



Sustainable mobility policy of the City and the Province of Groningen

Nachhaltige Mobilitätspolitik der Stadt und Provinz Groningen

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Policy maker Sustainable Mobility

City of Groningen



Groningen Energy Neutral in 2035

Ambitions Sustainable Mobility The Netherlands

National policy: 49% CO₂ reduction by 2030

Transportation sector responsible
for about 20% CO₂ emission

- 200.000 EVs by 2020

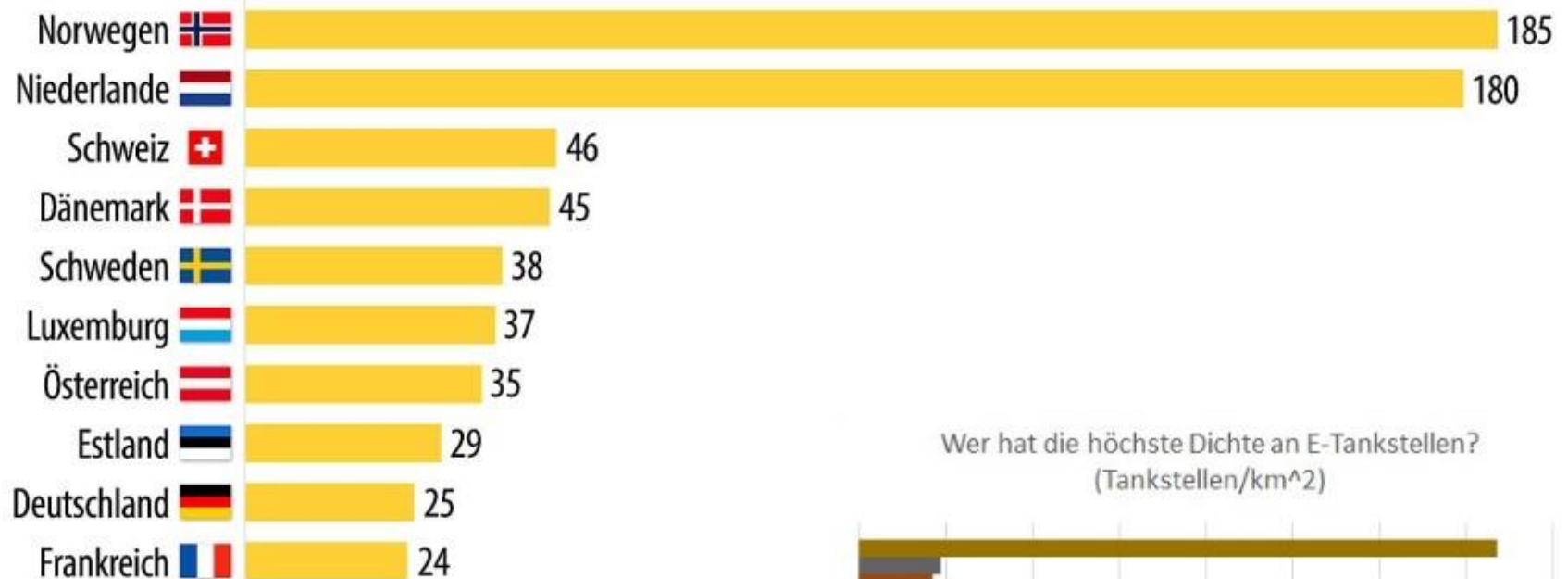
City of Groningen

- Mobility: 95% CO₂ neutral in 2035
- Infrastructure: Energy neutral in 2035



Wo stehen die meisten E-Tankstellen?

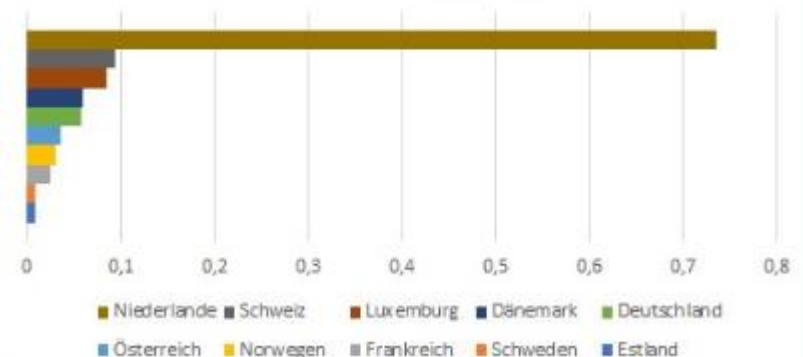
Ranking der europäischen Länder mit den meisten öffentlichen Ladestationen für E-Autos (pro 100.000 Einwohner)



