

# Hydrogen region Flanders- South-Netherlands

Adwin Martens

EHA, Brussels, 17 June 2009

# VSWB: network of Belgian players

**umicore**

**VS**  
**WB**  
VZW

[www.vswb.be](http://www.vswb.be)

**vito**  
vision on technology

**Electrabel**

**Tractebel Engineering**  
SVEZ

Linde Gas  
**Linde**

**HYDROGENICS**

**intensys**

UNIVERSITEIT GENT

**BASF**  
The Chemical Company

**SOLVAY**

DE STEENEN

Patrick Fremau

**VANDENBORRE**  
HYDROGEN INTEGRATOR

**THENERGO**  
SYNERGY IN SUSTAINABLE ENERGY

K | d  
G

Vrije Universiteit Brussel

**MICROTHERM**  
THERMAL INSULATION SOLUTIONS

**AIR LIQUIDE**

Capricorn Venture Partners

Karel van Kouteren

**bosal**

**IPPI**  
INDUSTRIAL PRODUCTS & PNEUMATICS  
NWSA

Guy Indeherberg

**KHLim**  
www.khim.be

**KHK**  
KATHOLIEKE HOGESCHOOL KEMPEN

**ULB**

**Aspiravi**

**aet**  
advanced energy technologies

**Fy**  
FLANDERS YACHTING  
INNOVATIVE VISION

**COCAS**  
we catalyse your growth

