

## Minutes meeting 28/11/2018 @ E-trucks Lommel

### Present meeting:

André Beukers-Ben Cornelis (E-Trucks), Tim Maeyens (Terranova Solar), Denis Thomas (Hydrogenics), Maarten Van Haute (Q8), Nicolas Gielis (Fluxys), Jean-Paul Mossoux – Dimitri Van Den Borre (Tractebel), Koen Vlaeminck – Harrie Blondeel- Daniel Marenne (Engie), Philippe Tavernier (POM), Valon Pillana (Air Liquide), Hans Magits (Atlas Copco), Bart Goddyn (Aspiravi), Koen van den Brande (Polders Investeringsfonds), Kristof Vanhoorne (EDF), Ruud Bouwman (VDL), Michiel Jeremiasse (Suez), Marcel Meeus (Umicore), Nick Valckx (Agfa), Filip Van Den Abeele (OCAS/Arcelor), Isabel François (WaterstofNet).

### Agenda:

10.00	Cluster news and general info
10.30	Filip Van Den Abeele, Arcelor Mittal R&D/OCAS Hydrogen research, development and testing capabilities at OCAS
11.00	Andre Beukers, director of E-trucks-Europe: Activities and perspectives Hydrogen waste trucks
11.30	Tour in the factory
12.00	Lunch

Presentations: see attachment

### Remarks

#### General info cluster

- Workshops H2 mobility are planned for Antwerp & Leuven and are being planned for Gent & Brussels. These workshops will be held in Halle/Zaventem at an existing refuelling station.

Remark: In West-Vlaanderen, there will be a workshop on short term, related to the plans of the POM to develop a hydrogen station in Roeselare. An info-session at an existing station, similar to those in Antwerp & Leuven, can be planned in a later stage.

Also for Limburg, an exploration is running for the Ford site in Genk; a workshop in Genk was organised in September; a follow-up workshop with interested companies will be held in January.

#### OCAS presentation

- OCAS wants to collaborate with cluster partners in innovative projects.
- OCAS does research on interaction of H2 with materials but also with existing components; the latter is especially interesting for collaborations within the cluster

- Question: in literature a small fraction of O<sub>2</sub> in the H<sub>2</sub> could probably counteract interaction of H<sub>2</sub> with steel? To be checked with specialists at Ocas.

### **E-trucks**

- Focus on 30-tonnes vehicles for inter-city transport with high energy consumption
- Focus on 3-axle trucks
- Fuel cost already competitive with Diesel today:
  - o 10kg H<sub>2</sub> equivalent with 120l Diesel (for 100 km)
  - o 100 € (at 10€/kg) versus 120€
- Total weight of a H<sub>2</sub> truck is comparable to Diesel truck
- Current concept has relatively small fuel cell (30kW) and relatively large battery ; this ratio will change in the future; plan is to minimize battery capacity and increase FC capacity.