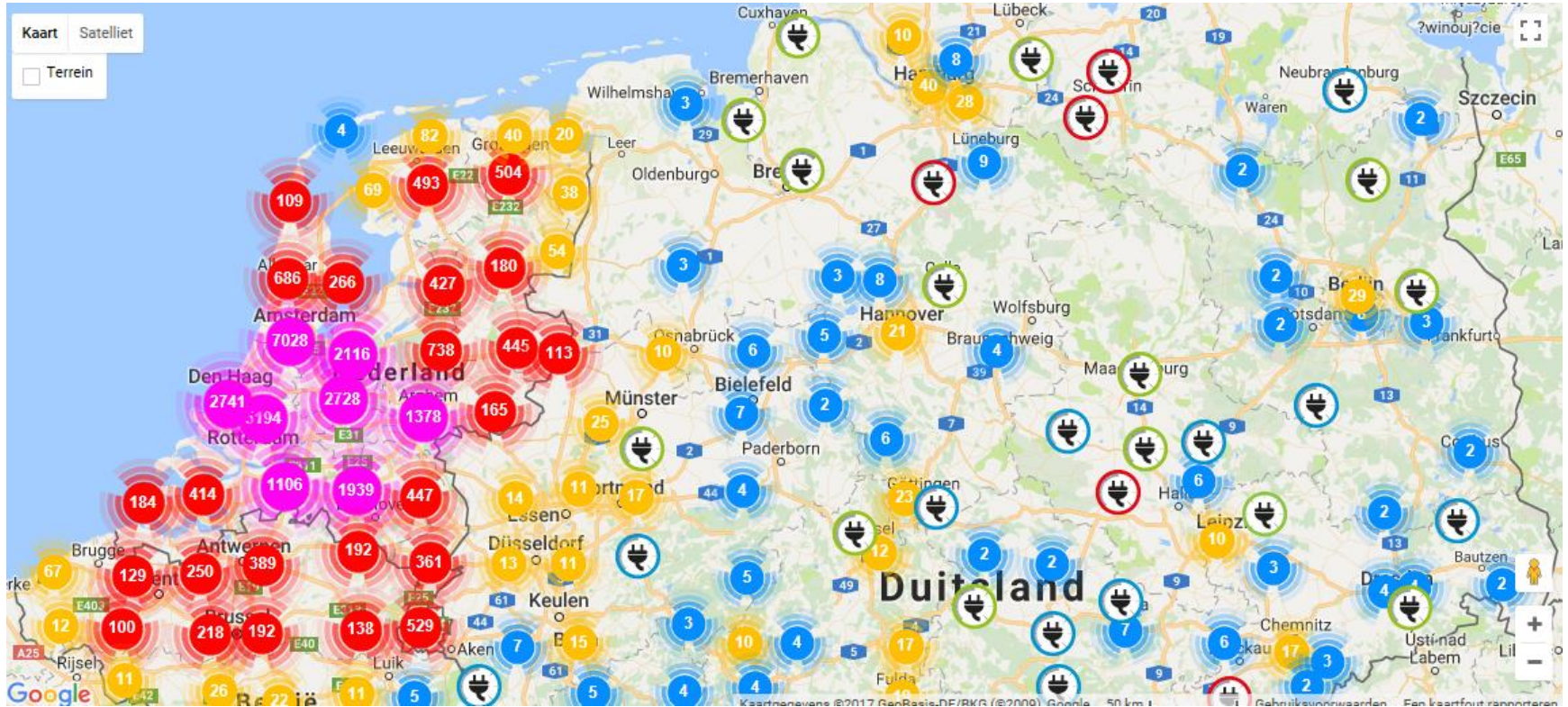
Stand: Juli 2017

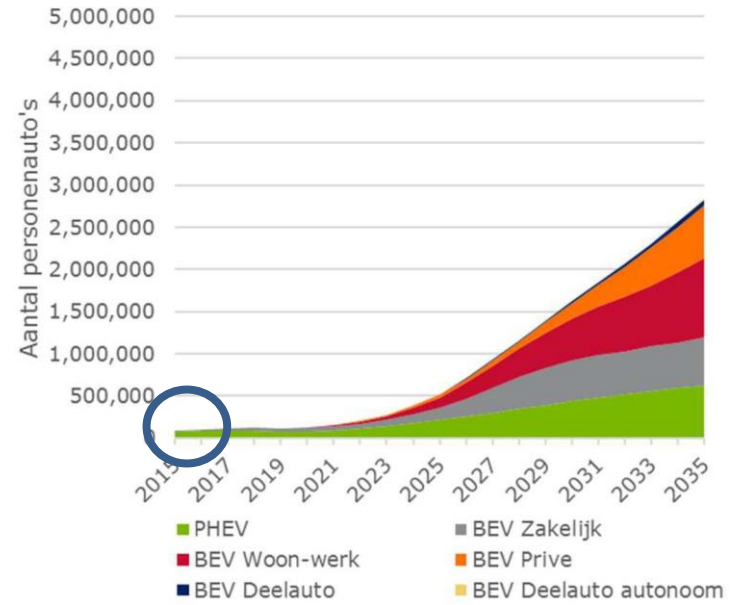
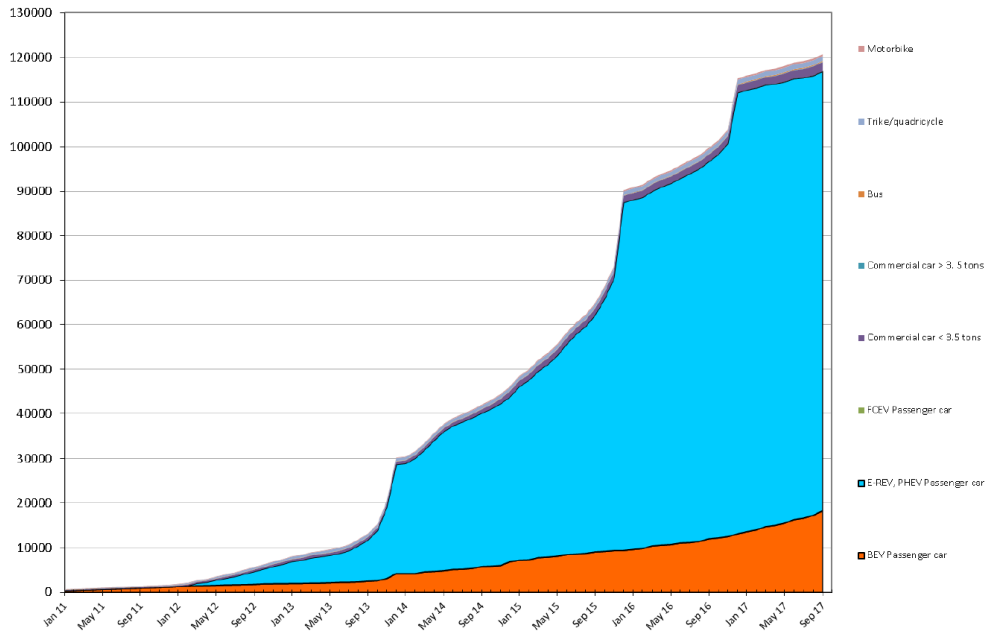
Quelle: EAFO, VCÖ

Wer hat die höchste Dichte an E-Tankstellen?
