

- Balancing varying electrolyzer H2 output with flexible H2 output of low-carbon SMR+CCS.
- H2 hourly electrolysis overproduction: store or utilize in gas power plants
- Storage: line-pack and salt caverns important for balancing
- Import hydrogen (ammonia, LOHC, liquid H2), each with storage, conversion and flexibility:
→ additional balancing opportunities
- Connection to Germany, Belgium
- Diversity of consumers: industry sectors; housing; transport; each with their own demand patterns.



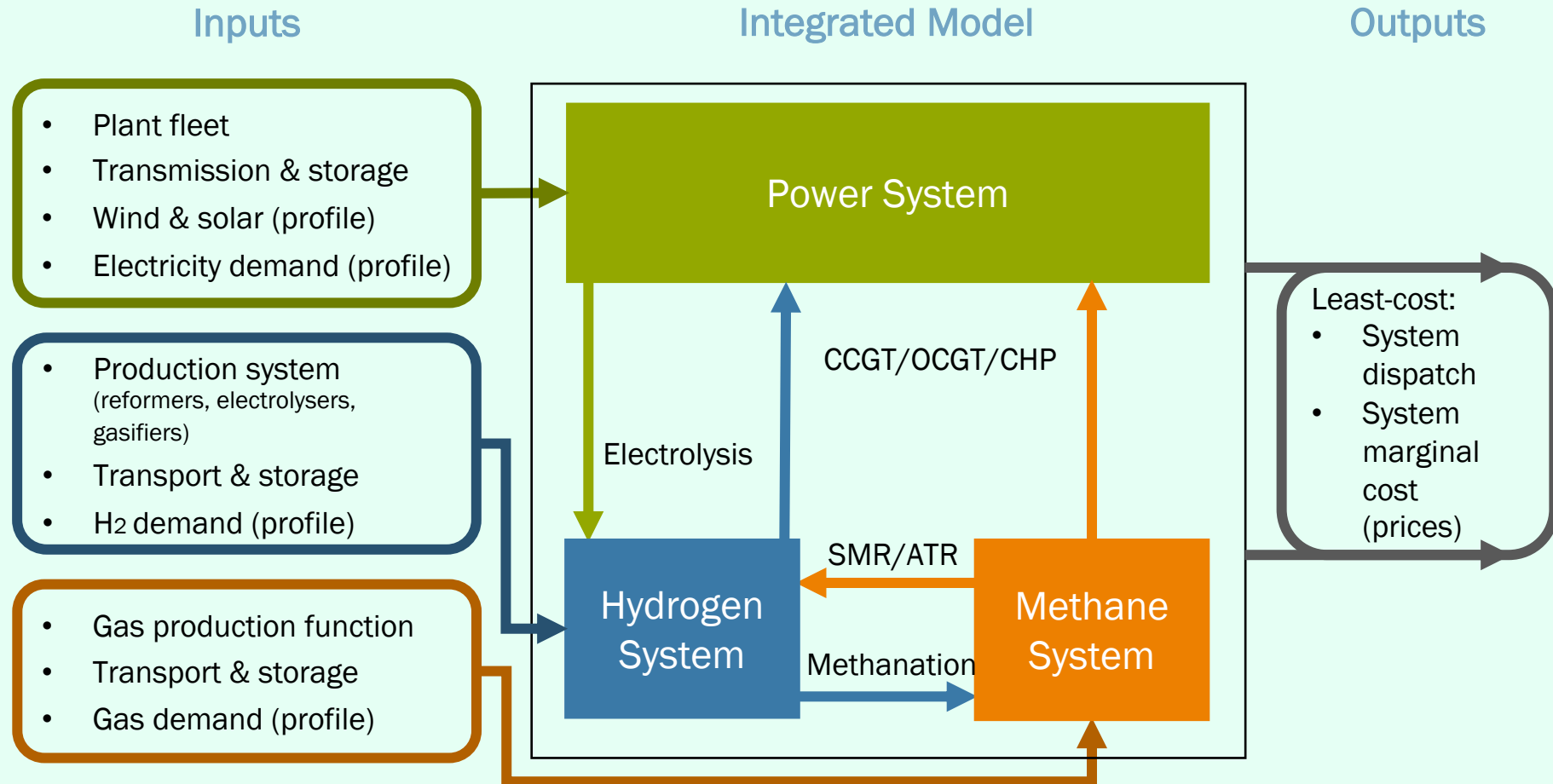
HyXchange simulation of Hydrogen spot market

