



Regional perspective on Green Hydrogen: the Dutch-Flanders Hydrogen Project

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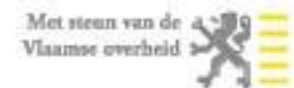
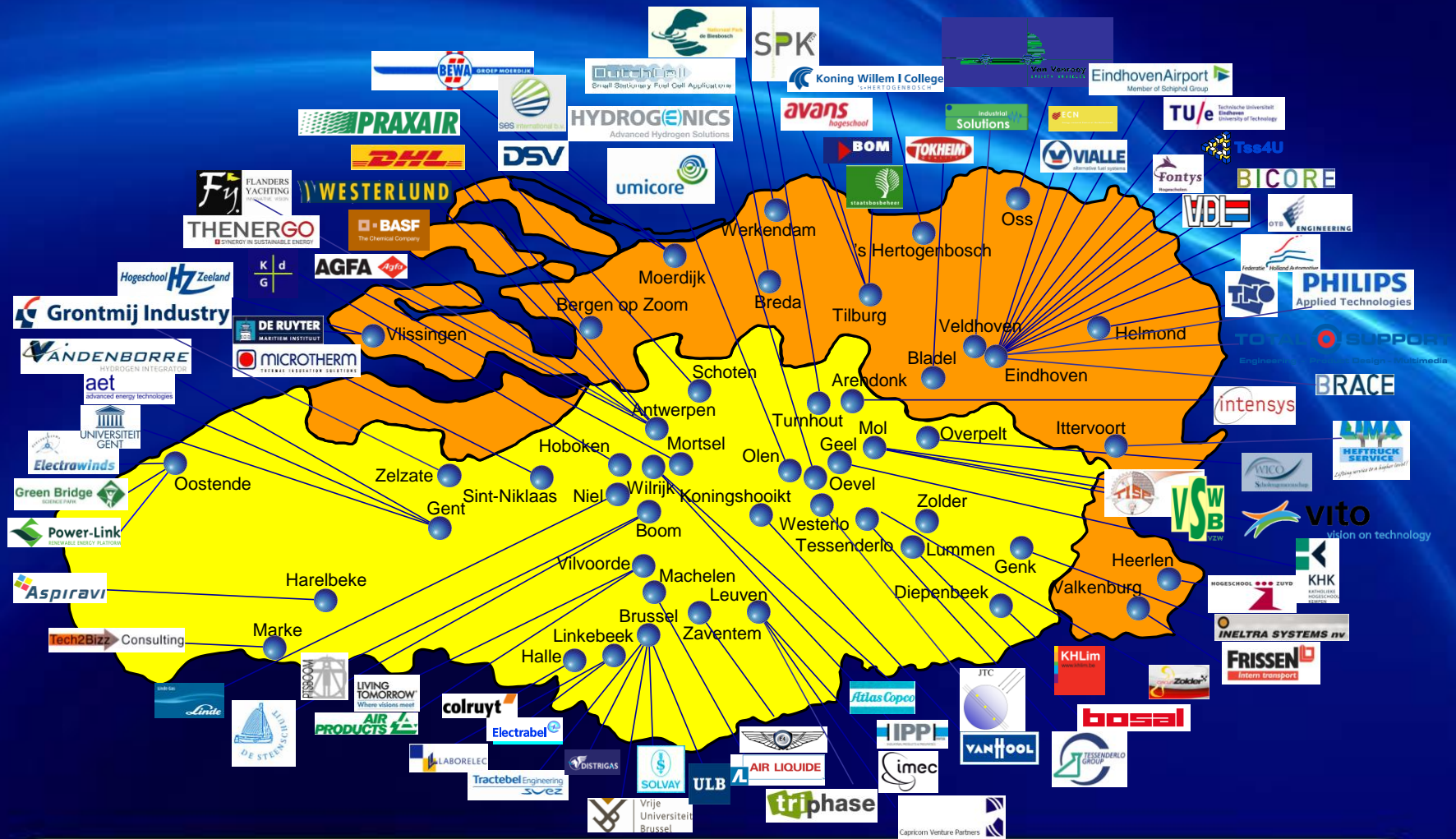
VSWB