(Tankstellen/km²)

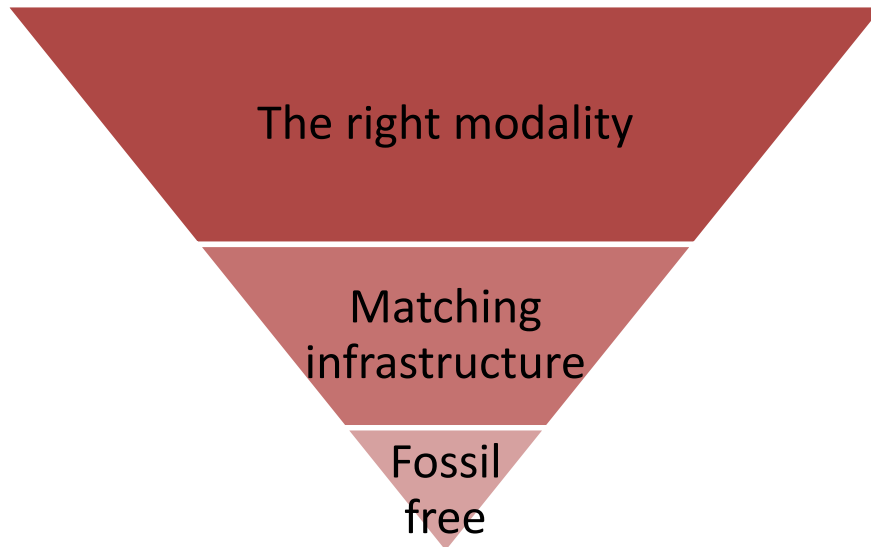


E-charge points





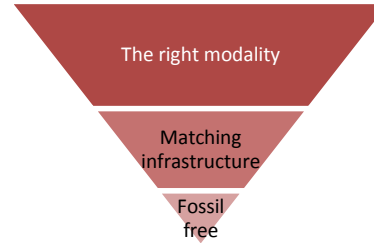
Sustainable mobility approach City of Groningen



