

Vetnisframleiðsla á Hellisheiði

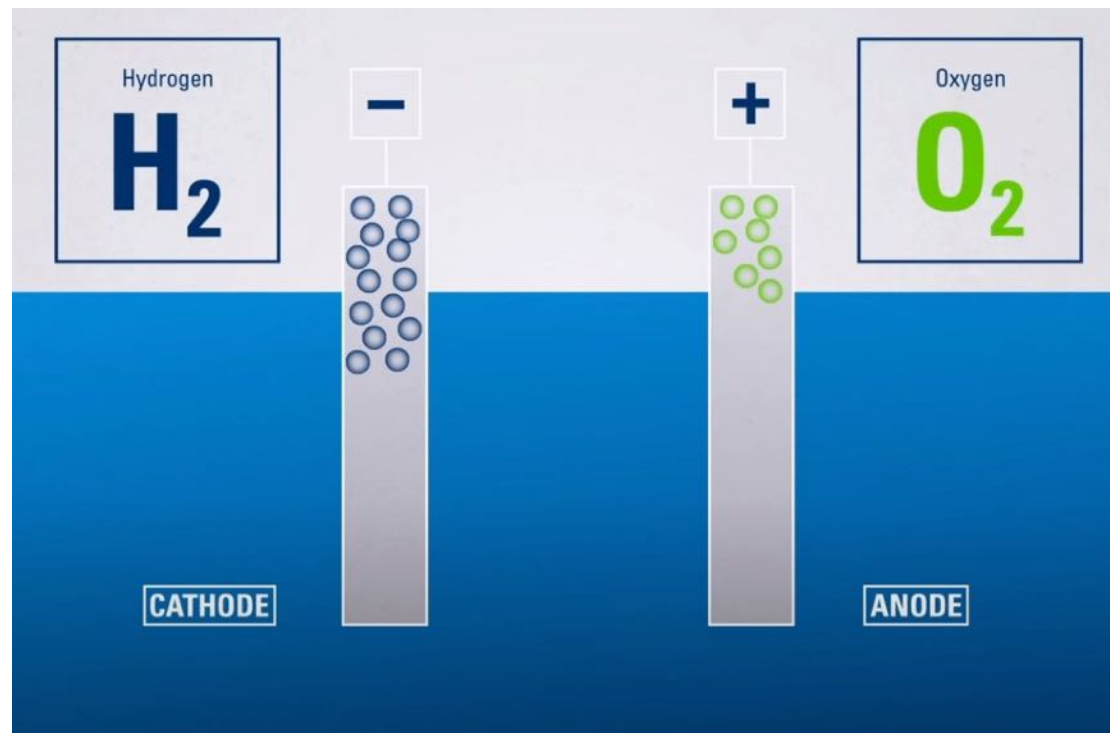
Magnús Þór Arnarson



Rafgreining á vatni

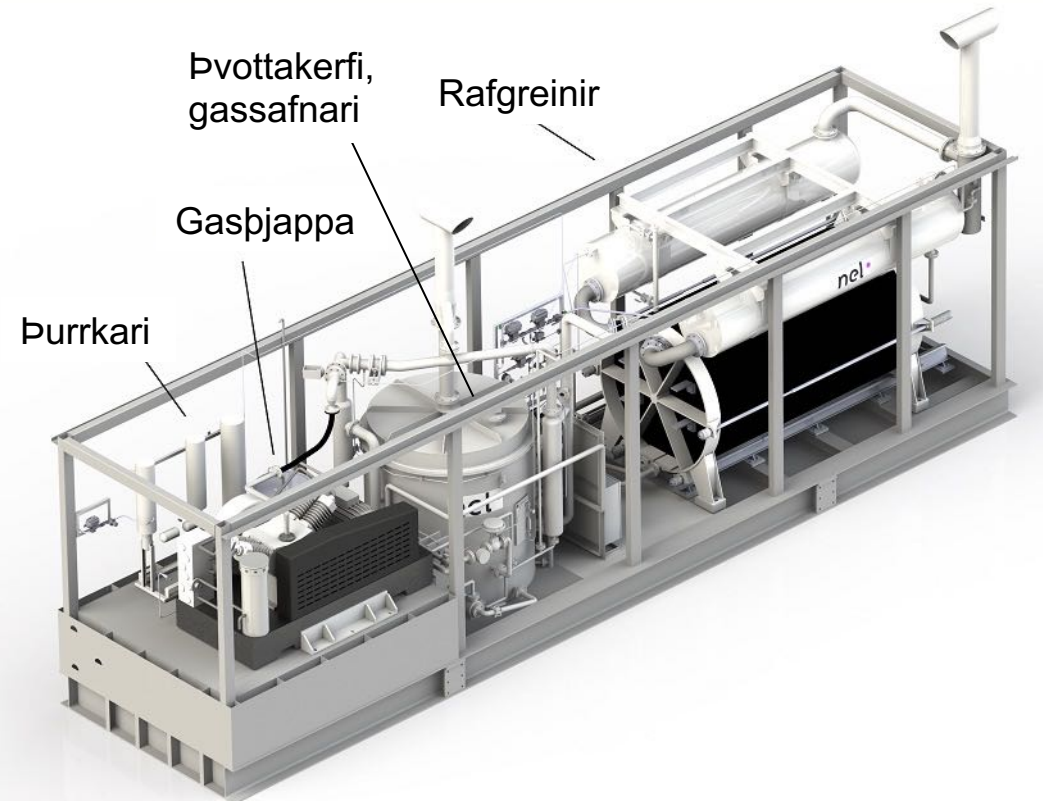
Grænt vetni

