

EU Sustainable Energy Week
Side Event: Towards a Hydrogen Energy Economy
Brussels, 19 June 2019



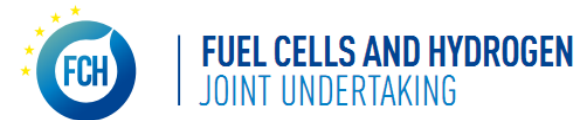
Sjaak Schuit, Municipality of Groningen

Ambitions of the municipality of Groningen

- Roadmap Groningen Carbon Neutral 2035
 - Zero Emission City Logistics in 2025
 - Zero Emission public transport in 2020
- ⇒ Hydrogen is part of these ambitions

Groningen is partner in European hydrogen programs:

- JIVE 2: 20 hydrogen busses (in 2020)
- Revive: 2 garbage collection trucks
- HyTrEc2: 6 municipal hydrogen vehicles and refuelling station
- Hector: hydrogen garbage collection truck
- Hydrogen Valley?



JIVE 2



ZERO EMISSION



Hydrogen Vehicles for Garbage Collection

- Groningen is partner in REVIVE, HyTrEc2 and HECTOR.
- These include in total five garbage Trucks.
- Groningen has also garbage trucks outside these programs.
- The first garbage trucks started operations in 2019. All trucks will be operational in 2020.
- The HECTOR program also includes adaption of the indoor parking and maintenance.



Hydrogen Busses



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

- 2 Hydrogen busses operational in Groningen since 2017 as part of High V.LO-City project. They have their own refuelling station.
- Municipality of Groningen is partner in OV-bureau Groningen-Drenthe.
- In 2018 Qbuzz won concession for zero emission public transport starting December 2019.
- Included in the offer are 20 hydrogen busses. These busses are part of JIVE 2 project.



Other Hydrogen Vehicles

- Four other vehicles in HyTrEc2:
 - 2 Hyundai ix35
 - Streetscooter
 - Kangoo
- Small bus for the city centre.
- Street sweeper.



HyTrEc²
Hydrogen Transport Economy
for the North Sea Region

Interreg
North Sea Region
European Regional Development Fund



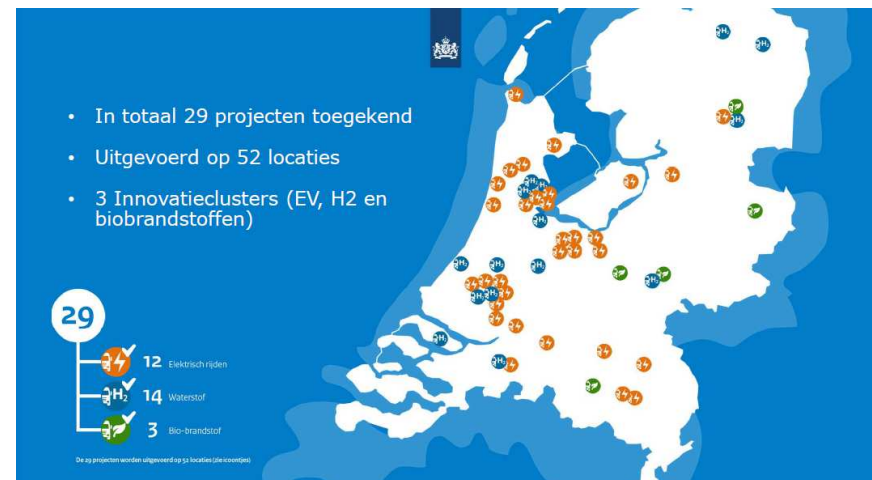
Coming soon: more hydrogen

New vehicles

- More vehicles for garbage collection
- VW Transporters
- VW Crafters
- A boat for maintenance of waterways.

Two Hydrogen Refuelling Stations

- A new refuelling station in Groningen for public use as part of the Dutch DKTI project H2GROw.
- A new refuelling station for the 20 busses of the JIVE 2 project.



Thank you for your attention