1. By foot
2. By bike
3. Public Transport

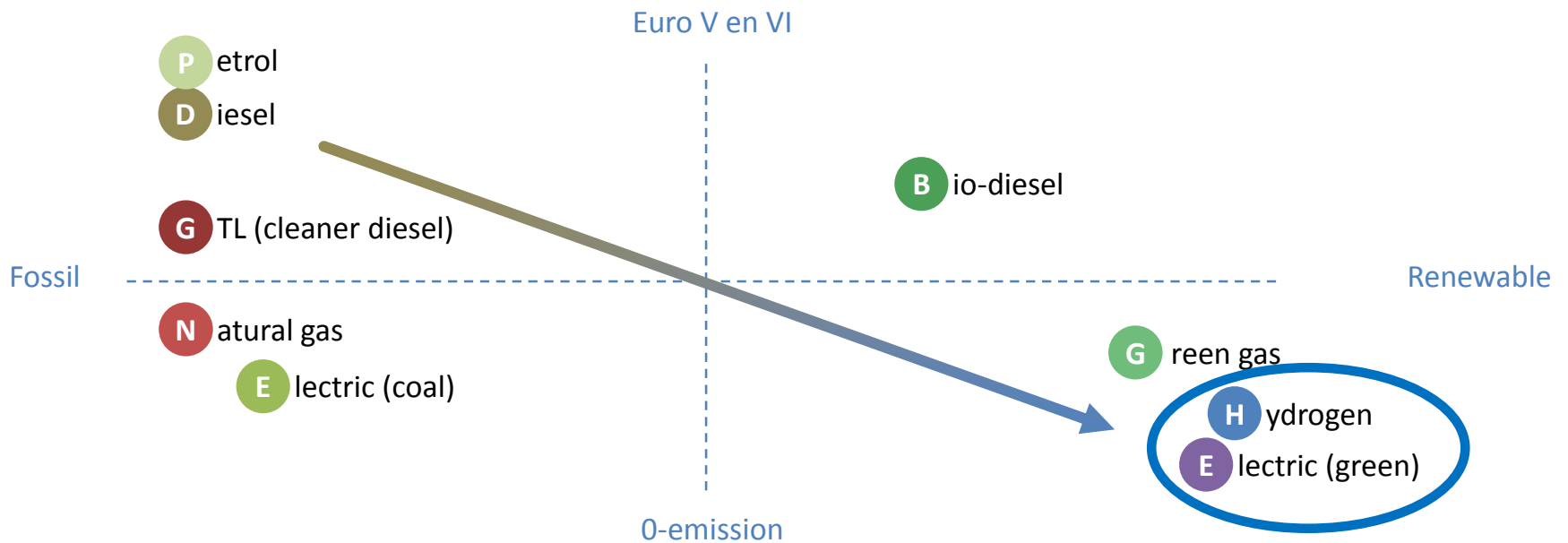
1. Attractive medieval city centre
2. Top notch bicycle infrastructure
3. Priority for busses

Sustainable mobility City of Groningen



Traffic Circulation Plan (1977)

