

Waterstof Industrie Cluster: Minutes meeting 08/09/2021 (digital meeting)

Agenda:

New members

10.00 – 10.40 AM: Presentation new members

Guest speakers

10.30 –10.50 AM : The Dutch approach towards hydrogen and mobility (Alexia Michel, IenW NL)

10.50 –11.10 AM: Activities & collaboration with WIC (Filip De Weerd, Flanders Investment & Trade)

11.10 –11.30 AM: Port of Rotterdam as an EU hydrogen hub (Randolf Weterings, PoR)

General WIC info

11.30 – 11.50 AM: News from the cluster

11.50 – 12.00 AM: News from cluster members

Presentation new members:

- **University of Antwerp:** Quinten Van Avondt,
Focus on LOHC, solar driven H₂ production technologies, Plasma-driven H₂ production, developing BlueApp facility to collaborate with industry
- **Verwater:** Jeremy Vandermeeren
Tankbuilding company, storage of liquid bulk, offering services on maintenance and construction of tanks. Developing H₂ storage solutions.
- **Jan De Nul:** Jan Grommen
Marine services with 4 departments i.e. Offshore Energy, Marine works, Civil & industrial constructions, & circular solutions. Looking into use of hydrogen for fuelling of vessels; specific H₂ related add-ons they can offer in their proposals.
- **Eriks:** Wim Debast
Mechanical engineering components & solutions (also manufacturing).
- **WDP:** Koen Baele
Develop and manage logistics and semi-industrial property.
Focus on implementation of solar energy in their projects.
Looking into integration of hydrogen.
- **Linde gas Benelux: Pieter den Hooglander**
Active in every segment of the hydrogen value chain
Building & operation of SMR (incl carbon capture), gasification, electrolysis (24MW plant in construction).
Liquefaction of hydrogen; Hydrogen in mobility.

Discussion/Q&A @ presentation Alexia Michel, IenW NL

Q: Will the exploitation result of a station be a criteria for a possible new grant scheme?

A: We don't know exactly how we will design this, it is still in the phase of exploring the possibilities (and waiting for decisions from the new government regarding financing)

Q: Are there any plans and actual budget to apply for an exemption with Brussels on state aid for H2 truck funding, just as we have very recently seen in Germany, where funding of trucks up to 80% is now allowed?

A: We have a limited budget at this moment, it sounds like a interesting possibility. It is not in our plans yet. Interested to have a look into this.

Discussion/Q&A @ presentation Filip De Weerd, Flanders Investment & Trade

Q: Is there a Flemish climate/hydrogen strategy yet and how is FIT working towards this strategy?

A: The strategy is in progress, but there is strong focus on hydrogen import.

FIT is looking at possible sources for import and companies that want to invest in Flanders.

Discussion/Q&A @ presentation Randolph Weterings, PoR

Q: Is Gasunie also involved in the import terminals?

A: Gasunie is indeed involved in some of the import terminal developments.

WIC/WaterstofNet news

- (New)members: 8 members joined the cluster since June 2021
- Status working groups shipping, policy, mobility and H2 for all.
- News from the governments FL-B-NL
 - FL: Hydrogen task force has started in July
 - BE: federal strategy is expected in October
 - NL: National Hydrogen Program (Nationale Waterstofprogramma) is published on 7 July 2021
 - NL: 338M€ forseen for green H2 and green chemistry (Groenfonds) of which 73M€ already approved for 2022-2023
- Overview FL/BE/NL/EU funding available on the member portal
- Matchmaking of industry with Flemish knowledge institutes: kick-off in October 14 and matchmaking meeting on November 9 in Brussels.
- WaterstofNet will participate in Hyvolution 2021 in Paris on October 27-28.
- Visit to Groningen: still option to join (October 6-8)

Agenda

- WIC Webinar, next edition on September 30
- Working visit Groningen October 6 – 7 – 8
- Kick-off matchmaking process industry-academia FL: October 14
- Meet & Greet (online): October 21
- Matchmaking industry-academia FL: November 9
- Conference on November 22, Brussels (free for WIC members, subscription from mid Sept.)
- Hydrogen Academy: starts October 11, 6 Mo-evenings, Agfa Mortsel
- Cluster meetings, next on December 8

News from the cluster members:

- **CMB** has recently presented a H₂ fuelled excavator with a total weight of 37 tons and 210 kW power. The dual fuel technology allows the operation of such large equipment. Battery electric operation is only applicable for much smaller excavators; the biggest available excavator with Fuel cells is only 20 tons.

Next to this excavator, CMB has also revealed their mobile refueller, with 950kg H₂ that refuels in a cascade setup (which allows filling to 600kg). It will a.o. be used for refuelling of the tug boat in the port of Antwerp.

Also 2 H₂ monofuel gensets have been shown (45kVA) and a 200kVA dual fuel genset (65% H₂).

Earlier (June) the refuelling station in Antwerp and a dual fuel truck have been presented.

The technology is ready!!!

- **Everfuel**

Everfuel is developing a hydrogen plant in collaboration with Shell Refinery, in Fredericia (DK), with a production volume of 8000kg /day (> 20MW electrolysis).

Everfuel is also selected for the IPCEI hydrogen (2 projects) by the Danish government. Through this IPCEI, there will be options to connect to Benelux companies.

