

HECTOR Project

‘Hydrogen waste collection vehicles in North West Europe’

Project Conclusions

- *What did HECTOR achieve*
- *What special skills or resources were brought to successfully complete the project?*

- **Real practice experience gathered regarding operation of hydrogen refuse truck**
- **Extra attention required for details of the refuse body if mounted on a hydrogen truck**
- **Much attention needed for all staff involved (dispatching, location management and drivers)**

Operational Experiences

Positives, Issues, barriers

- Long delays in delivery of the truck (caused by supply chain, suppliers and global problems as Covid)
- Many technical issues with the truck caused by several reasons, such as the design and construction, defective parts etc.
- Due to unreliability of the truck replacement of regular trucks is not possible at the moment
- Availability of the truck has been low
- Motivation of drivers and operational management is reduced when truck is not reliable
- Several problems and unavailability of the refuelling station
- Many possibilities for the future of hydrogen have been made visible for several applications
- Positive feedback and interest from public, municipality and other cities, companies

Lessons Learned

- The technology in our truck has not proven yet to be reliable for daily operation for waste collection; a backup truck is required;
- There is great dependence on the refuelling station; due to the fact there is only 1 refuelling station in the wider area, the truck can not be operated when the refuelling station is not available;
- Most truck workshops are not prepared for hydrogen
- Price of hydrogen fluctuates enormously; because of very high kg price in combination with purchase price of the truck a positive business case is not possible at the moment
- Hydrogen technology is certainly interesting for the future as an alternative for combustion engines in trucks and as an alternative for battery electric trucks due to charging network issues

Collaboration with Partners and Emerged Relationships

How was collaboration with other partners in the project and what relationships have emerged beyond the project?

- The collaboration, interaction and exchange of information and experience has proved very valuable

Comms

- *Any events to publicise the trucks (launches / outreach to general public)?*
- *Any complementary activities carried out during the project?*
- A big launch event has been organised with much publicity; several publicity in national media has been generated
- When truck is back in operation further events will be attended

The Future for your HECTOR Truck

- *What is your main focus over the next few months / years?*
- *Given your experience would you consider purchasing other h2 trucks?*

- Currently the truck is not in operation due to technical issues; we hope the truck is back in operation very soon and will proof to be reliable; our aim is to operate it as many days as possible for the coming years;
- When hydrogen trucks from OEM manufacturers are produced, refuelling options are available and TCO will decrease we will consider to operate more hydrogen trucks