Different sources, patterns, balancing



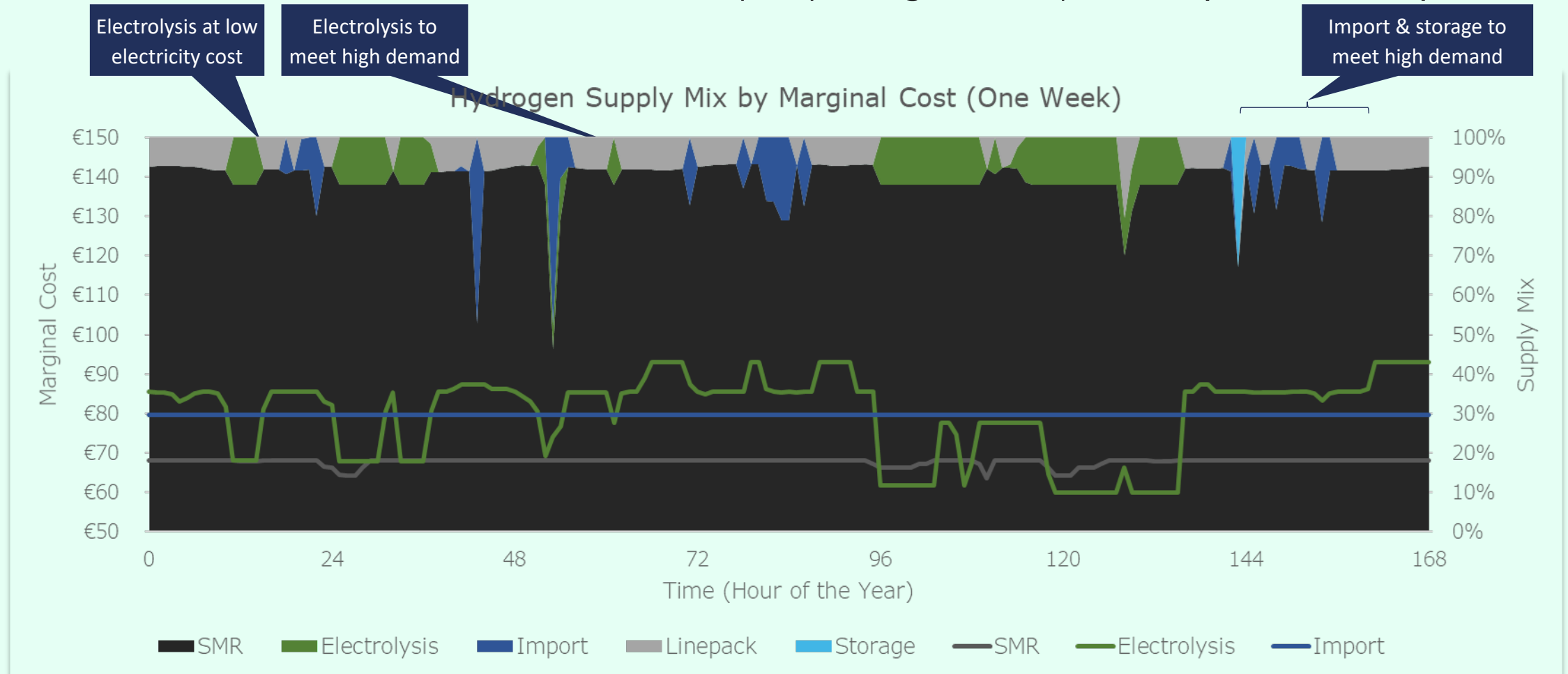
Recap I-ELGAS Model structure

- Model flow-chart: *optimization on (hourly) marginal cost*



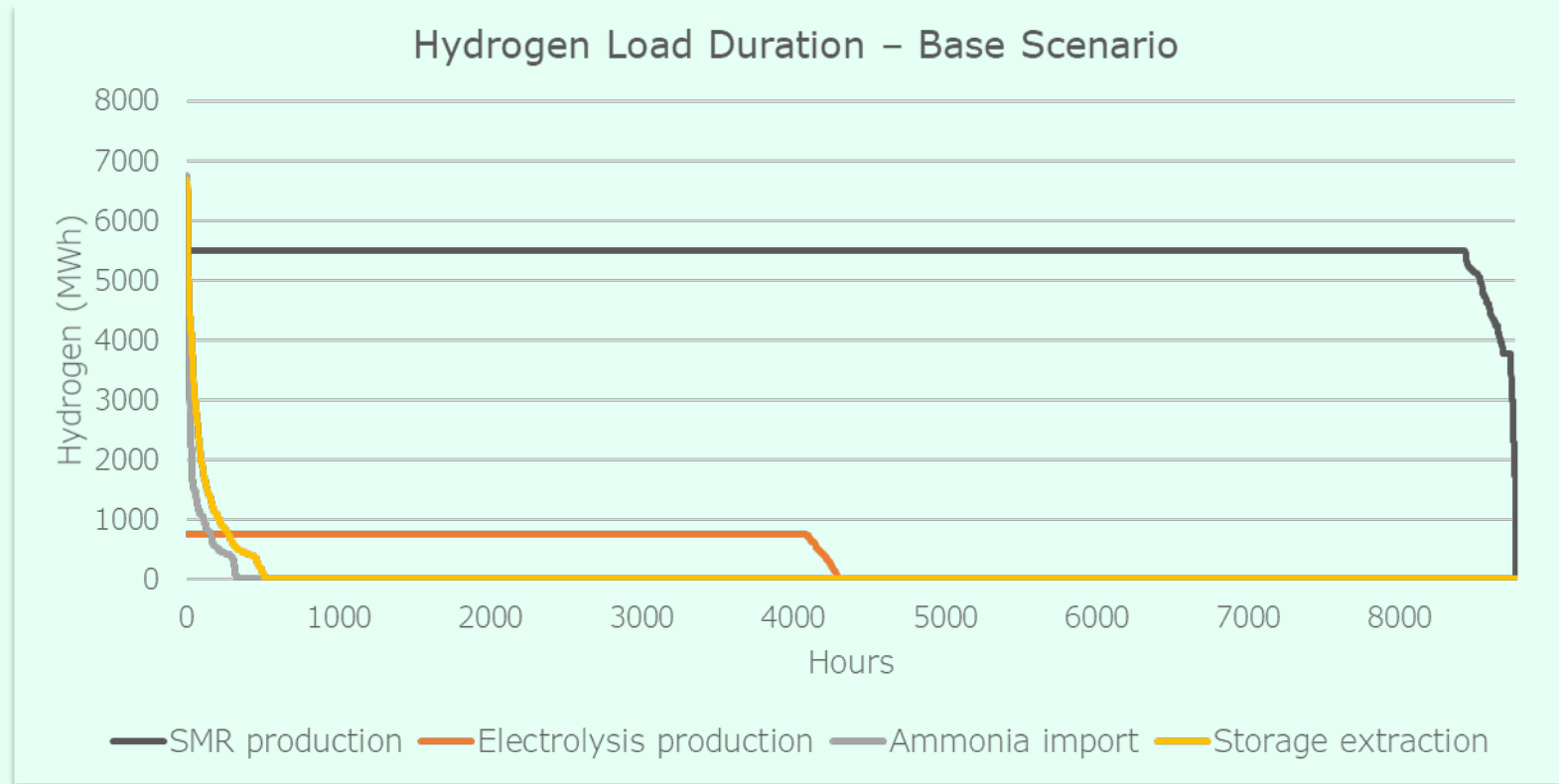
Base Case Scenario 2026

- First Results – illustration hourly hydrogen dispatch (one week)



Base Case Scenario 2026

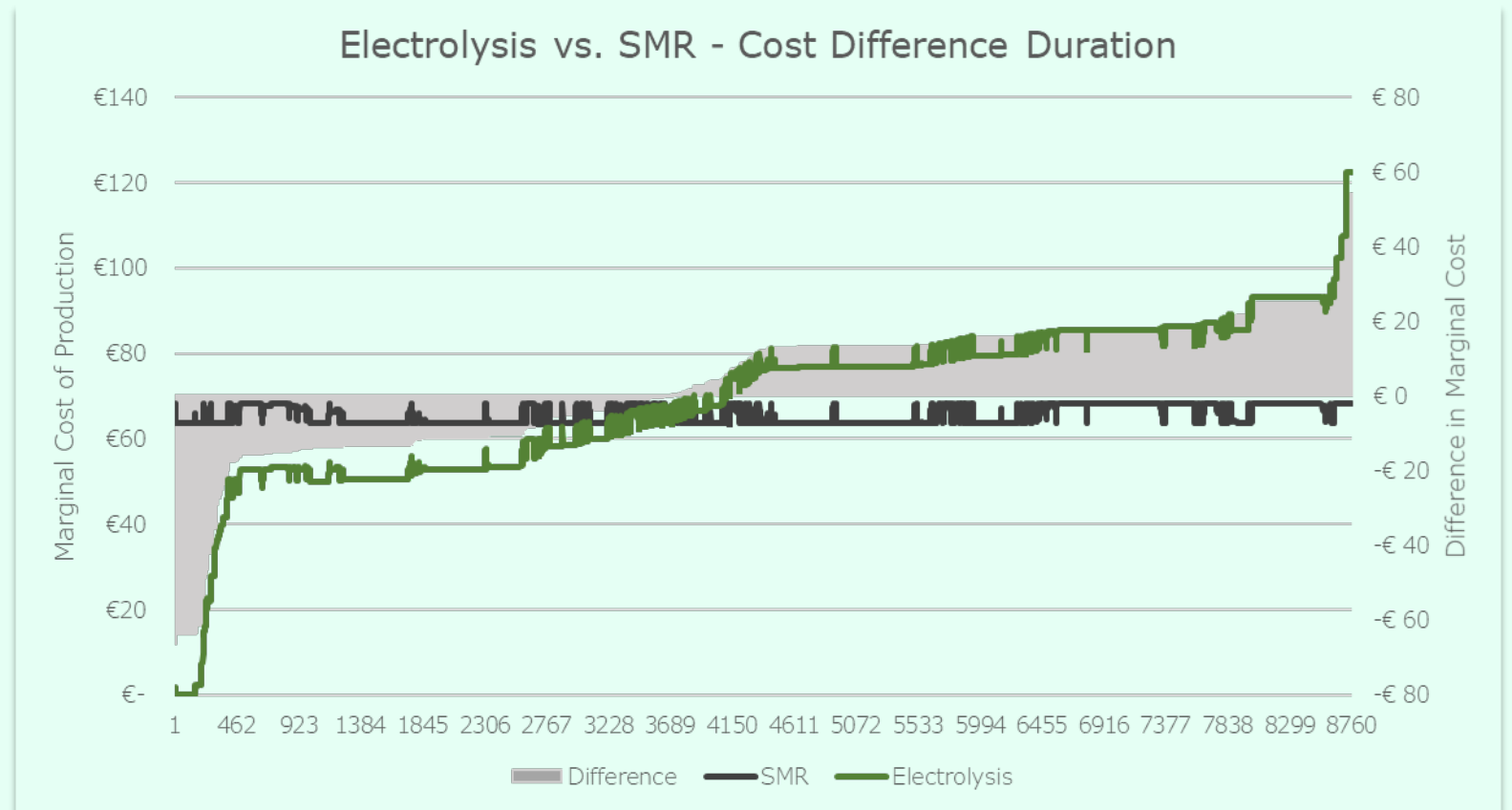
- First Results – load duration hydrogen dispatch



- SMR production meets 88% of the demand
- Electrolysis reaches the 4200 FLH exactly
- Remaining (high) demand met with (ammonia) import, linepack and storage