Endurnýjanleg orka + vatn \longrightarrow Vetni og súrefni



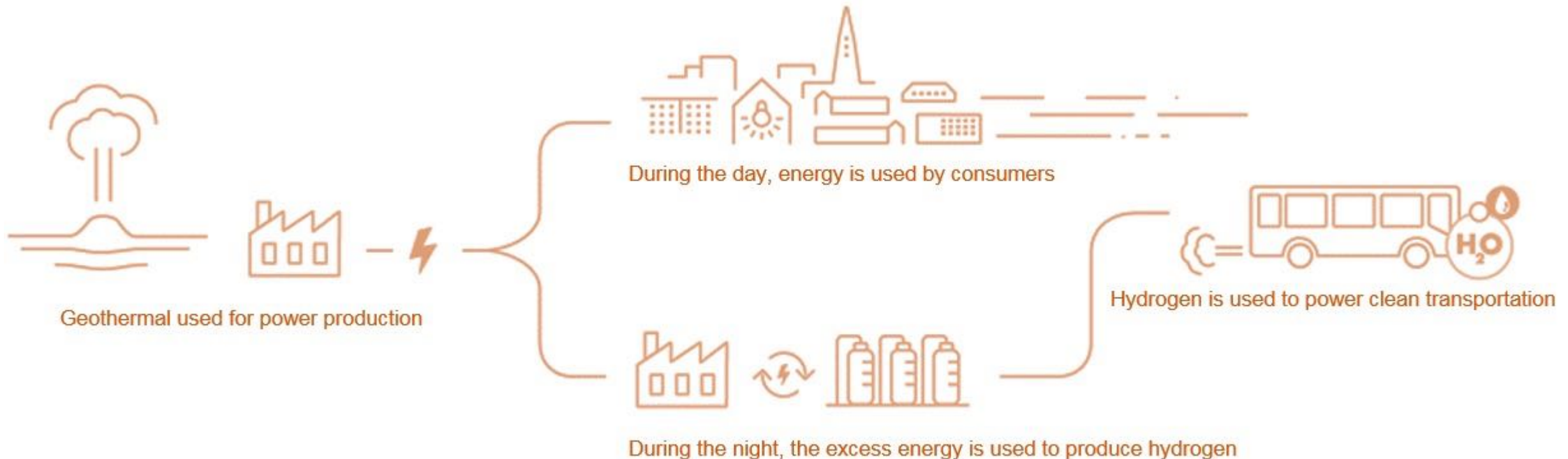
Hydrogen
Mobility Europe

Vetnisstöðin á Hellisheiði

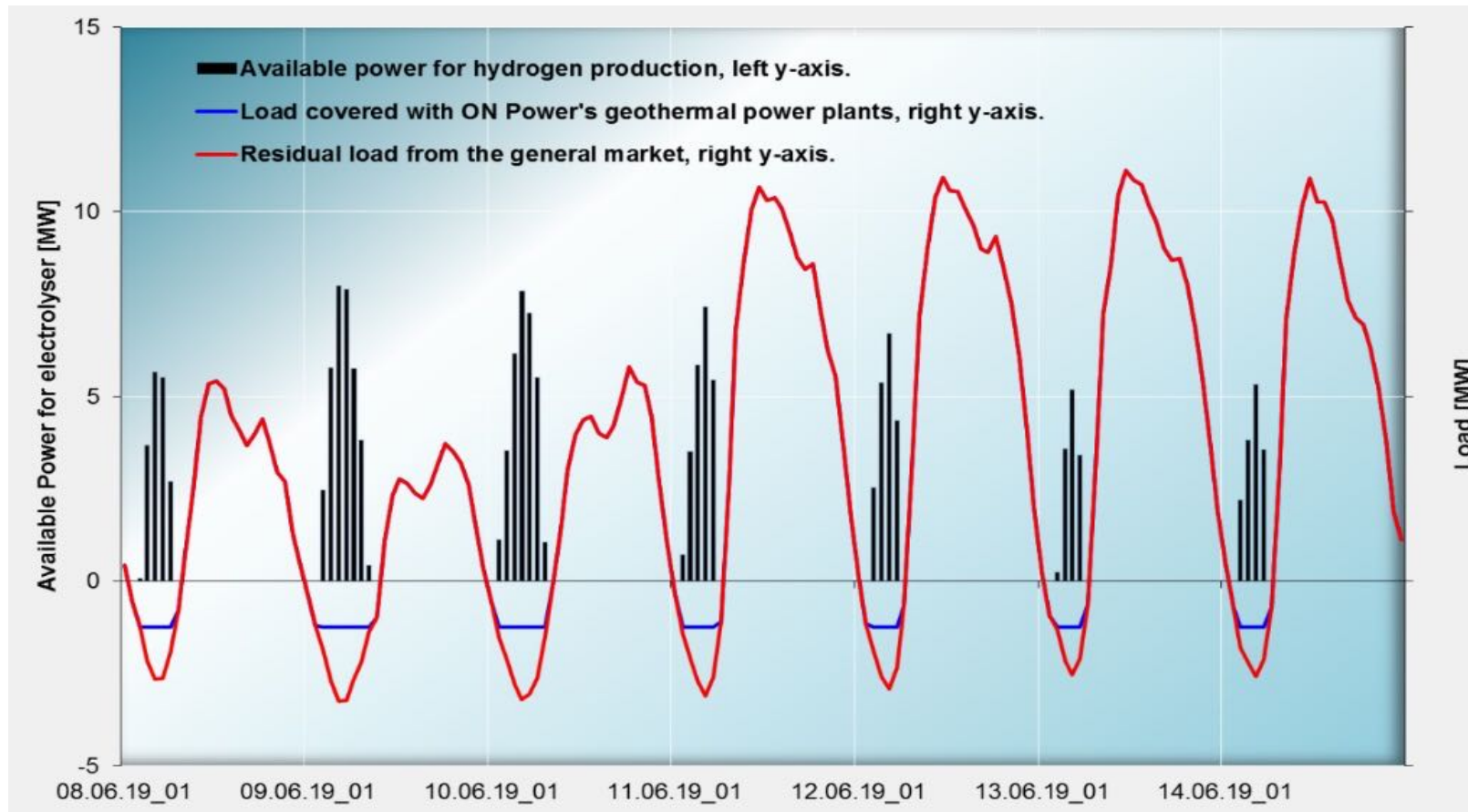


Tækifæri

- Framleiðsla jarðgufuvirkjana er grunnafli (fast afli, breytist ekki).
- Framleiðsla á vetni fer fram á nóttunni þegar álag, eftirspurn eftir rafmagni er lítil.



