



HECTOR Project

'Hydrogen waste collection vehicles in North West Europe'

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HECTOR Project

in a nutshell



Touraine Vallee de l'Indre

Compression Truck
Musicipal Waste

HECTOR Project will deploy 7 different types of fuel cell garbage trucks in 7 different cities in 5 countries:

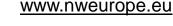
The aim of the project is to demonstrate that fuel cell garbage trucks provide an effective solution to reduce emissions from road transport in the North West Europe area.

Koofinanziert zu 60% von **INTERREG North West Europe**





LOW CARBON PRIORITY























What will Hector achieve?



- Timeline: first trucks to be deployed mid-2020, all of the trucks will be tested for at least 24 months before the end of the project
- Reduce C02 emissions: 400t by the end of the project
- Demonstrate that fuel cell garbage trucks are an effective solution
- For the pilot sites at the end of the project: readiness to deploy more zero emission garbage trucks
- Long term objective large scale roll out in the North West Europe area
- Replication in other cities/regions in Europe → set up of a group of follower regions (local authorities + operators) → Aim of the group: enable interested cities or regions to closely follow the progress of the project and to have in depth exchanges with the project partners

Project timeline



2019 2020

2021

2022

2023

Step 1

Public procurement process

All trucks ordered by Q4 2019

Step 2



Delivery of the trucks – Q2 to Q4 2020 Step 3

Operation of the trucks + analysis: 2020 to the end of the project

| Sites | Truck ordered | Estimated delivery |
|-----------|------------------------------|--------------------|
| Aberdeen | Geesinknorba / Holthausen | |
| Duisburg | FAUN | |
| Herten | E-Trucks | |
| CCTVI | SEMAT | Q2 to Q4 2020 |
| Brussels | TBC | |
| Groningen | E-Trucks | |
| Arnhem | E-Trucks / VKD-MOL | |



First lessons learned and recommendations



Procurement of the garbage trucks

- Joint procurement is a good idea... but difficult to put in practice
- → Garbage trucks are usually custom build
- Involve all stakeholders early on in the project. High levels of internal communication with drivers and technicians is key!
- → Involve them early on in the selection and procurement process
- → Take the drivers to the factory during the production process
- When writing the tender: **focus on your operational needs**
- → No need to be too specific about the technology, but keep the preferences of the drivers in mind
- Importance of maintenance
- → Define roles clearly. Do not change the accepted concept

First lessons learned and recommendations



Production of the truck

- **Production time** is currently around 12 to 14 months
- → longer than for conventional fuel trucks
- Trucks in the project are new vehicles but often conventional fuel vehicles converted into hydrogen
- Price of the trucks: generally price of a conventional fuel truck + conversion costs. Some manufacturers are leasing the truck
- Separate orders of body, chassis and fuel cell, as well as in house maintenance, can help to reduce the purchase price

Group of follower cities and regions



- The project will create a group of follower cities and regions, including operators (public and private)
- Aim of the group: enable interested cities or regions to closely follow the progress of the project and to have in depth exchanges with the project partners
- If you are interested, please contact Valentine Willmann at HyER valentine@hyer.eu

HECTOR Project Contact details



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