CO₂ neutral (fossil free) in 2035



Courtesy of PitPoint

Province of Groningen

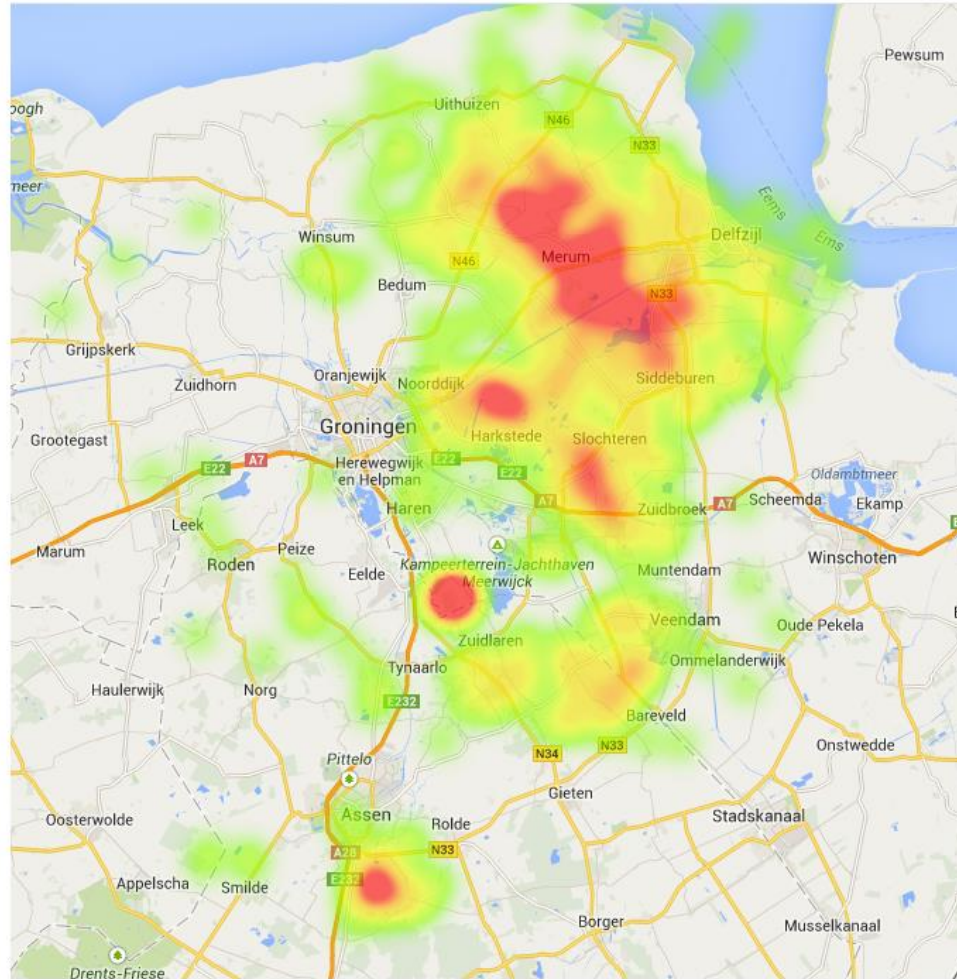


1959

Slochteren, Groningen

Groningen gas field







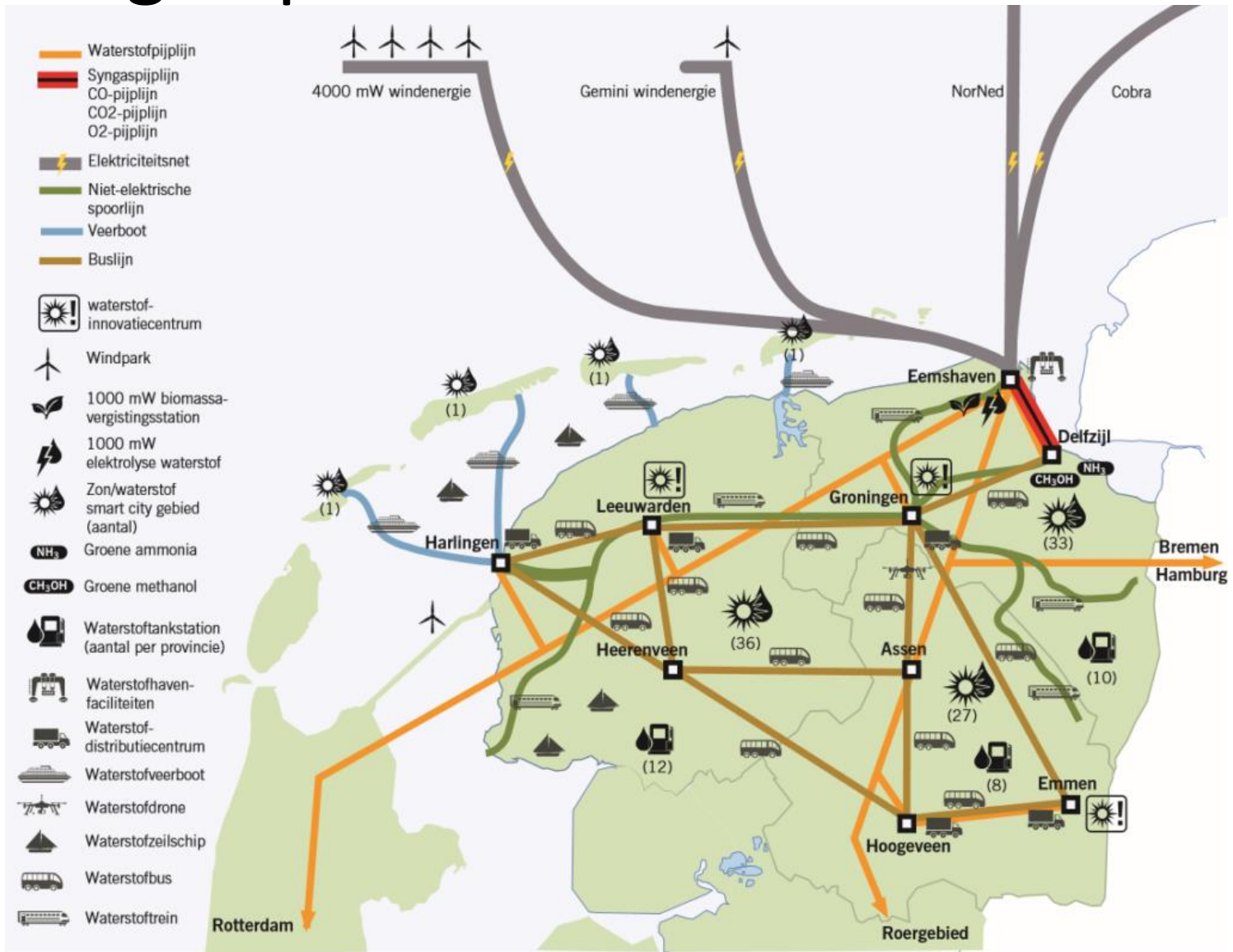


Hydrogen economy

**HET BESTE
VOOR
NEDERLAND
komt uit Groningen**



Hydrogen plan Northern Netherlands



Het waterstofplan in Noord-Nederland.

SO...