Market-based dispatch electrolyser

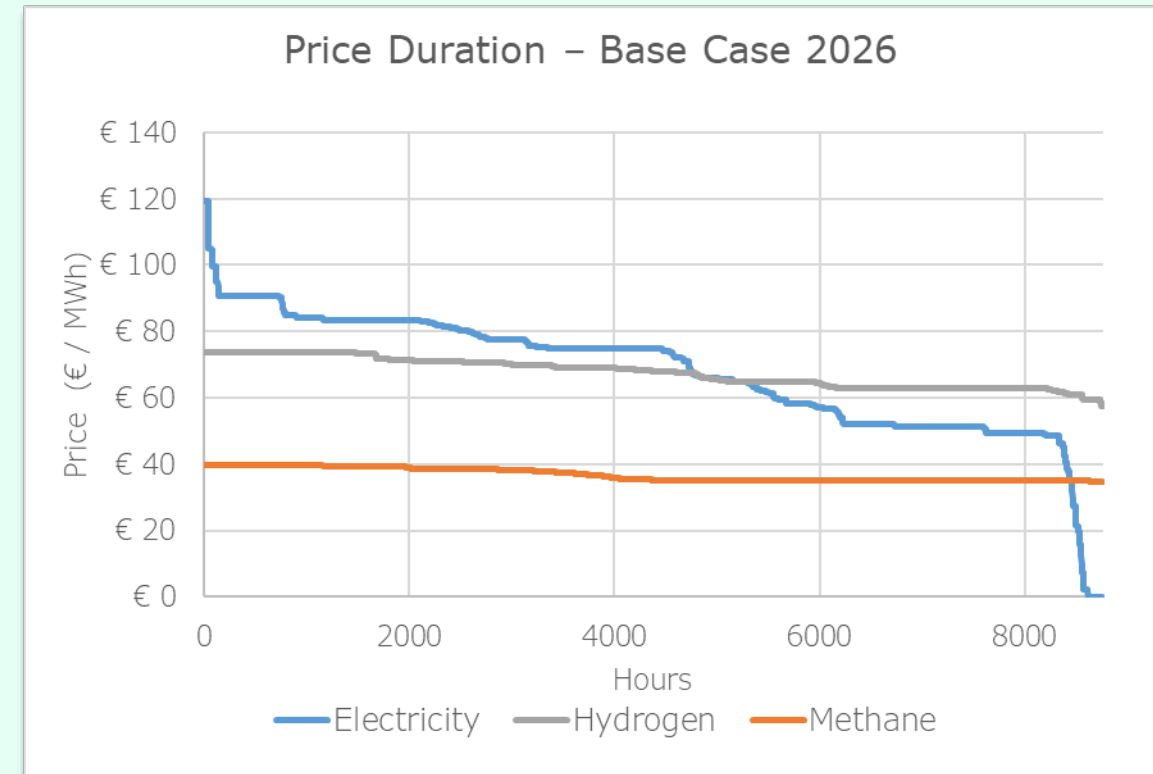
- First Results – electrolyser dispatch (pure variable cost optimization)
- 3052 FLH, 6% of total demand met with green hydrogen.
- Electrolysis driven by low cost electricity.



Base Case Scenario 2026

- Results – energy prices

Hydrogen market prices fall between the more variable electricity prices and the constant LNG-determined gas price level



HyXchange (spot market simulation) development timeline



Extensive review and validation of study findings with 100 market parties
Conclusion – market parties have need for:

1. Certificate
2. Spot market, incl. grid balancing & storage
3. Index product

Spot market simulation:

1. Model simulation 2026 – 2030 - 2035
2. Game simulation

Currently: first draft run(s) of 1. Model simulation 2026

- Still many uncertainties on future development
- Not a forecast; a first exploration
- Happy to get your feedback for further refinement

Simulatio co-funded by NL National green energy development program





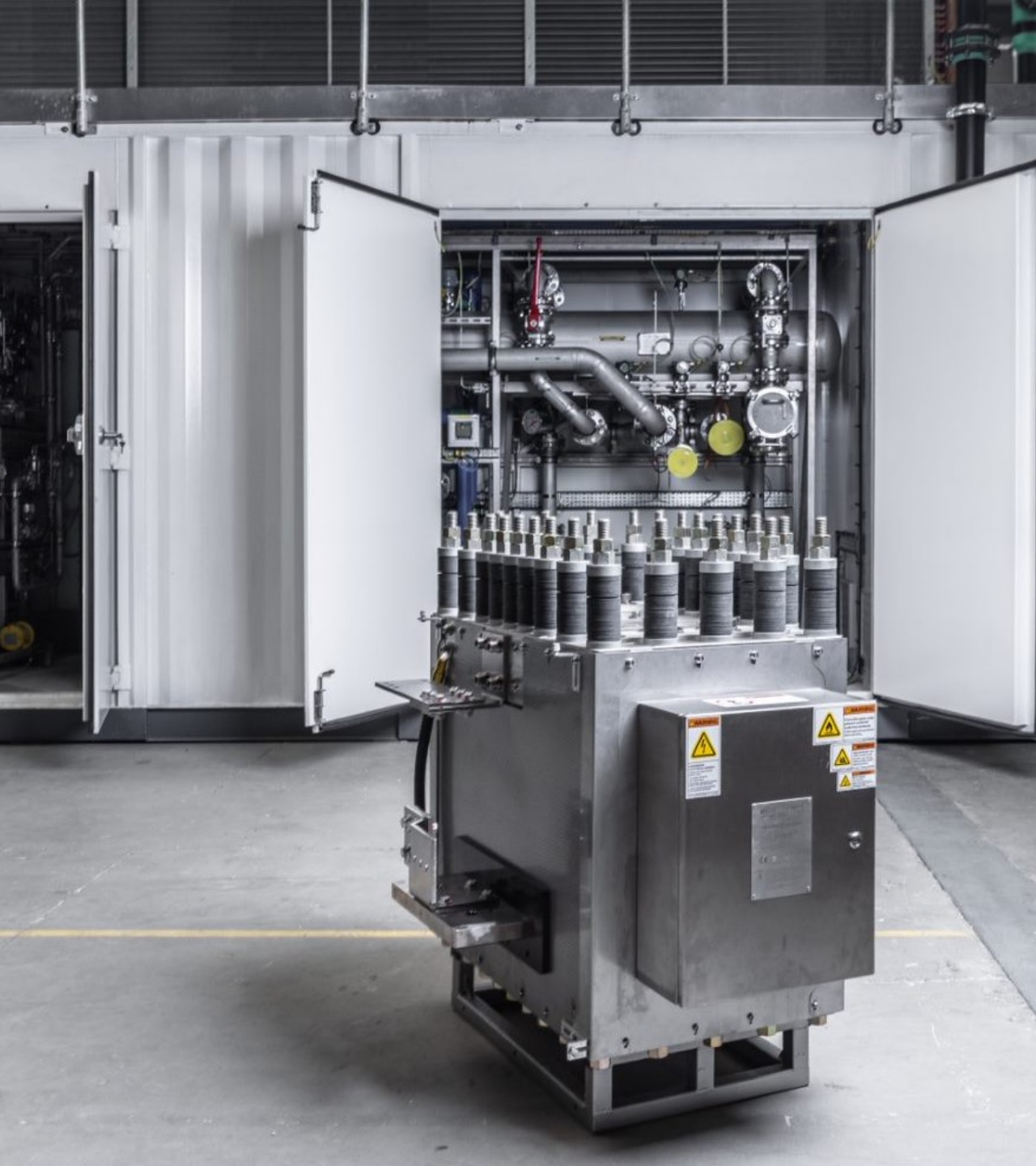
Thank you for your attention

- If you want to contribute to the HyXchange program or join the initiatives:
- Drs. Bert den Ouden, HyXchange project director
- bdnouden@wxs.nl +31 6 51994286

NEWS FROM CLUSTER MEMBERS



Cummins
Bosal



PEM Water Electrolysis **WIC update**

Denis THOMAS, Global Business Development &
Marketing Director, NPBU Electrolyzers - Cummins