In the NL, the project of the bus refuelling station in Heinenoord is in progress.

- Colruyt Group/DATS24

Active with the preparation of 4 hydrogen refuelling stations that will open this year. The offer that they have set up with ALD is off to a good start.

In addition, they are working within HyTrucks on heavy-duty story for hydrogen. The tests of the first 44-ton tractor were positive.

Within H₂Share Colruyt Group will test the 27ton tractor very briefly in Belgium and then it will continue to drive at Colruyt Group in France.

Present in the call:

Patrick Vanschoubroek	Actemium	Paul Schroé	MBZ
Elina DANILOVICH	Actemium	Filip Van Den Abeele	OCAS
Nick Valckx	Agfa	Marc Vanderschueren	OCAS
Tijl van Criekingen	Air Liquide	Gertjan Wauters	Perpetum
Siegbert Verhulst	Air Products	Devon Hyver	Plug Power

Frank Schnitzler	Air Products	Corine Dubruel	Plug Power
Maxim Verdoodt	ALD Automotive	Koen Van den Brande	Polders Investeringsfonds
Ann Larosse	ALD Automotive	Myriam Rebahi	POM Antwerpen
Koenraad Mols	ArcelorMittal	Rob Cornelissen	POM Limburg
Erik De Coninck	ArcelorMittal	Guido De Roo	POM West-Vlaanderen
Robert Seghers	Alstom	Maxime Peeters	Port of Antwerp
Roger De Vos	Atlas Copco	Gilles Decan	Port of Antwerp
Hans Magits	Atlas Copco	Dirk Declerck	Port of Ostend
Sandra Wauters	BASF	Maarten Van Haute	Q8
Adrien Theunissen	Besix	Georges Leysen	Sea Tank Terminal
Gert Nelissen	Borit	Luk Wuyts	Sea Tank Terminal
Nicole Van Klaveren	Bureau Veritas	Mark Philips	SGS
Elena Rogers	Bureau Veritas	KeesJan Rijswijk,	SGS
Edward Van de Steen	Capgemini Engineering	Erik Teerink	SGS
Jonas Cautauts	Colruyt	Wim Van Den Mosselaer	Siemens Energy
Sébastien Piret	Colruyt	Frank Taelman	Siemens Energy
Liesbet Verhaert	CMB	Johan De Blicck	Siemens
Roy Campe	CMB	Sophie Pla	Siemens
Johan De Clippeleir	Covess	Pieter Jan Jordaens	Sirris
Chris Prengels	Deme	Joris Van Dyck	Solenco Power
Sofie Marivoet	De Vlaamse Waterweg	Jean-Marc Chamberland	Solvay
Lynn Eyckmans	De Vlaamse Waterweg	Tom Van Den Noortgaete	Sweco
Koen VLAEMINCK	Engie	Tim Maeyens	Terranova Solar
Laurens Mussely	Eriks	Yannick Sijssens	Tessengerlo Group
Kenneth Roman	Eriks	Philippe Quenon	Tessengerlo Group
Wim Debast	Eriks	Johan Dekervel,	Total Energies
Tom Bakker	Eriks	Karl Elen	Total Energies
Geert Beyl	Eriks	Frank MARTENS	Total Energies
Jeroen Schmidt	Eriks	Saša Marinić	Total Energies
Ben Cornelis	E-trucks Europe	Vincent Mattelaer	Toyota Motor Europe
Wouter van der Laak	Everfuel	Simon Heylens	Toyota Motor Europe
Filip Van Caneghem	Farys	Jimmy Henrard	Toyota Belgium
Leander Hanegreefs	Fluxys	Thomas Vercammen	Toyota Belgium
Céline Vaessen	FPIM	Jean-Paul MOSSOUX	Tractebel
Stephan Laux	Fuel Cell Power	Marcel Meus	Umicore
Herman Van Damme	G&V	Nathalie Meyer	Universiteit Antwerpen
Sven Audenaert	Hima	Quinten Van Avondt	Universiteit Antwerpen
Josse Brys	Hima	Sammy Verbruggen	Universiteit Antwerpen

Hans Rymenants	Hitachi-ABB	Ruud Bouwman	VDL
Raymond Daems	Hitachi-ABB	Peter Simkens	VKI
Wessel Hofst	Hitachi-ABB	Jeremy Vandermeeren	Verwater
John Swinkels	Hitachi-ABB	Sam Schotte	VIVES
Stefan van der Spek	Hyzon Motors EU	Koen Baele	WDP
Pieter Jacqmaer	Infrabel	Ruben Vandam	WDP
Peter Gysen	Intertek	Jan Vliegen	WN
Katrien Ver Elst	IOK	Isabel François	WN
Matthias Schnellmann	Inovyn	Adwin Martens	WN
Amain Hanneuse	Inovyn	Chris Lefrère	WN
Jan Grommen	Jan De Nul	Samira Farahani	WN
Jan Rongé	KULeuven-Cokkat	Yannick Van den Broeck	WN
Rick Claus	Linde	Randolf Weterings	Guest Port of Rotterdam
Pieter den Hooglander	Linde	Alexia Michel	Guest IenW
		Filip De Weerd	Guest Flanders Investment & Trade

Isabel François
September 8, 2021