INTERNATIONAL PARTNERSHIP FOR
HYDROGEN AND FUEL CELLS IN THE ECONOMY

IPHE Country Update April 2017: the Netherlands

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1. New Policy Initiatives on Hydrogen and Fuel Cell

Continuation of fiscal measures in 2017 for FCVs by exemption from vehicle purchase and circulation tax as well as reduction of taxation for private use of company car (applies to all ZEVs). Subsidy Scheme for HRS refuelling stations is still under development.

2. Hydrogen and Fuel Cell R&D Update

R&D programme (sustainable) Hydrogen under development. Estimated Budget: € 850k.

3. Demonstration and Deployments Update

Newly opened 3rd refuelling station in Arnhem (Eastern part of NL). For now, it is only possible to refuel at 350 bar. The next approved refuelling station will include 700 bar.

TU Delft has transformed a Hyundai ix35 Fuel Cell into a power plant. More information available here.

4. Events and Solicitations

N/A

5. Investments: Government and Collaborative Hydrogen and Fuel Cell Funding

Setting up of the formal organization H2NL (information only available in Dutch) to stimulate knowledge exchange between government, industry and knowledge institutes. The goal is to contribute, starting with the formation of next Cabinet, to meeting the hydrogen goals set for 2020. While the Cabinet formation process is still underway, this next Cabinet will most likely focus more on dealing with the effects of climate change, in part by moving towards sustainable mobility.

Political Situation in the Netherlands
- Recently, 15th of March, General Elections Dutch Parliament:
- Results: No big parties anymore, only medium sized and small parties!
- As a consequence, at least 4 parties needed for a majority in Parliament.

Coming months, the formation of a new Cabinet will take place.
Big Issue: How to deal with the “Paris Agreement”/COP21.

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Summary Country Update April, 2017: the Netherlands

Transportation	Target Number	Current Status	Partnerships, Strategic Approach	Policy Support
Fuel Cell Vehicles[1]	2000 by 2020	30 (February 2017)		• Exemption from vehicle purchase and circulation tax (national government)
FC Bus	100 by 2020	12 (scheduled)		• Subsidy for purchase, target group: PTA (Public Transportation Authority)
Fuel Cell Trucks[2]	500 vans and 20 trucks by 2020	2		
Forklifts	No target	0		• No support policy
H_2 Refueling Stations	**Target Number**	**Current Status**	**Partnerships, Strategic Approach**	**Policy Support**
70 MPa On-Site Production	20 by 2020	1		
70 MPa Delivered		1 (March 2017)		
35 MPa On-Site Production	20 by 2020	1		
35 MPa Del.		2 (March 2017)		

[1] Includes Fuel Cell Electric Vehicles with Range Extenders
[2] As above

Stationary	Target Number[3]	Current Status	Partnerships, Strategic Approach	Policy Support
Small[4]	No target			
Medium[5]	No target			
Large[6]	No target			
District Grid[7]	No target			
Regional Grid[8]	No target			
Telecom backup	No target			
H_2 Production	Target[9]	Current Status	Partnerships, Strategic Approach	Policy Support
Fossil Fuels[10]	Climate neutral as soon as possible ((no CO2- emission well to wheel)			Green Deal H2

[3] Targets can be units installed and/or total installed capacity in the size range indicated
[4] <5 kW (e.g., Residential Use)
[5] 5kW – 400 kW (e.g., Distributed Residential Use)
[6] 0.3MW – 10 MW (e.g., Industrial Use)
[7] 1MW – 30 MW (e.g., Grid Stability, Ancillary Services)
[8] 30MW plus (e.g., Grid Storage and Systems Management)
[9] Target can be by quantity (Nm^3, kg, t) and by percentage of total production; also, reference to efficiency capabilities can be a target
[10] Hydrogen produced by reforming processes

Water Electrolysis[11] (PEM, Alkaline, SOEC)	No target			
By-product H_2	No target			
Energy Storage from Renewables	**Target[12]**	**Current Status**	**Partnership, Strategic Approach**	**Policy Support**
Power to Power[13] Capacity	No target			
Power to Gas[14] Capacity	No target			

[11] Please indicate if targets relate to a specific technology (PEM, Alkiline, SOEC)
[12] Can be expressed in MW of Installed Capacity to use the electricity from renewable energy generation, and Annual MWh of stored energy capacity
[13] Operator has an obligation to return the electricity stored through the use of hydrogen back to electricity
[14] Operator has the opportunity to provide the stored energy in the form of hydrogen back to the energy system through multiple channels (e.g., merchant product, enriched natural gas, synthetic methane for transportation, heating, electricity)