Waterstof Industrie Cluster (WIC) Meeting
Dec 1st, 2022

CUMMINS



Engines



Power generators

Components

Distribution



Electrolysis



Fuel cells



Batteries



Electrical traction

New Power

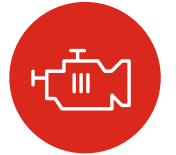
190
Countries



59.9K
Global Employees



1.3M+
Engines built



10.6K
Distributor & dealer locations



\$1.1B
Invested in research & development

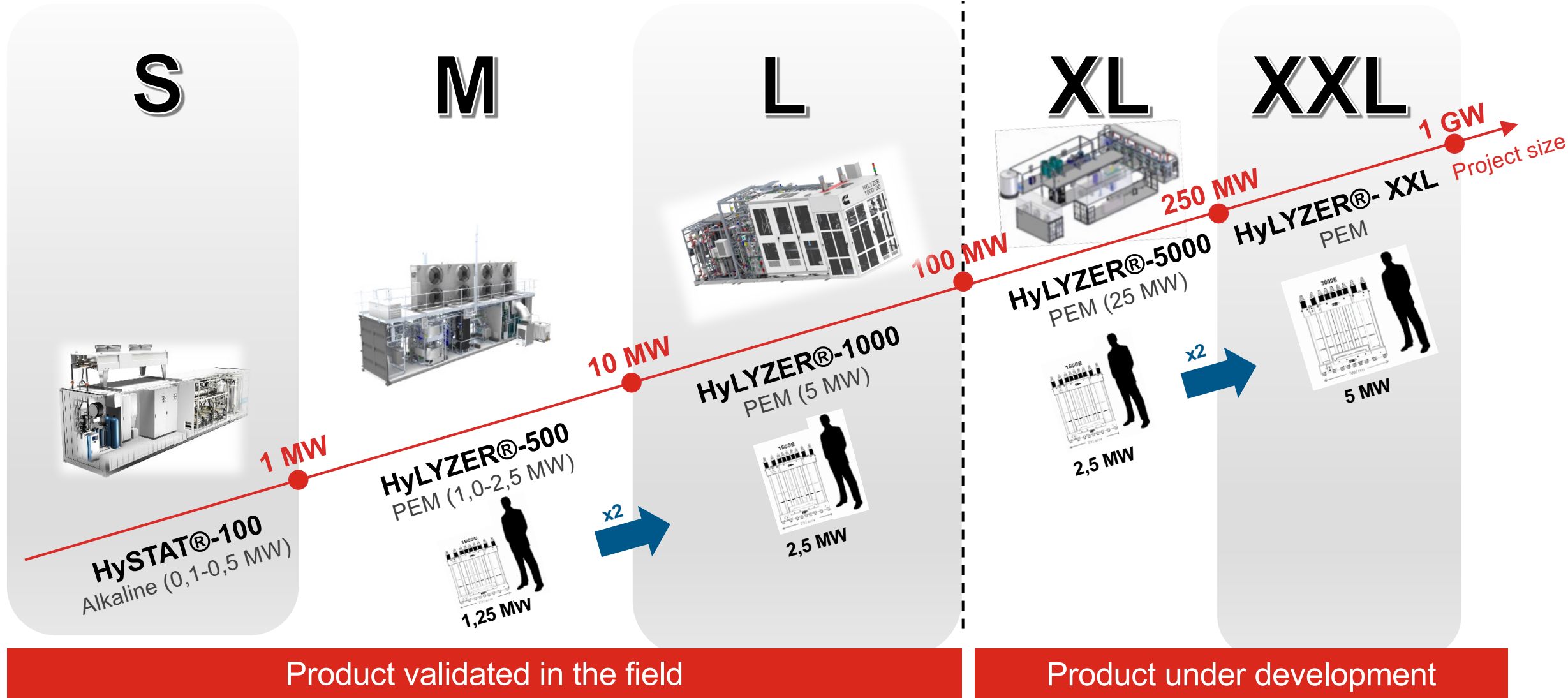


103 YEARS
of industry leadership



*2021 figures

ELECTROLYZER PRODUCT OFFERING



World's Largest PEM Electrolyzer 20 MW



More info & video tour:
<https://www.cummins.com/news/2021/10/04/video-case-study-cummins-hylyzerr-pem-electrolyzer-becancour-quebec>

Dec 1st, 2022 | Waterstof Industrie Cluster

Air Liquide Becancour, Canada

4x HyLYZER® 1000-30 – indoor – 20 MW – 4.000 Nm³/h – 8,6 TPD

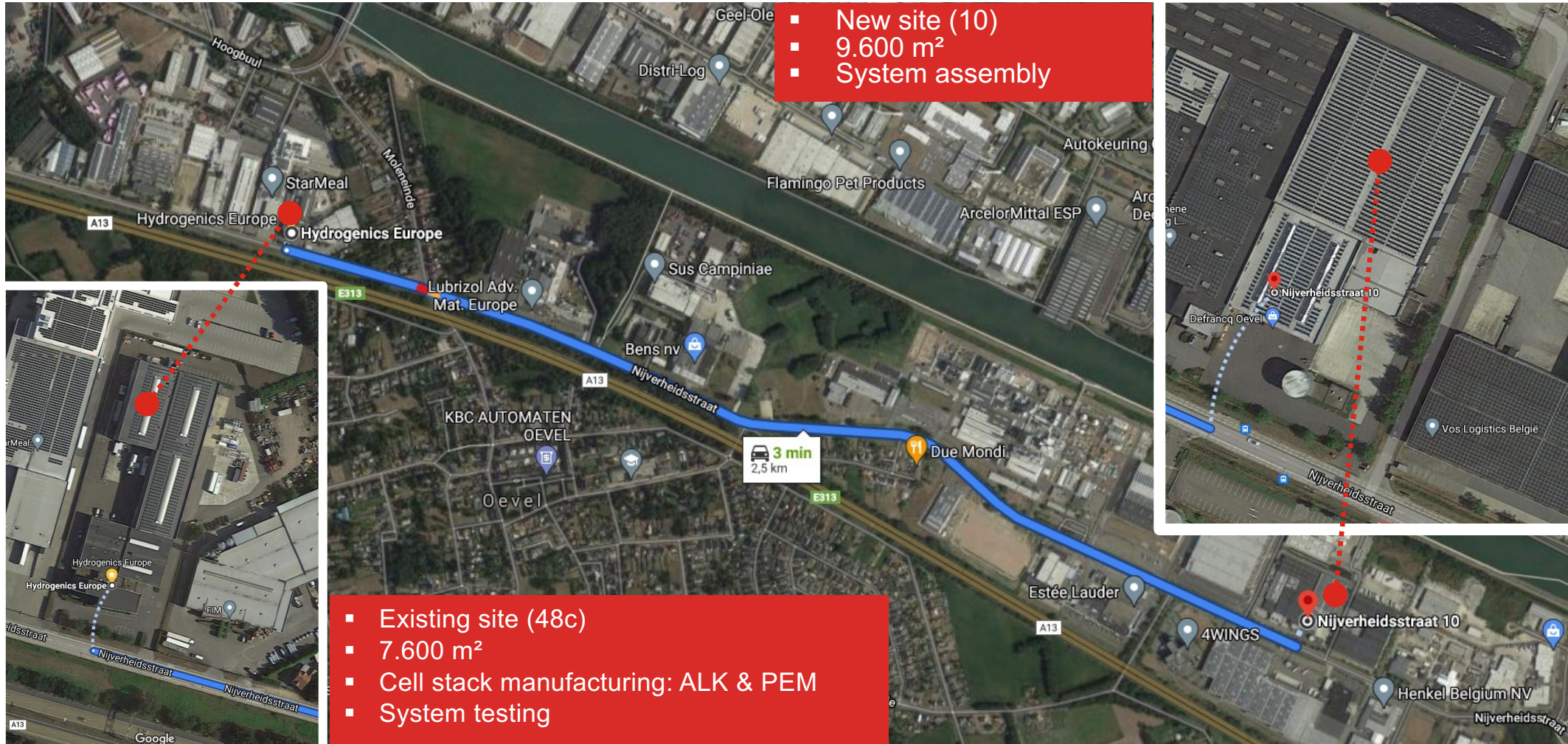
WE ARE EXPANDING OUR PEM ELECTROLYZER MANUFACTURING CAPACITY ON 3 CONTINENTS



Country	Belgium	Spain	Canada	USA	China	China (in JV with Sinopec)
City	Oevel	Guadalajara	Mississauga	Fridley	Shanghai	Foshan
Status	Extension	New	Extension	New	New	New
HyLYZER® PEM cell stacks	•		•		•	
HyLYZER® PEM systems	•	•	•	•		•
HyLYZER®-500	•			•		•
HyLYZER®-1000	•	•	•			•
HyLYZER®-5000		•		•		

GLOBAL ANNUAL CAPACITY: 2-3 GIGAWATTS IN 2023-2024

(OEVEL) BELGIUM: EXPANSION





Bosal Introduction

BOSAL at a glance

founded

1923

€400 mio
revenue

14 production
facilities

2.500
employees
worldwide

Family owned

Long standing
customer relations

Industry **leader**
in engineering
capabilities

Global footprint

Contributing to a cleaner world by consistently innovating in mobility and energy

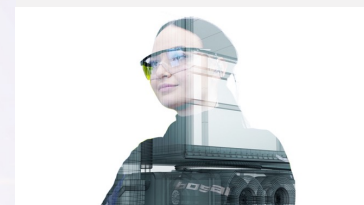
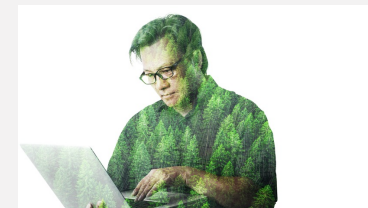
We offer a full range of innovative solutions to industry leaders worldwide



