



## Launch of HECTOR's first Hydrogen Powered Waste Truck!

On the 2nd of December 2020 HECTOR partner Wirtschaftsbetriebe Duisburg (WBD) in Duisburg launched the first hydrogen powered waste disposal vehicle. WBD is the first municipal company in Germany to use this type of vehicle. It is an important milestone on the way towards

sustainable waste disposal and a low emission fleet. The new vehicle is estimated to achieve a range of up to 285km, storing a maximum of 16.4kg of hydrogen and will be refuelled every two days.

# How does this vehicle work?

There are four tanks below the vehicle, each holding 4.1kg. The vehicle is refuelled at the Autohof in Duisburg-Neuenkamp. The vehicle carries the hydrogen in gaseous form in 700 bar pressure tanks. Fuel cells convert the gas in the tanks into electricity and water. The vehicle is powered by electricity. The advantage over electric vehicles is that like gasoline or diesel, hydrogen can also be refuelled in a short time, without having to carry large, heavy batteries. In addition, there is no engine noise when driving, which is a great benefit especially in residential areas.

The use of this vehicle is only the beginning of the implementation of the hydrogen strategy of Wirtschaftsbetriebe Duisburg and the complete

conversion of the vehicle fleet. The delivery of further refuse collection vehicles with fuel cells is planned as part of a current funding programme of the Federal Ministry of Transport and Digital Infrastructure. In addition, the Ministry of Economics, Innovation, Digitization and Energy of the State of North Rhine-Westphalia supports the implementation of hydrogen projects in the context of the Hydrogen Roadmap NRW.

The model region Düssel.Rhein.Wupper deserves special mention here, which Minister Prof Dr Andreas Pinkwart has named the winner of the NRW model region Hydrogen Mobility competition. The use of the refuse collection vehicle with fuel cell is a contribution of Duisburg to the implementation within the model region.

## HECTOR Achievements in 2020

- 2 out of 7 fuel cell waste trucks delivered to partners
- Pre-operation preparations underway including development of a checklist for depot alterations
- Driver behavioural study developed

## Key actions for 2021:

- Delivery of the 5 remaining trucks - between Feb to May 2021
- Operational data collection and initial analysis
- Mid-Term Conference - June 2021



## Contacts:

If you would like to know more about the HECTOR project:

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