

Waterstof Industrie Cluster: Minutes meeting 16/09/2020 (@ABC, Gent)

Present @ ABC: Koen Christianen (ABC),
Nick Valckx (Agfa),
Roy Campe - Nathan De Bruyn- Louis Vercauter (CMB),
Pascal Meyvaert (Nippon Gases)
Geert Uytterhoeven - Norbert Schneider (Gascomponenten)
Baudoin de Lannoy (Hydrogenics),
Paul Schroé (MBZ),
Steven Keyzer (OCAS),
Koen Van Den Brande (Polders Investeringsfonds)
Rob Cornelissen (POM Limburg),
Guido De Roo (POM West-Vl.),
Frank Taelman (Siemens),
Antony Grande (Tractebel)
Peter Simkens (Von Karman Institute),
Adrien Theunissen - Daniel Van De Gucht - Johan De Rouck (BESIX)
Silvie Myngheer (Engie)
Tim Maeyens (Aertssen-Terranova Solar)
Stefaan Cauwels (E. Van Wingen)
Kristof Vanhoorne (Luminus)
Joyce Conings (FOD economie)
Ludovic Laffineur (Hydrogen Europe)
Patrick Berre (Denys)
Yannick Van den Broeck - Isabel François- Adwin Martens – Chris Lefrère –
Davine Janssen- Andrea Hennis (WaterstofNet).

Present in the call: Wouter Koster (Ballast Nedam Industriebouw),
Gert Nelissen (Borit),
Ludo Sweron - Jonas Cautaearts - Sébastien Piret (Colruyt)
Jan Rongé (KUL-Cokkat),
Marcel Meeus- Mia Bats (Umicore)
Hugo Vandenborre (Solenco Power),
Philippe Quenon (Tessengerlo Group),
Lynn Eyckmans - Sofie Marivoet (de Vlaamse Waterweg),
Marjan Beelen (Port of Antwerp)
Maarten Van Haute (Q8)
Ben Cornelis (E-trucks)
Hans Magits (Atlas Copco)
Filip Van Den Borre (Dpt omgeving- VL overheid)
Leander Hanegreefs (Fluxys)
Saša Marinić (Total-Pitpoint)
Ian Van der Jagt (Berkman)
Senne Gabriels (FOD economie)
Pieter Jacqmaer (Infrabel)
Koen Vlaeminck (Engie)

Agenda:

- 9.30 - 10.00 AM: Reception with coffee
10.00 – 10.30 AM: Presentation new cluster members + round table
10.30 – 11.00 AM: News from the WIC/WaterstofNet: Flemish H2 strategic vision
11.00 – 11.25 AM: Belgian federal hydrogen developments by FOD Economie
11.25 – 11.45 AM: Vision maritime applications by Hydrogen Europe
11.45 AM – 1PM: H2 developments at ABC/CMB/BeHydro and tour at ABC
1 PM – 2 PM: Sandwich lunch

Presentation new cluster members

BESIX (Adrien Theunissen) and Von Karman (Peter Simkens) present their activities and ambitions for hydrogen. The other new members will present themselves in one of the following cluster meetings.

News from the WIC/WaterstofNet: Flemish H2 strategic vision

- WaterstofNet is writing strategic vision document to present to the Flemish government, from the cluster. The input provided by the cluster member (with the questionnaire) will be included. A roadmap for deployment is proposed in the vision, with quantitative targets for the different parts of the value chain (production – distribution & storage – use in industry/transport & buildings).
Timing:
 - Until mid October the text will be further processed.
 - **Mid October, the text will be distributed among all cluster members and last comments can be included.**
 - The Final version of the text is foreseen for the end of October
- In parallel, but in close cooperation with WaterstofNet, the Flemish government is also working on a H2 strategy document. This is an initiative of the cabinet Crevits + EWI/VLAIO. Other departments will be involved, but the cabinet of Crevits is in the driver's seat. The goal is to have a Statement ("mededeling") for the Flemish government early October.
- Agenda for coming months:
 - Next cluster meeting November 18 AM
 - Replaced by webinar (?): TBC
 - Hydrogen conference: December 7 AM + PM
 - Location: Lamot, Mechelen
 - Minister Crevits confirmed
- With several partners with interest in shipping and bunkering infrastructure having joined the cluster, we will organize a meeting on possible activities in this field. An invitation will be sent around on short term.
- As a part of the strategic plan, we want to make an overview of the required research that our industry needs to make further steps in their development and of the required education that is needed to find sufficiently skilled people. A mailing will be sent around to make a high level inventory of these needs.