: powertrain

: chassis

: energy



We are expanding fast into advanced sustainable products

Range Extender

Emissions Upgrade

CHASSIS
Vehicle Parts & Accessories

Pre Heater

Evaporator

Hot End

Fuel Reformer

Humidifier

Cold End

EGHRs

Condenser

POWERTRAIN
Emission Control Systems

Towbars

Air Vessels

Fuel Tanks

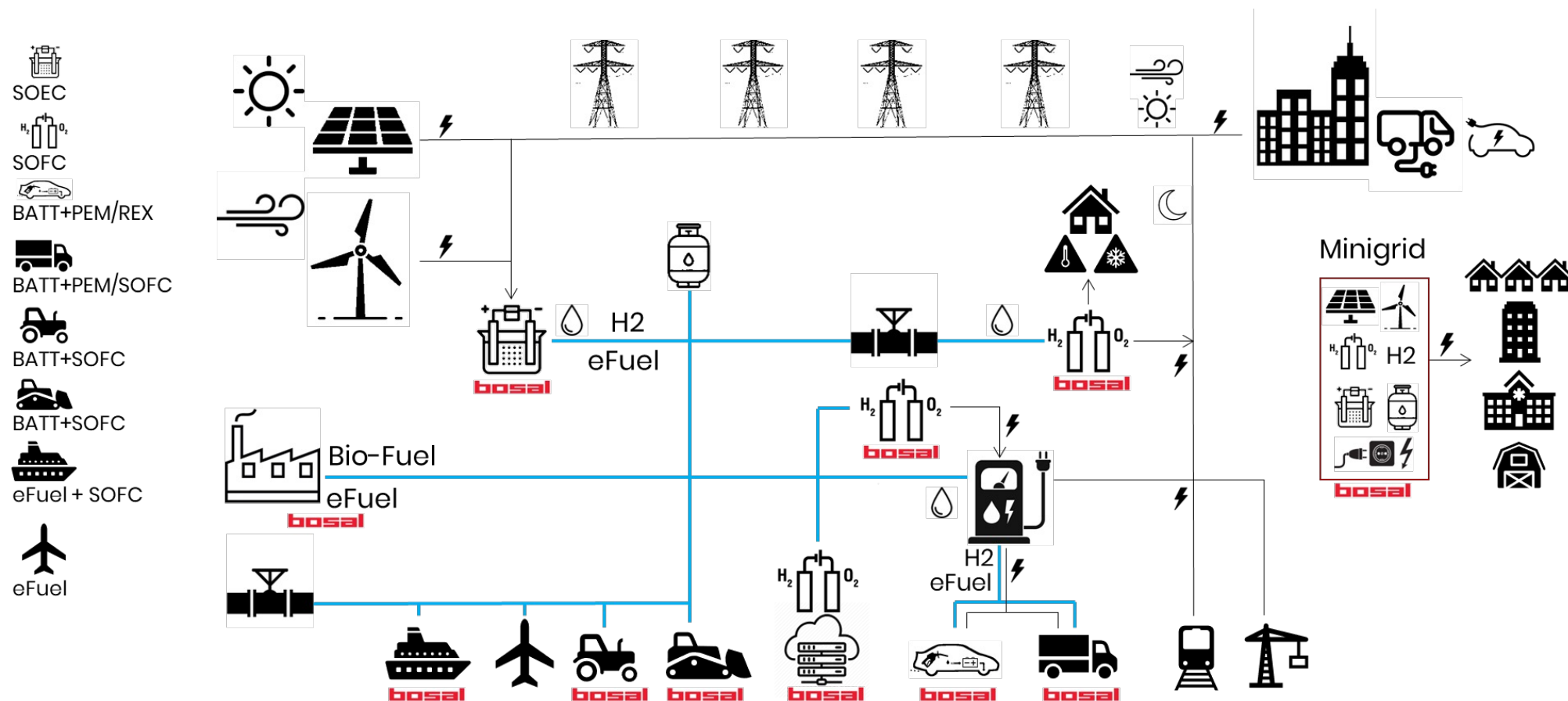
Seat Frames

Jacks

ENERGY
Energy Conversion Modules

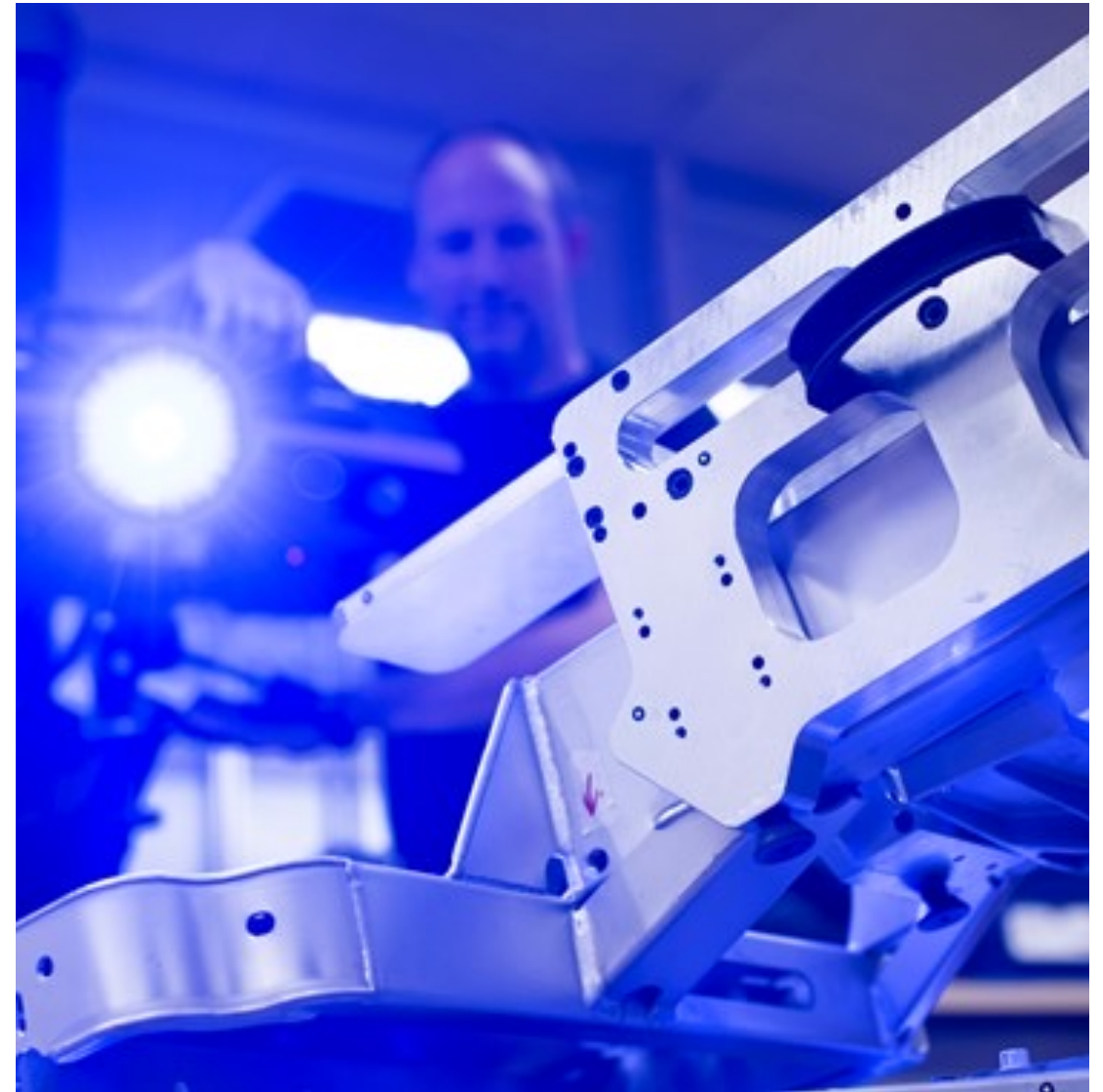


We execute our strategy to lead future technology in the entire ecosystem for new energy solutions in both the energy industry as transportation

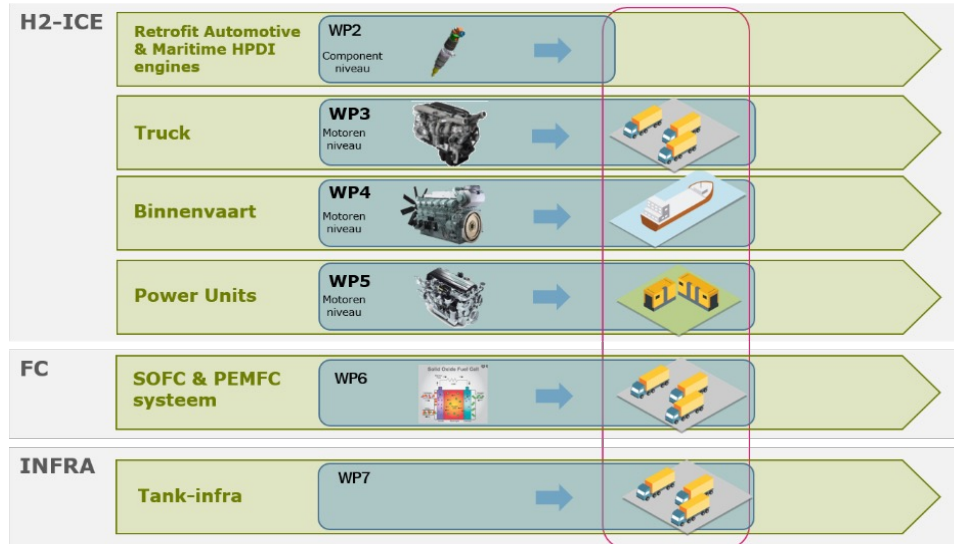


Innovation as a business driver through leading engineering knowledge

- : Advanced engineering technology
- : Functional product development
- : Virtual engineering tools, digital twin
- : Process simulation
- : State-of-the-art research & test facilities
- : Fully equipped proto-shop
- : Contract R&D, Manufacturing