AND THIS

IS WHAT

WE DO:

Own fleet



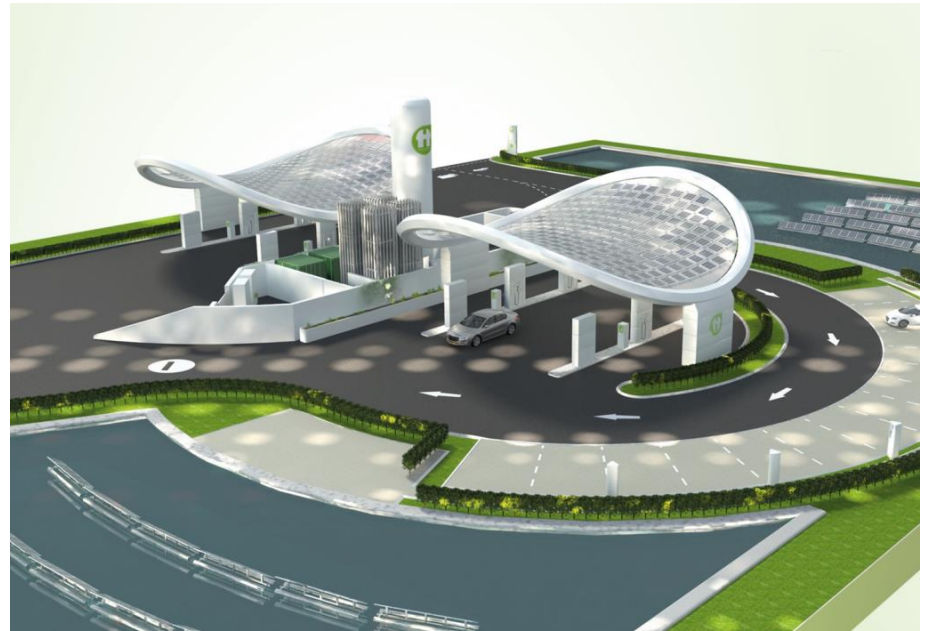
Own fleet City of Groningen (500+)

- 6 hydrogen vehicles in 2017
- 10 hydrogen vehicles in 2018
- Battery electric where possible, hydrogen when needed
- 100% zero-emission vehicles in 2035





Hydrogen fill station
Groningen (2019)



2016

15 Q-link buses

(euro-6, 18 meter, airco, wifi)

45 euro-6 instead of euro-5

(euro-6, 12 meter regional bus)

2 battery electric

(euro-6, 12 meter regional bus)



Since dec 2017

5 euro-6 'dubbles'

(euro-6, 85 zitplaatsen, streekbus)



10 Q-link electric buses

(electric opportunity charged, 18 meter)



2 hydrogen regional buses

(electric/hydrogen, 13 meter, airco, wifi)