- WaterstofNet has engaged two new employees to strengthen our cluster activities in Flanders and the Netherlands; Davine Janssen and Chris Lefrère are joining our team as of today.
- IPCEI: The IPCEI process as it is running now, with the “Expression of Interest” that has been launched in the different regions is explained and the next steps are indicated.

Belgian federal hydrogen developments by FOD Economie

A number of Federal activities and responsibilities of the federal government regarding hydrogen are presented by Joyce Conings:

- IPCEI: The IPCEI process is mainly delegated to the regions, but at this moment the FOD is investigating whether extra federal budget can be allocated to the IPCEI projects, as some of the (20!) submitted projects are very relevant from a federal point of view.
- Energy Transition Fund: a new call for the ETF will be published at the latest on November 1, 2020. From the previous call, two projects focused on hydrogen were selected for funding: H2FC-SoSvector en H2GridLab.
- Political declarations (Penta): The FOD plays a facilitating role for cross border cooperation. An event of the PENTA on hydrogen will take place on Nov 18, led by the German delegation.
- Hydrogen and offshore energy: a discussion paper has been written recently on H2 and offshore, with H2 having a facilitating role to maximise the integration of offshore wind energy. It will be checked whether this paper is public and can be distributed among the cluster members. At the end of 2020 there will be an expert workshop on this topic in the framework of the NSEC (North Seas Energy Cooperation).
- ENOVER hydrogen & energy storage: in this working group the different regions and the federal level discuss the Belgian position in international organisations.
- Fuel policy: fuels are a federal competence. The current role for hydrogen and e-fuels in the current national climate plan is very limited. This issue has been identified by the FOD and will be discussed and will be re-evaluated the coming months.

Vision maritime applications by Hydrogen Europe

Ludovic presents the activities of Hydrogen Europe in general and the activities of the maritime cluster within Hydrogen Europe.

This working group works on four pillars:

1. Techno-economic assessment : a comparison tool is developed in which the different alternative (H2-based) fuels are included for different types of ships. This tool is a living tool, is constantly in development, and is publicly available. The main conclusions coming out of the tool so far are:
 - When it comes to fuel production costs alone, **pure hydrogen** options are always cheaper than fuels that require further ‘transformation’ – regardless of electricity price
 - For large ships **Ammonia** is the cheapest synthetic fuel (based on renewable hydrogen) - BUT more research on Ammonia slip, N2O emissions is needed.

2. Policy : Hydrogen Europe is active in analysing and influencing legislation regarding the use of hydrogen and derived E-fuels in shipping. A new directive is in preparation within the EU “FuelEU Maritime” that will regulate the use of more climate friendly fuels. Hydrogen Europe has sent its comments within the public consultation round.
Also a position paper on the EU Alternative Fuelling Infrastructure Development directive , that will be revised in 2021, has been written by HE. Similar to what has been done for LNG, the AFID can e.g. require that ports provide certain volumes of hydrogen.
3. R&I and funding : the ports will play a major role in development of hydrogen application in ships, since ports will be “H2 hubs” in several aspects: production and import of hydrogen, distribution to nearby chemical clusters etc..
4. Technical regulation: Hydrogen Europe pushes for development of codes, standards and guidelines for both vessels and bunkering.

H2 developments at ABC/CMB/BeHydro and tour at ABC

ABC (Koen Christianen) presents the activities, and specifically the development of dual fuel engines (hydrogen/methanol) for shipping applications and monofuel engines (spark engine) on H2 to be used as generators.

For the hydrogen activities, a joint-venture with CMB has been established: BeHydro.

CMB (Roy Campe) presents its hydrogen activities; i.e. hydrogen powered vessels (tug boat, ferry, Crew transport vessels..), gensets and the first public road/water hydrogen refuelling station that is being constructed in the port of Antwerp.

A tour of the factory and the new 1MW Behydro dual fuel engine is organised by ABC.