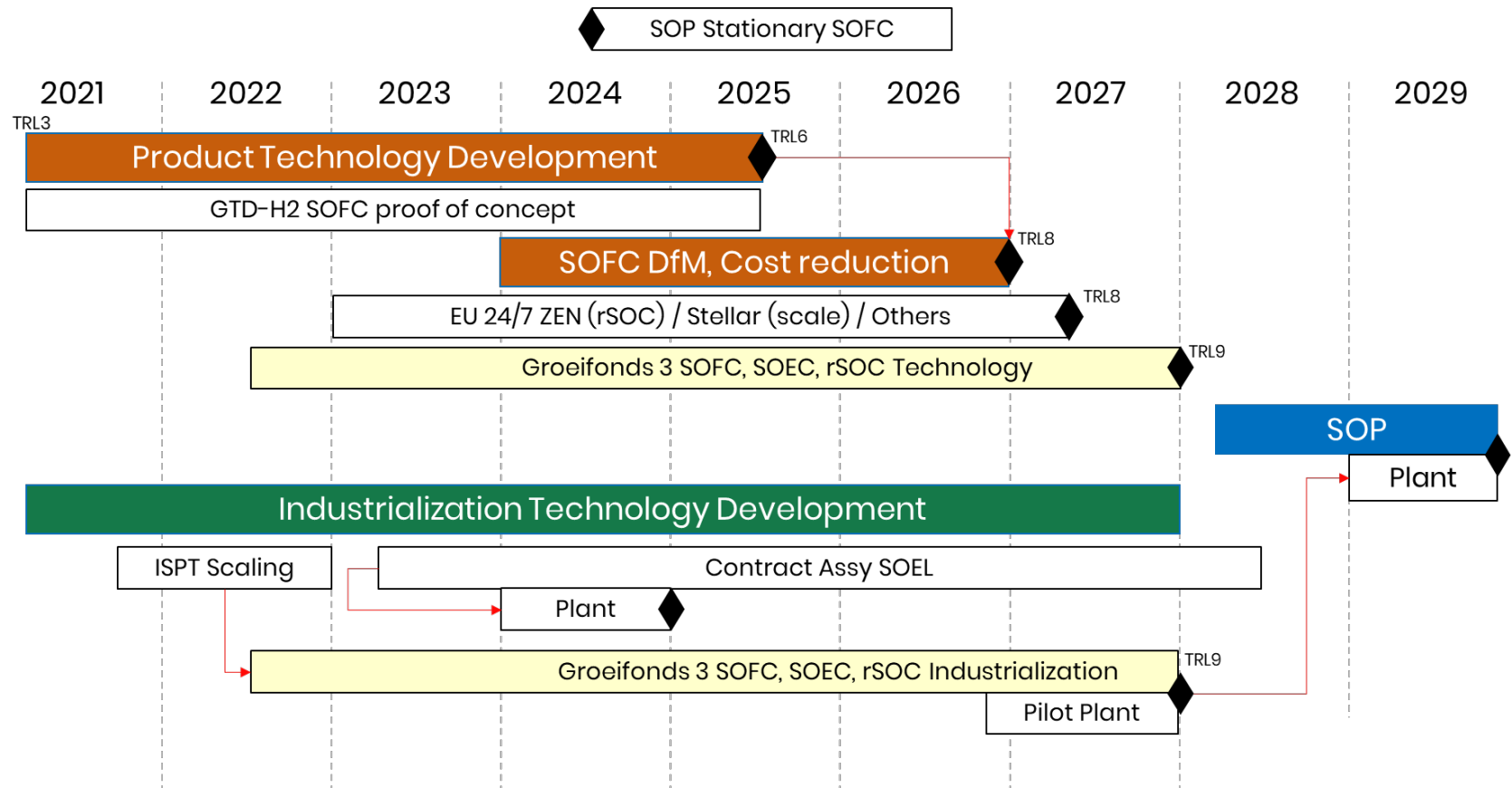


Cooperation is essential to realize the transition fast



The scope of GTD-H Fuel Cell project is to overcome the disadvantages of SOFCs, facilitating their introduction into the Heavy-Duty transportation sector

We execute a roadmap of projects with partners, for a cost-effective world-leading mass production system of Solide Oxide key-technologies



Key work packages are defined for future collaboration, enabling cost-effective mass production

Virtual Development Tools, AI en IoT

- Control Oriented Modeling & Controls
- Optimisations (1-3D)
- Field data IoT

Efficiency, Durability, Reliability and Recycling

- Advanced smart Heat & Energy management
- Reliability engineering, predictive maintenance
- LCA

Product Cost Reduction

- Components, Material, Catalysts
- Non-rare materials, stability supply chain
- DfM, DfA, Function Integration

Process Cost Reduction

- Digital Twin Lean Manufacturing, Adaptive machine learning, AI
- In-line quality control
- Full automation in flow



Thank
you!

Combustion technology

H2

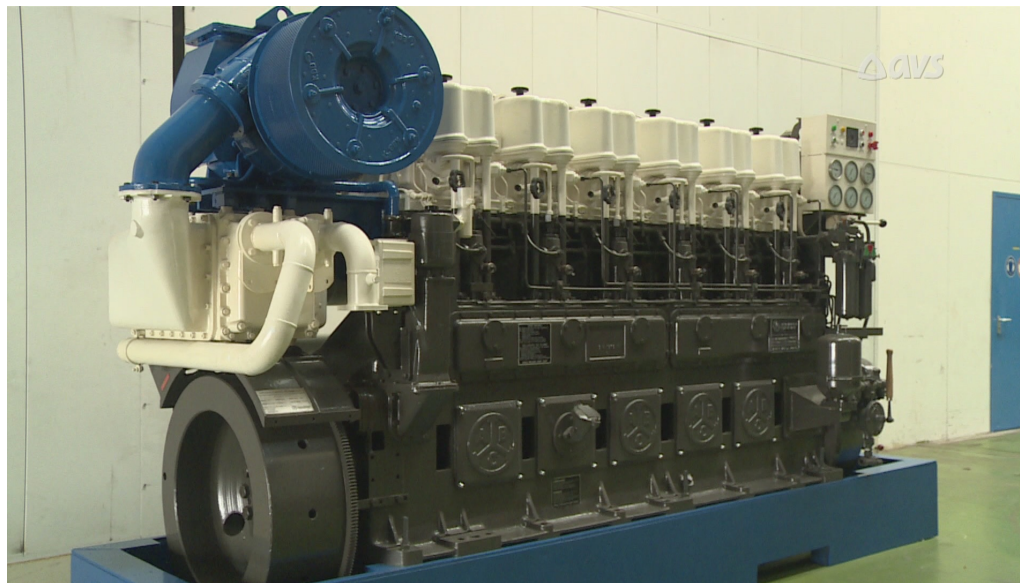
(Working group combustion)

efficiency

Cost

Worldwide
knowledge

Manufacturing
scalability



Mature
technology

Retrofit

Available
materials

Robust
(H2 fuel grade)