**LABORELEC**

**Atlas Copco**

 **Vlaams Innovatienetwerk**  
met steun van IWT

# Realisations in the regio



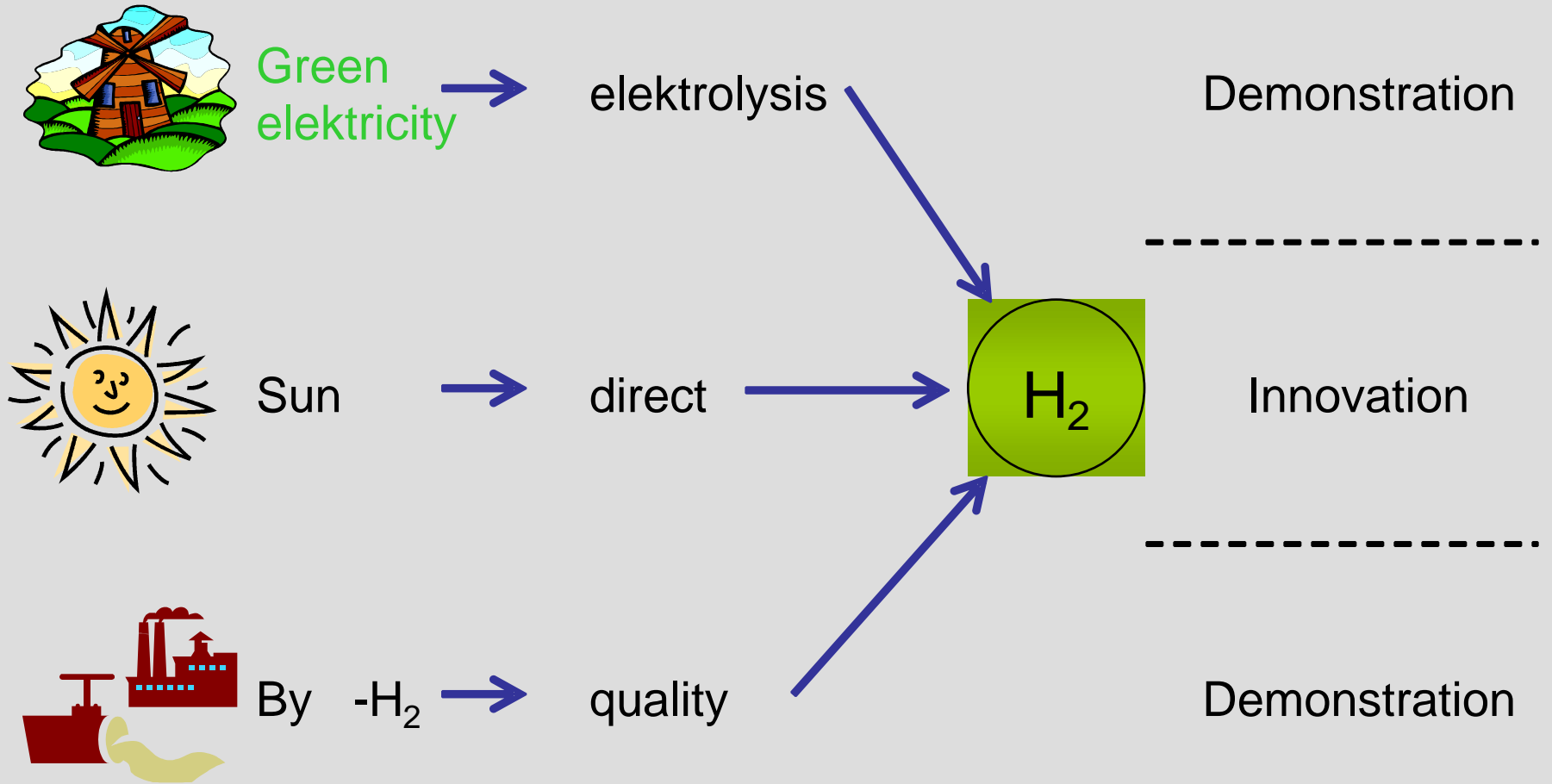
# Starting points

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





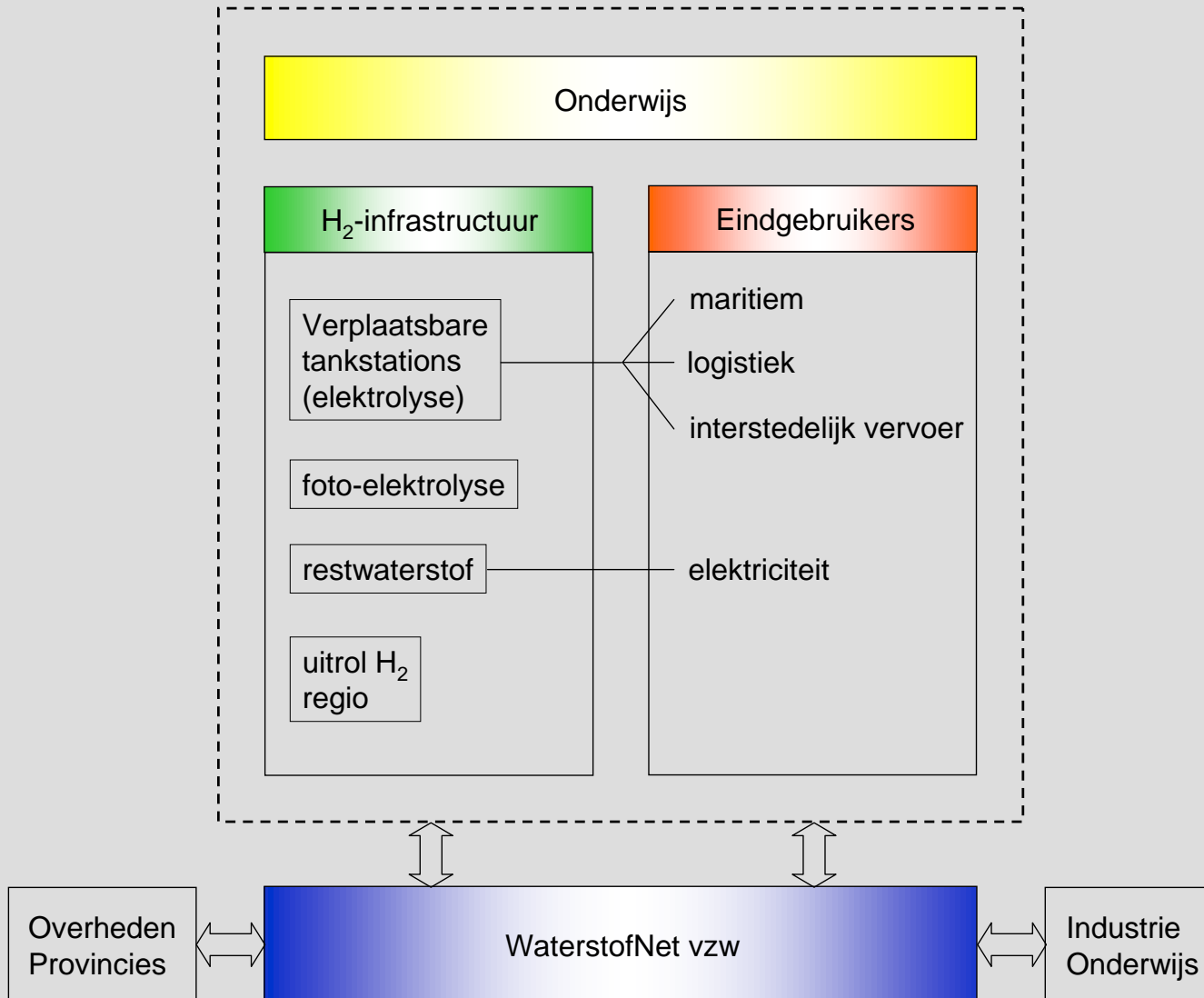
# Hydrogen production



# *Early markets*

- Electricity production : by-product
- Intercity transport : e.g. bus
- Maritime : e.g. vessels
- Logistics : e.g. forklift

# Structuur



# Masterplan Waterstof

- Period: 1/6/2009 - 31/5/2012
- Budget: 14,1 Meuro (Flanders, Netherlands, Interreg, industry)
- Results:
  - Mobile hydrogen tank stations
  - Hydrogen production via photo-elektrolysis (1 m<sup>2</sup>)
  - 1 MW power plant on waste-hydrogen
  - Roll-out scenario for hydrogen infrastructure
  - Logistic applications on hydrogen
  - Maritime applications on hydrogen
  - Intercity transport applications on hydrogen
  - Education/training program
  - Cördination office WaterstofNet vzw



# Van demonstratie naar markten