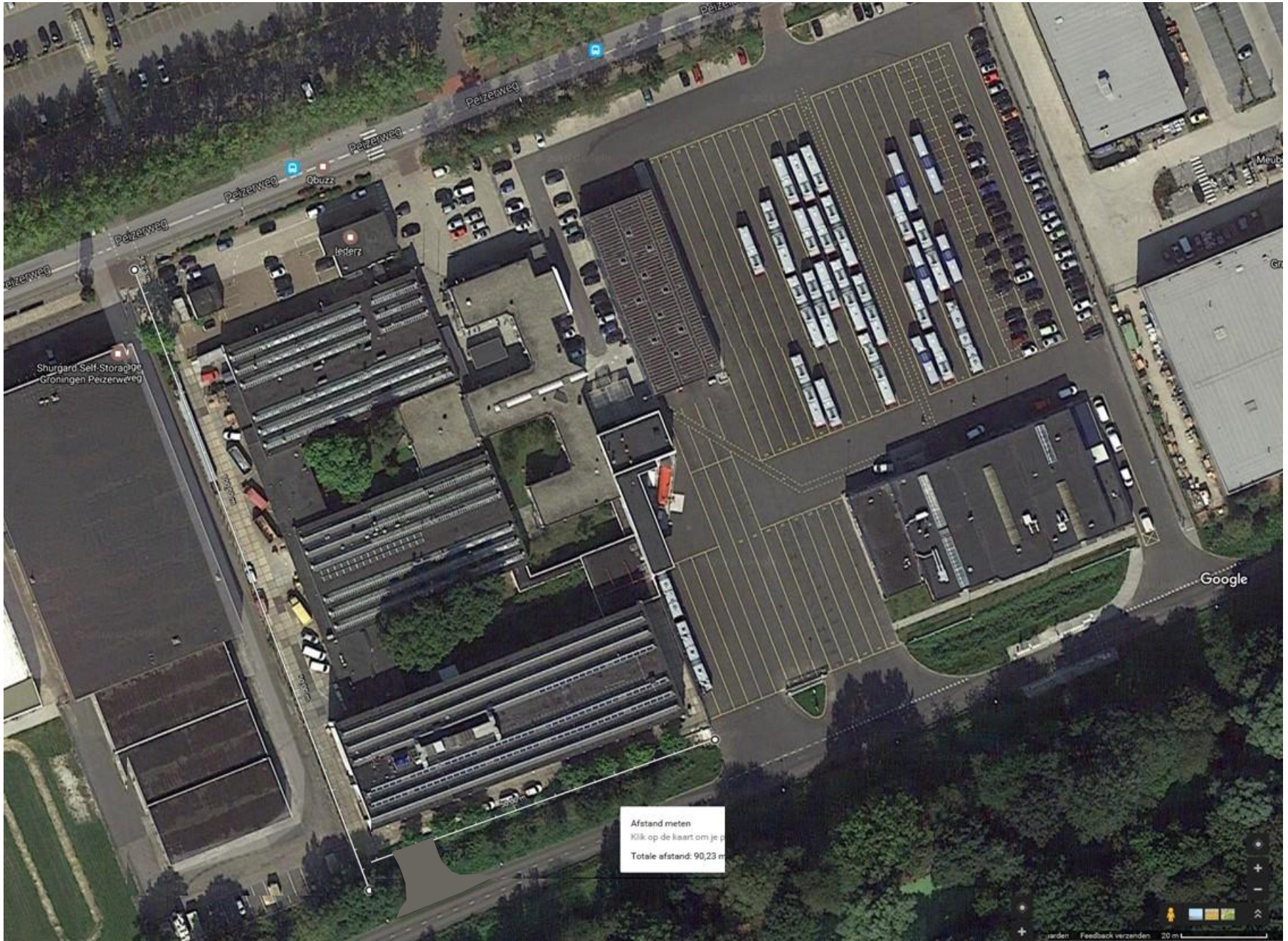


Public Transport - Buses

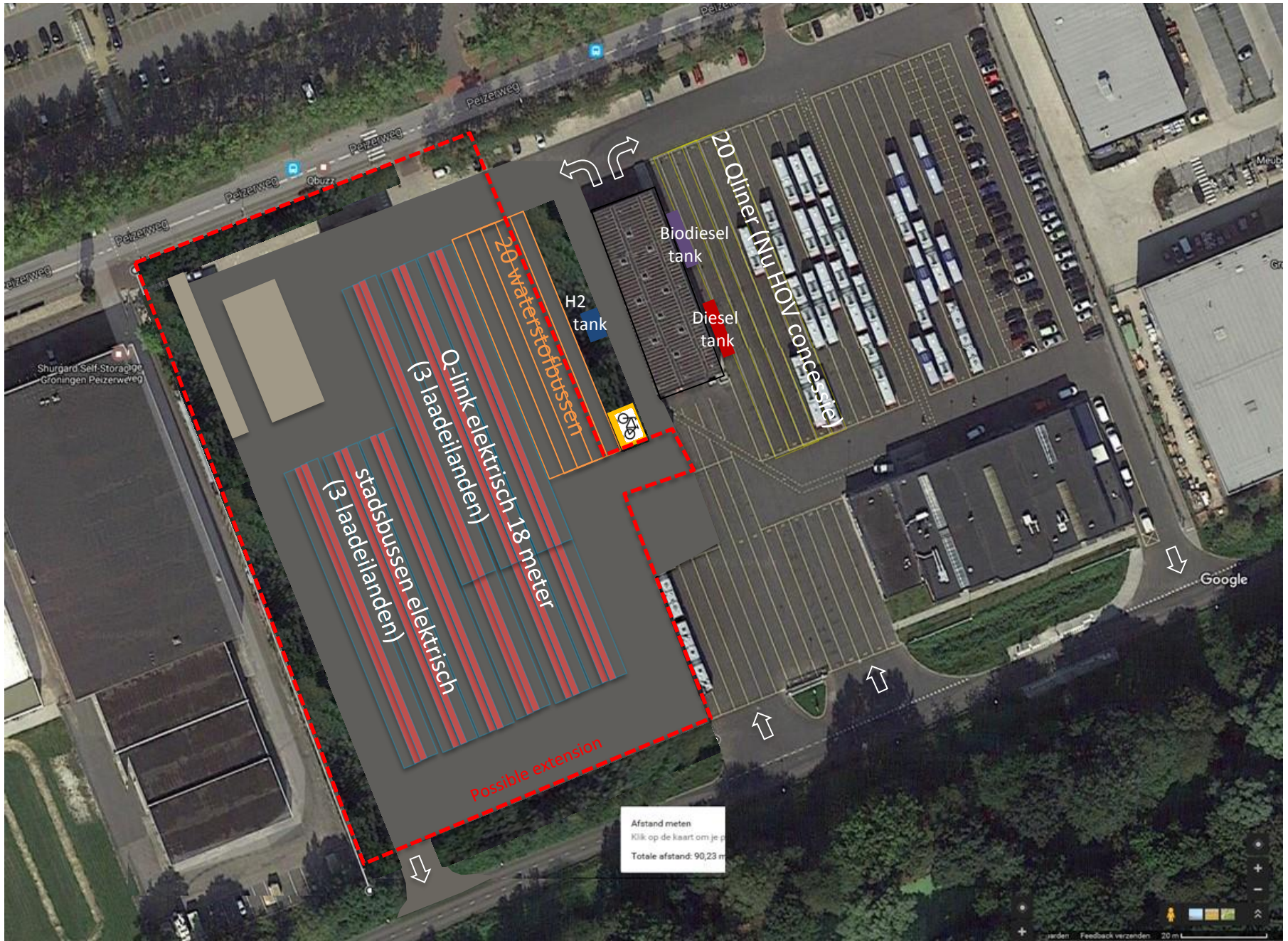


Future 350 busses
Fossil free in 2030
175 H₂ ?
175 battery electric ?