Worldwide
service
network

Association
with fossils

NOISE

CO2
emissions

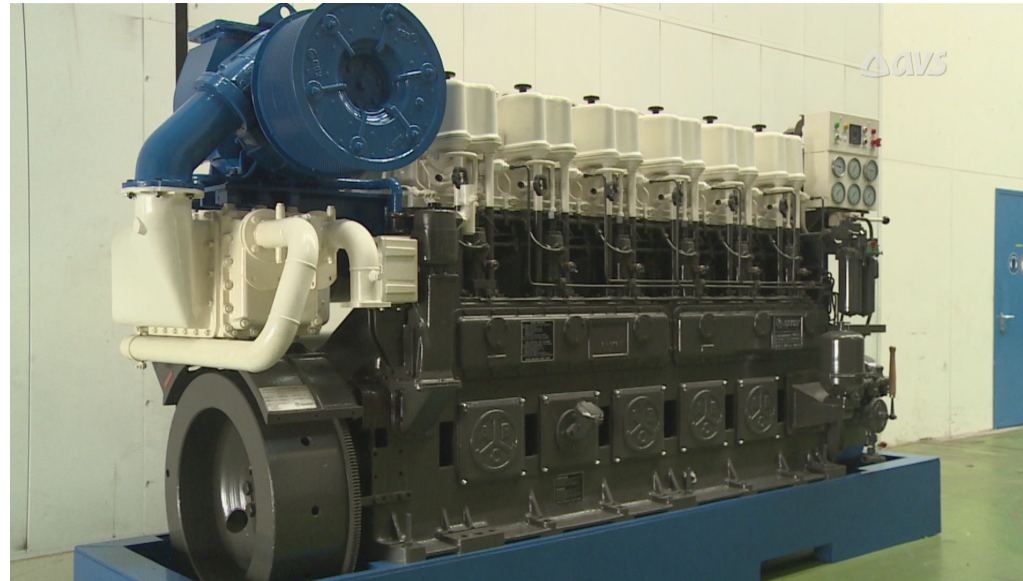
Societal
resistance

NOX
emissions

Moving
parts

Maintenance

Vibrations



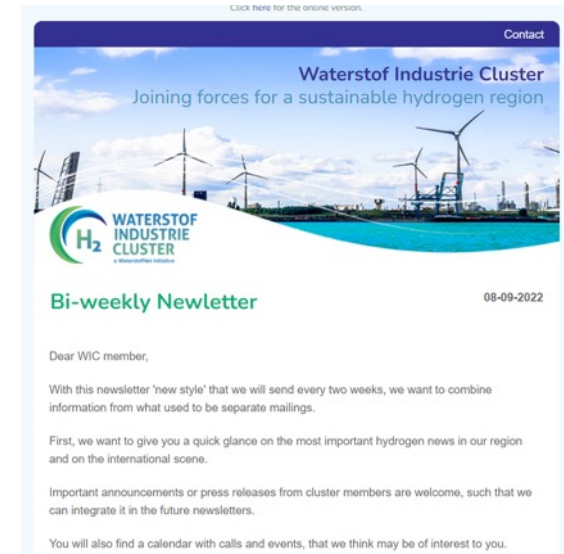
NEXT STEPS COMBUSTION WG

- White paper
 - Event in spring 2023
-

WN/WIC News

COMMUNICATION : WIC NEWSLETTER

- **Content:**
 - Newsflash
 - Regional
 - International
 - **MEMBER NEWS !!!**
 - New events
 - New calls
- **Update**
 - 7 sent already
 - **Feedback from members welcome**





Contact English Dutch

Search:



My account
Welcome Mathieu Wuyts

Home

Members

Working Groups

Downloads

Overview

Search

Search for name / keywords

Main activity category 1

- System Integration
- Production, Transport and Distribution
- Industrial Applications

- Technology
- Mobility and Logistics Applications
- Facilitator

Main activity category 2

- Subcomponents
- Operation and Maintenance
- Manufacturing and Production
- Training, Testing and Certification
- Regional Development Agencies

- Study and Engineering
- End User
- Construction and Installation
- Port Authority
- R&D

Filter →

Reset filter

Brussels Airport



Capgemini Engineering



COVESS



EDF Luminus





Detail

[← Back to overview](#)



WaterstofNet

Facilitator

[Contact →](#)

Address

Slachthuisstraat 112
BE 2300 Turnhout

[Open location →](#)

Phone

+3214 40 12 19 (Fix)

Website

<https://www.waterstofnet.eu/>

Documents

[Company presentation](#)

About

Mission

WaterstofNet is a knowledge and collaboration platform. We aim to contribute to a carbon-neutral society by supporting and realising hydrogen projects in Flanders and the Netherlands. Together with the industrial sector and the government, we enable concrete achievements in the field, laying the basis for further collaboration. By doing so, we assist in the further development of Flanders and the Netherlands as leaders in hydrogen.

Vision

Sustainable hydrogen will play a key role in the decarbonisation of our community. It can contribute to zero-emission transport and function as a sustainable raw material for industry, as a means of energy storage and a carbon-free source for heat.

Flanders and the Netherlands host a unique value chain of companies and research institutes that are active in the field of hydrogen. As a knowledge and collaboration platform, WaterstofNet acts as a catalyst for this ecosystem in the further realisation of a hydrogen economy.

Contacts

Search for name, function or for which a person is active

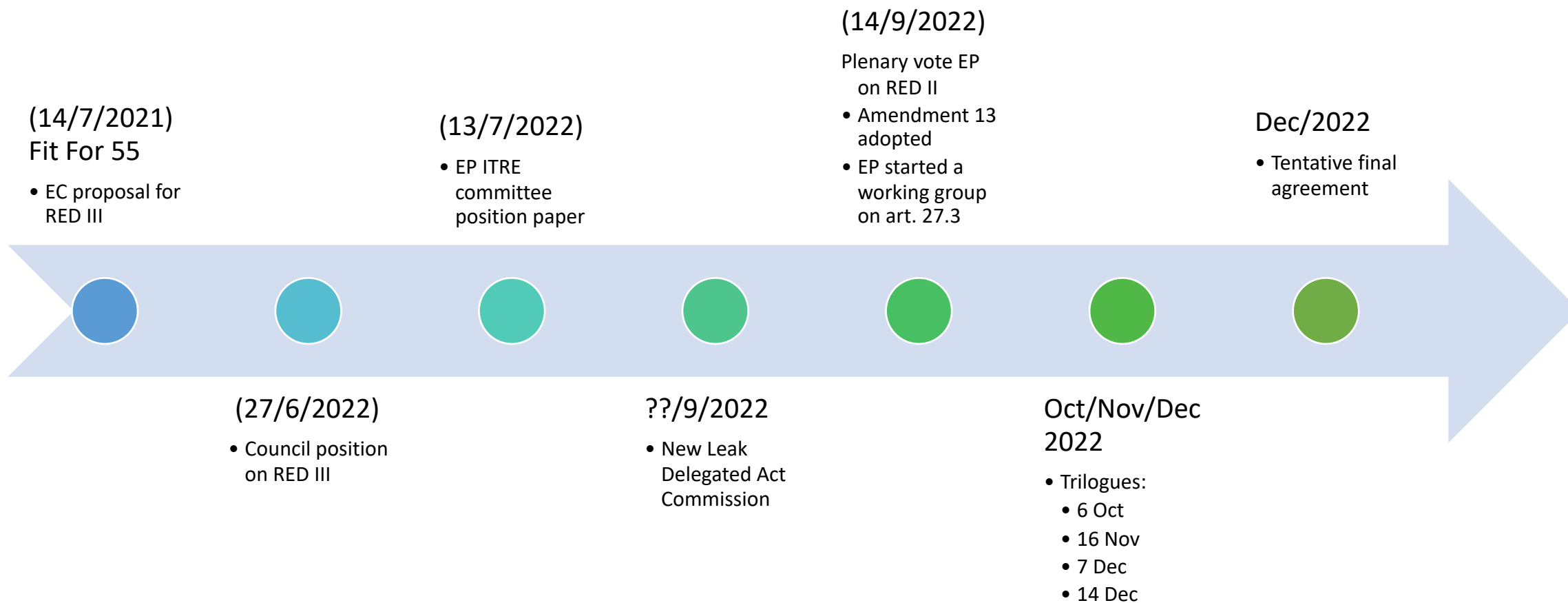
[Search →](#)

Name ↓	Function	Email	Telephone
Isabel François	Employee	isabel.francois@waterstofnet.eu	+32478982140
Mathieu Wuyts	Employee	mathieu.wuyts@waterstofnet.eu	-

- Finetuning & testing now
 - Release 15 december*
-

- European Hydrogen Bank: little known about precise mechanism
 - 3 Bln from the innovation fund
- German H2Global initiative:
 - 900 Million announced in 2021, for 2022
 - At COP27 Chancellor Scholz announced: “We plan to invest more than €4 billion [into H2Global]. The first tenders will be launched soon,”
 - Dutch government announced to participate financially in the initiative
- RED III/ Additionality: see next slides

RED III/ Additionality update



RED III/ Additionality recap

	EC	Council	Parliament
Overall target	40% (July 2021), <u>45%</u> (REPowerEU)	40%	45%
GHG emission reduction target in TRANSPORT	13% with a 2.6% (5% REPowerEU) target for renewable fuels of non-biological origin (RFNBOs) in the transport sector by 2030	13% with a 5.2% target for renewable fuels of non-biological origin (RFNBOs) in the transport sector by 2030 NON BINDING	16% by 2030 with a 5.7% target for renewable fuels of non-biological origin (RFNBOs) in the transport sector by 2030 and 2.6% by 2028 + of which at least 1.2% by 2030 in the maritime sector
Green Hydrogen in INDUSTRY	50% in 2030 (July 2021), <u>75%</u> (REPowerEU)	35% in 2030 en 50% in 2035 NON BINDING	50% in 2030 en 70% in 2035 BINDING BUT COMMISSION CAN AMMEND TARGET (in 2026)

NEWS FROM THE NETHERLANDS

- “Routekaart waterstof” (roadmap hydrogen) presented on 03/11/22

1. Holistic approach to the development of the Dutch hydrogen market
 2. Public and private parties associated with the NWP
 3. 13 themes, written by 13 NWP theme groups (production, import, infra, ...)
 4. Consisting of experts from organizations relevant to the theme
- ➔ Projections for 2022-2025, 2025-2030 and after 2030

