

Power to Gas cluster: Minutes meeting 19/06/2019 @ Van Hool-Koningshooikt

Present: Bart Goddyn (Aspiravi), Wim Van Den Mosselaer - Frank Taelman (Siemens), Vincent Vancaeyzeele (Fluvius), Roy Van Son (Air Liquide), Wouter Parys (Haven Antwerpen), Hans Magits (Atlas Copco), Ludo Sweron (Colruyt), Nathalie Beken (EDF-Luminus), Marcel Meeus (Umicore), Michiel Jeremiasse (Suez), Nick Valckx (AGFA), Linus Lapidaire (Fluxys), Ruud Bouwman (VDL), Vincent Mattelaer (Toyota Motor Europe), Maarten Van Haute (Q8), Geert Van Hecke (Van Hool), Arnaud de Lhoneux- Denis Thomas (Hydrogenics), Koen Van den Brande (Polders Investeringsfonds), Tine Deheegher- Thomas Cools (ENECO), Steven Keyzer (OCAS), Koen De Gussemé- Pieter Jacqmaer (Infrabel), Patrick Berre (Denys), Joris Van Dyck (Solenco Power), Benjamin Huybs (Nike), Isabel François- Adwin Martens (WaterstofNet).

Agenda:

- 10.00: Presentation new cluster members (Infrabel, Eneco, Denys)
- 10.30: Status of Power-to-Gas projects and -plans in the Netherlands,
Jörg Gigler, Directeur TKI Nieuw Gas (NL)
- 11.00: Cluster news - projects - advocacy - continuation of the cluster *Isabel*
- 11.15: Status Hyflow project, a future hydrogen network in VL/NL *Adwin*
- 11.30: Developments hydrogen buses in EU and at van Hool
Geert Van Hecke, Van Hool
- 11.50: Factory tour Van Hool with visit to a hydrogen bus
- 12.30: Sandwich Lunch

Content:

@ Presentation of new cluster members

- Eneco-activities were presented by Tine Deheegher.
Eneco has Interest in hydrogen for storage of electricity from wind farms .
- Denys-activities were presented by Patrick Berre.
Denys sees several opportunities for future infrastructural works related to hydrogen transport (pipelines) or use (bus depots..),.
- Infrabel activities were presented by Koen De Gussemé.
Infrabel has identified several options for using hydrogen: reduce own diesel consumption in their own vehicles (working trains & vans) , better use of high capacity grid connections, avoid expensive electrifications in train trajectories that are not intensively used.

@ Status of Power-to-Gas projects and -plans in the Netherlands,

- In the Netherlands a draft Climate agreement has been developed with a target of **49%** CO₂ reduction by 2030, which will be leading for the energy-transition in the Netherlands. This Climate agreement will be consolidated in the coming weeks.
- Running activities are presented in 9 categories:
 - H2 in Mobility
 - H2 in industry
 - H2 in Built environment
 - Production of H2
 - System integration
 - Import of H2
 - H2 for electricity production
 - Storage of H2.
- Several large scale projects are announced, of the order of 100MW and more. In most cases, the projects are in the feasibility study-phase and investment decisions are expected in 2 to 3 years time.
- Several national funds have been made available (good vibe towards hydrogen)
- Discussions are running on national level about financial support for the production of green hydrogen, via the SDE+ (Stimulation of the Sustainable Energy production), as is existing today for the production of renewable electricity, renewable gas and renewable heat.
- The North Sea energy consortium develops knowledge for the application of hydrogen for transport of energy from the offshore windparks in the North sea and balancing of the energy system. In NL there will be 11,5 GW wind energy capacity in 2030.
- Vlaanderen is a logical partner for further collaboration.

@ Cluster news and activities

- New project initiatives:
 - Concept study for shared H2 refuelling infrastructure in collaboration with the logistics cluster (VIL). Interested partners to collaborate in this project can contact WaterstofNet. Target is to have the full project proposal ready around October, to have it approved (VLAIO) before the end of the year. The project can start in 2020.
 - Concept study for offshore hydrogen production in collaboration with Flux50 and the Blue Cluster. Interested partners to collaborate in this project can contact WaterstofNet. Target is to submit the project in September, if possible.
- Legislation-advocacy activities:
 - The policy paper on the REDII implementation in Belgium and the memorandum on hydrogen have been sent to federal and regional representatives, as input for coming legislative work and the coming governmental program.
 - National Energy & Climate Plan: cluster will send specific reaction and recommendations. Friday first telco to list the arguments.
 - To be defined: official “event” or meeting to communicate the memorandum to cabinets/administration etc..

- Continuation of the cluster after first 3 years
 - Funding from VLAIO for cluster organisation stops after 3 years (for all IBN) (= End of August 2019 for IBN Power-to-gas. The cluster will **continue** without funding from VLAIO, but will remain an official IBN with access to VLAIO services and intercluster calls etc...
 - A small survey will be sent around before end of June,
 - To check the interest for candidates to form an operational core team for the cluster
 - To review the working groups; is there interest in working groups dealing with other cross cutting teams (similar to the one on legislation/advocacy ...) suggestions?
- Events:
 - Workshop **permitting hydrogen fuelling stations (VL/NL) November 2019** (within WaterstofRegio project)
 - Next **clustermeeting September, 18** @ OCAS, Zwijnaarde
 - TCI global conference **October, 8-10** (with representation of Flemish clusters) @ Antwerpen
 - **WaterstofRegio conference November, 14** @ Den Bosch, Provinciehuis

@ Status Hyflow project

- *“creating the flow of hydrogen between Flanders – The Netherlands (Low Lands), facilitated by the ports”*
- **What?** A future “hydrogen corridor” between Zeebrugge and Eemshaven using existing pipelines, connecting ports, can be the backbone for a green hydrogen economy
 - Current injection points for offshore wind Eemshaven, Rotterdam and Zeebrugge
 - Transport by pipelines
 - Cross-border experience can guide Europe
 - Individual projects to be coupled to this future hydrogen corridor
- **Nex steps:**
 - Quantifying data/value chain of hydrogen for each port
 - Concept infrastructure, starting from natural gas
 - Discussion with governments in Flanders – Netherlands
 - Plan for 2030 with projects/data/actors

@ Developments hydrogen buses in EU and at van Hool

- Van Hool works on the different zero-emission solutions, trolley, BEV and FCEV.
- Advantages of FC hydrogen buses are clear: fuelling speed and autonomy, comparable ease of use as Diesel buses

- Van Hool has now a standardised bus concept, of which 30 will be delivered to Cologne and 10 to Wuppertal.
- Innovative concept is the “Tram-bus” on hydrogen, to be delivered in Pau (FR) ; this option has been selected over 12 proposed battery-electric solutions in tendering procedure set up by the city of Pau. The tram-bus has the advantage that investments in tram infrastructure (electrical overhead lines) can be avoided, which makes an interesting business case.
 - 8 of these vehicles will be delivered to Pau, where the hydrogen will be produced locally by Engie (electrolyser of ITM). The buses will be fuelled by a slow filling process.
 - Currently, the tram-bus is being tested in Lier.

The cluster-members are now invited to make a small tour in the Tram-bus!