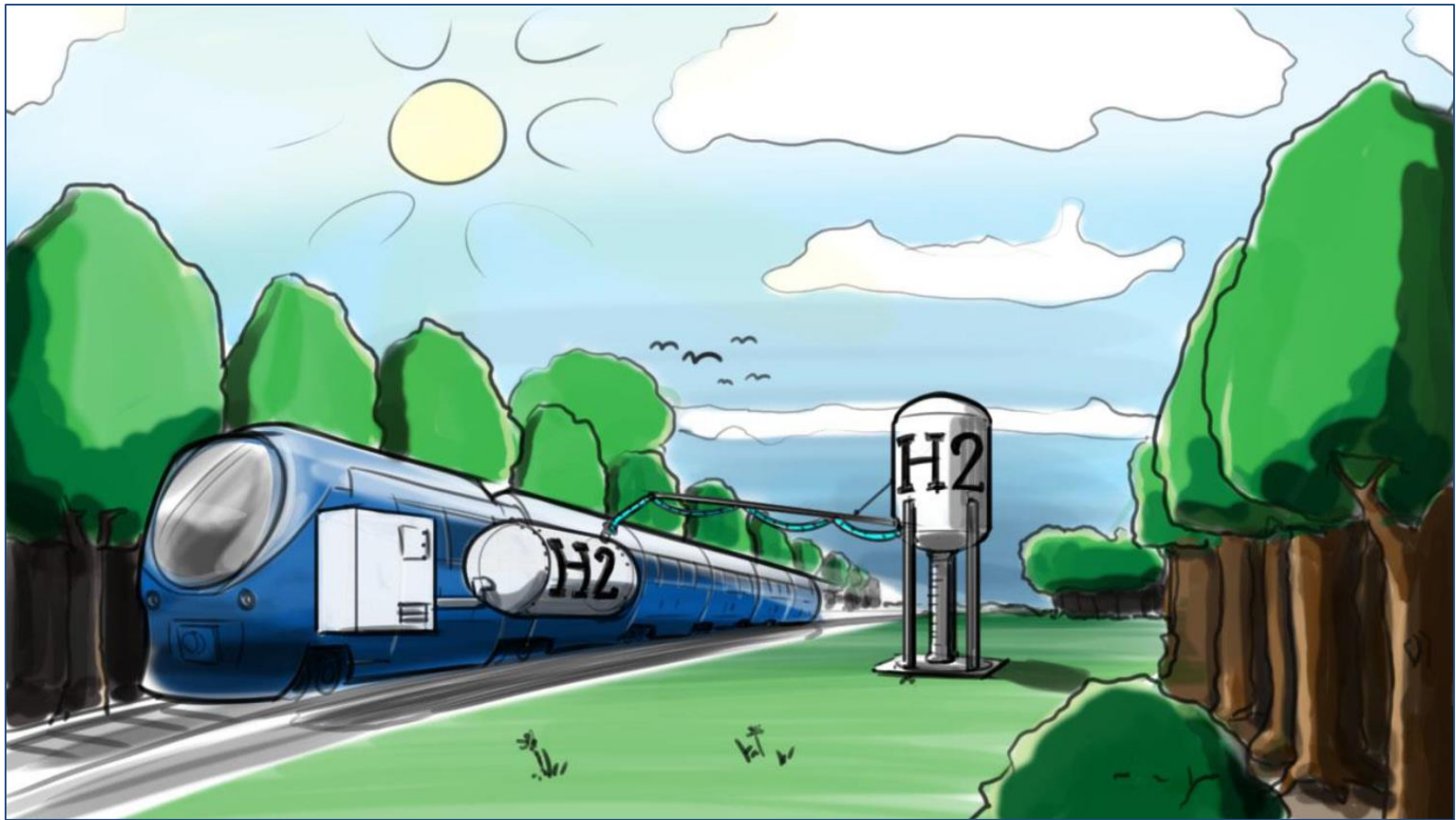
Current Bus depot



Sustainable busdepot



Public Transport - Trains



Pilot hydrogen train 2018



'Power module'

Diesel out
Fuel cell in

'WMO' transport tender

(Taxis, school buses, handicapped transport, etc.)



Green gas or electric only

Green deal 1.000 charge stations

- 1.000 public e-charge stations in the provinces of Groningen and Drenthe
- 400 allocated to the City of Groningen
- Tender 2018-2022 (2028)
- 250 euro per e-charge station
- Goal: nearly the same price as you should pay at home!
- Q2 2018