Routekaart voor waterstof

NWP Nationaal Waterstof Programma

2022-2025

2025-2030

Na 2030

Productie
600 MW elektrolysecapaciteit; inzet CCS bij bestaande productie

Import
Eerste import van waterstof, vooral als ammoniak

Infrastructuur en opslag
Waterstofnetwerk in opbouw, verbindt productie met vraag. Eerste opslagcaverne

Productie
80 PJ hernieuwbare waterstof, ook inzet CCS

Import
Ontwikkeling grootschalige import inclusief doorvoer

Infrastructuur en opslag
Waterstofnetwerk verbindt productie en vraag, opslag in 3-4 zoutcavernes

Productie
Hernieuwbare waterstof op zee

Import
Grootschalige import, is onderdeel van de Europese markt

Infrastructuur en opslag
Verdere ontwikkeling distributienetten en infra op zee

Toepassing

- 600 MW hernieuwbare waterstof, met name als grondstof
- 50 waterstof tankstations met bijbehorende voertuigen
- Eerste pilots in gebouwde omgeving
- Eerste deels geschikte gascentrales voor opwekking elektriciteit

Toepassing

- 40-80 PJ met name voor productie staal en chemicaliën en raffinage
- 18-58 PJ waterstof voor alle transportmodaliteiten
- Eerste pilots voor emissieloze luchtvaart en scheepvaart
- Mogelijk eerste 100% waterstofcentrales voor opwekking elektriciteit

Toepassing

- Inzet bij productie van staal, chemicaliën en raffinaderijen
- Gebruik in elektriciteitsopwekking en delen gebouwde omgeving
- Waterstof een volwaardige optie voor wegtransport
- Ombouw laatste gascentrales

Randvoorwaarden: essentieel om de doelen te bereiken



Beleidskader



Veiligheid



Innovatie



Maatschappelijke acceptatie



Maakindustrie



Human capital agenda

- **New Federal Hydrogen Strategy**
 - ✓ Updated, more ambitious targets (import/use)
 - ✓ Details on supply routes: North Sea, Southern-Europe/Northern Africa, Shipping route
 - ✓ Support the creation of a Belgian Hydrogen Council

- **Belgian Hydrogen Council**
 - ✓ Coordinated by WaterstofNet and Cluster Tweed
 - ✓ Composed of our members
 - ✓ Promotion & policy recommendations



Evaluation & statements Related to EU or national legislation

- Policy recommendations
 - ✓ Position paper certification , ASAP, renewable & low carbon, uniformity, compatibility with NL & DE systems
 - ✓ Position paper investment deduction, more efficient use of energy, discussions with relevant cabinets
- Meetings held on
 - 23 September (online)
 - 28 November (@PoAB)
- Next steps
 - ✓ Closer follow-up of Dutch Policy developments
 - ✓ Position paper update on de-risking and support schemes
 - ✓ Memorandum to prepare 2024 elections



Sharing experiences on permitting of H₂ installations.
Indicating missing elements/best practices to authorities.

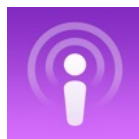
- Inventory made of practical experiences with permitting (12 responses)
 - ***Non-specific and vague legislation** leads to ‘own interpretations’ of licensing authorities. Different authorities (provinces) have different interpretations.*
 - *Authorities do **not have the required knowledge**, which leads to unrealistic demands*
 - ***Throughput time** is too long, especially for a demo/test. Mobile installations have to comply with the same procedure as fixed installations, which is not feasible*
 -
- Contact with Flemish environmental department established; meeting in January
- First meeting with team to make Action plan/define priorities on Dec 7



Disclosing the world of H₂ to the broader public

Working group scrapped, but podcast continues:

- New episode available on “Hydrogen combustion engines”
- Next episode (beginning 2023) on Hydrogen in port environments
- **Please promote Podcast through your channels!**



WORKING GROUP MOBILITY

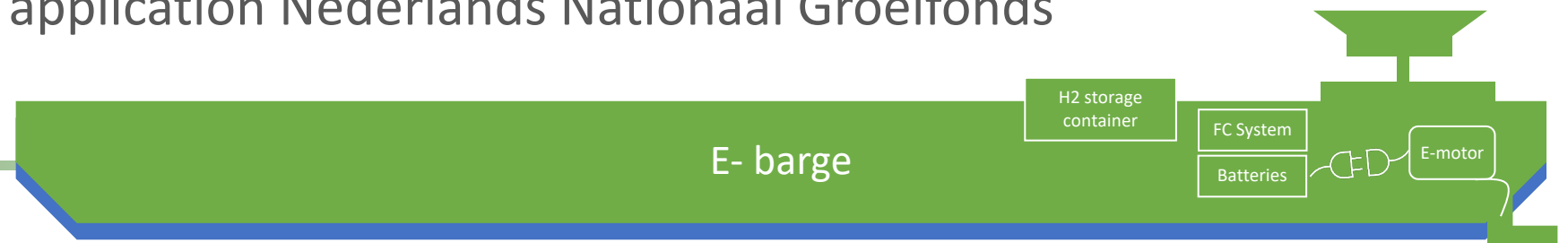


- HRS-roadmap for cars, trucks for Benelux 2025 - 2030
 - * taking into account targets Nationaal Waterstof Programma (NI)
 - 2025 : 50 HRS, including 10 XL-HRS
 - HRS: between 3 – 5 year, 100 – 130 FCEV/HRS
 - HRS-XL: between 1 – 5 year, 25 – 25 trucks on hydrogen
 - 8 million kg on hydrogen consumed in mobility
 - 2027 : at least 4 HRS-XL for 150-200 trucks on hydrogen
 - 2025 – 2030 : HRS-network covering Netherlands
 - 2030 :150 HRS + 50 XL-stations
 - 40.000 – 75.000 cars on hydrogen
 - 5.000 – 10.000 trucks on hydrogen

Increase utilisation, certification HRS, increase utilisation, communication



- H2 container
 - 100 % cooperation with CONDOR Project
 - Swappable
 - Market Neutral
 - Standardised
 - Scalable
- Already 70 parties involved
- 2 kind of workshops planned
- 12/12 : Go/No Go for application Nederlands Nationaal Groeifonds



WG PORT EQUIPMENT



- Kick-off Sept 23
 - Introduction round
 - Gathering of information
- Next meeting Dec 14
 - Learnings of pilot project
 - Seveso regulation
 - Set up action plan pilot equipment
 - Case study Deloitte

- **Huge training needs for engineers, technicians, public bodies !!**
- Different steps
 - **Phase 1** : interviews (what is existing + future ambitions)
 - Universities
 - High schools
 - Secondary schools
 - Adult education
 - Public bodies
 - **Phase 2** : analyses of shortages
 - **Phase 3** : common plan for new training/education
 - **Phase 4** : broad communication



FUNDING OPTIONS

EU

- Horizon Europe: Energy R&I projects, **deadline 10 & 24 January 2023** - The European Commission has launched new calls for projects under Horizon Europe's Work Programme for 2021-2022. EU funding of EUR 214.1 million in total is now available for Energy topics. ([more info](#))
- Innovation Fund third call for large scale projects, **deadline 16 March 2023** - the European Commission launched the third call for large-scale projects under the EU Innovation Fund. With a budget doubled to €3 billion and specific topics on hydrogen. ([more info](#))

BE

- Energy Transition Fund (ETF), **deadline 14 december 2022** - The Energy Transition Fund aims to encourage and support energy research, development and innovation - within federal energy powers. ([more info](#))

NL

- IPCEI Hydrogen: import and storage (RVO), **deadline 14 december 2022** - Does your organisation deal with the import and storage of hydrogen? Then apply for a grant with the IPCEI Hydrogen: Import and Storage. ([more info](#))
- New Dutch-German program on green hydrogen (NWO), **deadline 7 February 2023** - With a new ten million euro program, the Netherlands and Germany will strengthen cooperation in the field of energy transition ([more info](#))

BE/NL

- Interreg Vlaanderen-Nederland, **deadline 9 February 2023** ([more info](#))

UPCOMING EVENTS

- New WIC meetings 2023
 - WIC meeting 1: Thursday 2 maart**
 - WIC meeting 2: Thursday 8 juni**
 - WIC meeting 3: Thursday 21 sept**
 - WIC meeting 4: Thursday 7 dec**
 - Hyvolution Feb 1-2
 - Hannover Messe April: WIC or regional (FL) representation?
 - WIC conference end of April-beginning of May to be planned
 - WIC visit NRW (Q1, 2023, to be planned)
 - Meet & Greet: to be planned
 - Webinars: Ad hoc, depending on input from WIC members
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