WaterstofNet

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Regional players

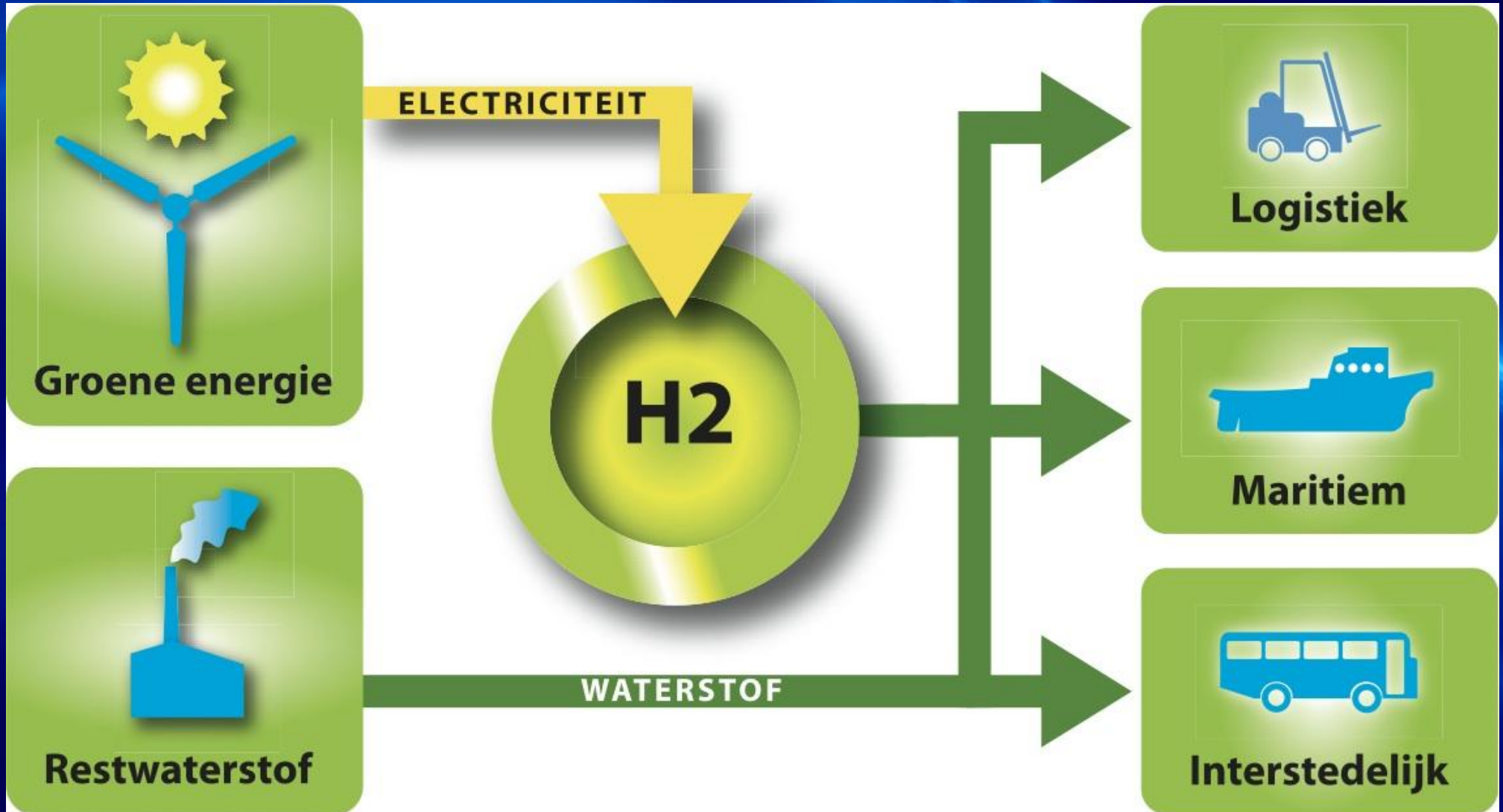


Starting points



- Target:
 - From “uncoordinated in the region” towards “focussed to the top of Europa”
- Starting points:
 - **Sustainable hydrogen (no fossil fuels)**
 - Early markets
 - Maximal involvement of regional players in line with Europe
 - Overall chain: from production to end-use
 - Concrete, visible results within 3 years
 - Start of training program
 - Coördination by program office WaterstofNet

Concept





- Period: 1/6/2009 - 31/5/2012
- Budget: 14,1 Meuro (Flanders, Netherlands, Interreg, industry)
- Results:
 - Mobile hydrogen tank stations
 - 1 MW power plant on by-product hydrogen
 - Hydrogen production via photo-elektrolysis (1 m²)
 - Roll-out scenario for hydrogen infrastructure
 - Logistic applications on hydrogen
 - Maritime applications on hydrogen
 - Intercity transport applications on hydrogen
 - Education/training program



Projects(1)

- By-product hydrogen: 1 MW to be delivered first half 2011:
 - Site Lillo, port of Antwerp
Solvay
 - Nedstack fuel cell technology
 - Total budget: 5 Meuro



Projects (2)

- 160 stacks, 11 kW_{peak}
- Nominal load 1 MW, peak 1,6 MW
- Largest in the world
- Demonstration and test facility
- Actuele stand van zaken www.waterstofnet.eu



Projects (3)

- 2 fuelling hydrogen stations
- Electrolyser, compressor, storage
(30 - 50 Nm³ /h, 350 bar)
- One in Flanders one in South-Netherlands
- Procurement procedures
- First fuelling station to be installed Q1 2011



Projects (4)

- Photo-electrolysis (IMEC)
- Demonstration system 1 m² in 2012



Summary

- Regional plan will be kept in line with European targets
- Flemish network on hydrogen and fuel cells is member of EHA

*A lot of opportunities for joining forces
within Europe....*

and we are ready to contribute

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Cooperation ?



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