Hagkvæmasti tíminn til að framleiða vetni

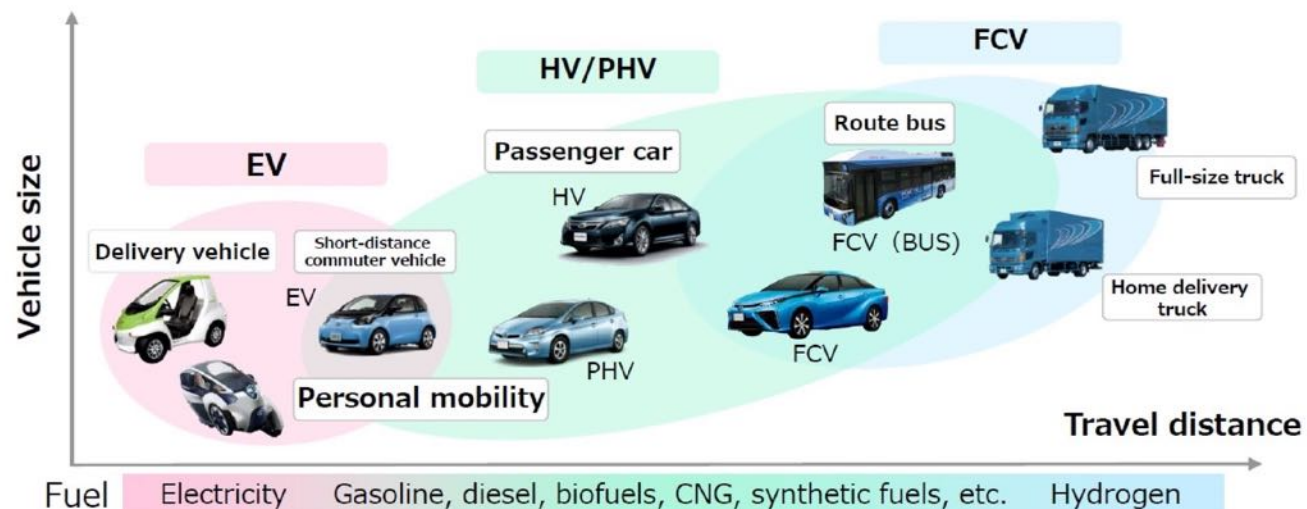


Vetni og framtíðin

- Vetrnisframleiðslustöðin
 - Árleg framleiðsla um 100 t á ári.
 - Getur annað eftirspurn ca 700 fólshíla.

Fuel diversity and uses

TOYOTA



EV: Short-distance, HV & PHV: Wide-use, FCV: Medium-to-long distance

Svo að lokum vetni er ekki bara vetni

	Terminology	Technology	Feedstock/ Electricity source	GHG footprint*
PRODUCTION VIA ELECTRICITY	Green Hydrogen	Electrolysis	Wind Solar Hydro Geothermal Tidal	Minimal
	Purple/Pink Hydrogen		Nuclear	
	Yellow Hydrogen		Mixed-origin grid energy	Medium
PRODUCTION VIA FOSSIL FUELS	Blue Hydrogen	Natural gas reforming + CCUS Gasification + CCUS	Natural gas coal	Low
	Turquoise Hydrogen	Pyrolysis	Natural gas	Solid carbon (by-product)
	Grey Hydrogen	Natural gas reforming		Medium
	Brown Hydrogen	Gasification	Brown coal (lignite)	High
	Black Hydrogen		Black coal	

Takk fyrir
