



INTERNATIONAL PARTNERSHIP FOR HYDROGEN AND FUEL CELLS IN THE ECONOMY

IPHE Country Update May 2016: Iceland

Name	Jón Björn Skúlason
Contact Information	skulason@newenergy.is
Covered Period	2015-2016

1. New Policy Initiatives on Hydrogen and Fuel Cell

The government's goal is to be technology neutral and for the last few years there have been strong tax incentives in Iceland for ZEV – i.e. no taxes at all, not even VAT. Currently a new strategy paper is being introduced to the government emphasizing that this tax relief has to continue. The current suggestion is to have a quota for ZEVs, that is a tax-free environment until a certain target has been reached, or, a timeframe which could be 2020-2022. This strategy should be confirmed in the next Country Update.

2. Hydrogen and Fuel Cell R&D Update

Nothing to report.

3. Demonstration and Deployments Update

The pioneering Iceland demonstration projects ended in 2012. Now, under a new FCH-JU project, refuelling stations will be built again in Iceland and vehicles introduced. The project size will be confirmed later but 1-3 refuelling stations will be build 2017-18, and the goal is to have 20-50 cars running at the same time. More details will be reported soon.

4. Events and Solicitations

Iceland is active in coordinating the North Atlantic Hydrogen Association (NAHA) which has over the last few years focused specifically on remote island wind2hydrogen projects. Within NAHA there is a good cooperation between regions from Eastern Canada over the Atlantic to Norway.

Icelandic companies are also active in the Nordic Hydrogen cooperation – led through the Scandinavian Hydrogen Highway project. Jointly, the Nordic countries will host a Nordic Hydrogen conference (HFC Nordic 2016 <http://www.scandinavianhydrogen.org/hfc-nordic-2016/>) coinciding with the opening of the newest station in the Nordic countries this autumn in Sandviken, Sweden.

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

Nothing new to report.



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Summary Country Update May 2016: Iceland

Transportation	Target Number	Current Status	Partnerships, Strategic Approach	Policy Support
Fuel Cell Vehicles ¹	>80 by 2020	0	<ul style="list-style-type: none"> • Cooperation with Nordic deployment strategies, specifically via the H2ME projects. 	<ul style="list-style-type: none"> • No import taxes on vehicles
FC Bus	N.A.			
Fuel Cell Trucks ²	N.A.			
Forklifts	N.A.			
H ₂ Refueling Stations	Target Number	Current Status	Partnerships, Strategic Approach	Policy Support
70 MPa On-Site Production	1 by 2018	0	<ul style="list-style-type: none"> • Cooperation with Nordic deployment strategies, specifically via the H2ME projects. 	<ul style="list-style-type: none"> • No fuel taxes
70 MPa Delivered	2 by 2018	0		
35 MPa On-Site Production	N.A.			
35 MPa Delivered	N.A.			

¹ Includes Fuel Cell Electric Vehicles with Range Extenders

² As above



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Stationary	Target Number ³	Current Status	Partnerships, Strategic Approach	Policy Support
Small ⁴	N.A.			
Medium ⁵	N.A.			
Large ⁶	N.A.			
District Grid ⁷	N.A.			
Regional Grid ⁸	N.A.			
Telecom backup	N.A.			
H ₂ Production	Target ⁹	Current Status	Partnerships, Strategic Approach	Policy Support
Fossil Fuels ¹⁰				
Water Electrolysis ¹¹ (PEM, Alkaline, SOEC)	All hydrogen production in Iceland will be from renewables			
By-product H ₂				

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 (Nm³, kg, t) and by percentage of total production; also, reference to efficiency capabilities can be a target

¹⁰ Hydrogen produced by reforming processes

¹¹ Please indicate if targets relate to a specific technology (PEM, Alkaline, SOEC)



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Energy Storage from Renewables	Target ¹²	Current Status	Partnership, Strategic Approach	Policy Support
Power to Power ¹³ Capacity	N.A.			
Power to Gas ¹⁴ Capacity	N.A.			

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)