

LULEÅ 25 JAN 2023

Port development: What happens in the hydrogen area?

A Swedish perspective

Agenda

- Welcome/Brief introduction
- Presentations:
 - Port of Luleå
 - BothniaLinkH2/Uniper
 - Port of Rotterdam
 - Port of Tallin
 - Hydrogenius
- Panel session – RISE/LTU/Speakers



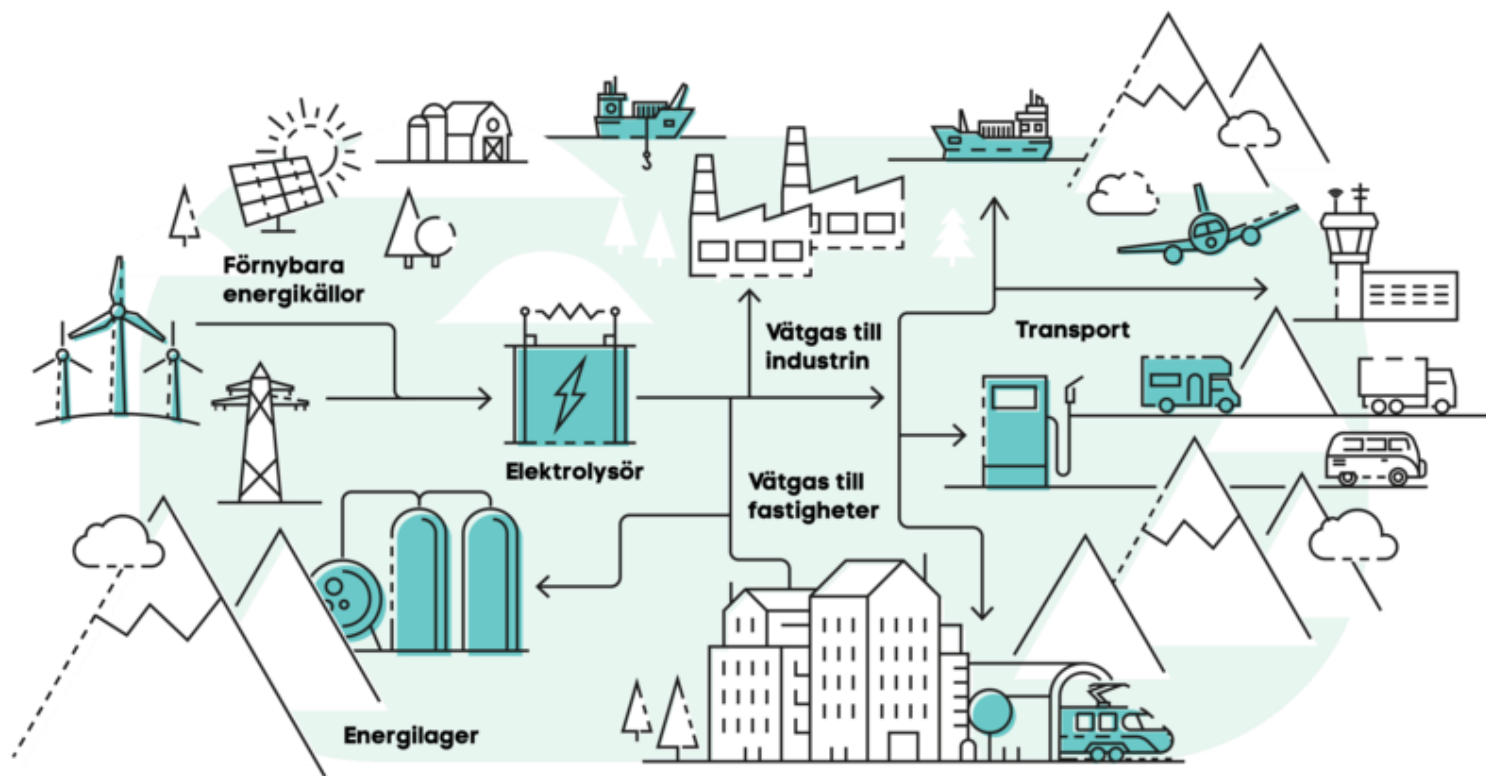
Ports as Hydrogen Nodes: The Future of Clean Energy?

Why ports?

- Ports are natural transport nodes
- Equipped with (part of) the necessary infrastructure
- Often located near sources / or good conditions for renewable energy, such as wind and solar
- Areas of great importance with regards to emission reduction
- A interface to the surrounding industry/society: new economic opportunities and value chains

How can hydrogen be utilized in port areas?

1. Fuel for ships
2. Fuel for land-based vehicles
3. Energy storage
4. Industry
5. Power generation
6. Export and import
7. Research and development



Areas for further research/delmoment

1. Cost
2. Storage and transport
3. Safety
4. Lack of infrastructure
5. Limited availability of hydrogen vehicles and equipment
6. Public acceptance

What's the remaining obstacles?



What's the news in Sweden

A varying interest among Swedish ports but a growing number of initiatives is taking place e.g.;

- Göteborgs Hamn AB/Statkraft Industry: Hydrogen production 4 MW
- Stockholm ports: Hydrogen refuelling station/port vehicles
- Gotlandsbolaget: Hydrogen ferry
- ... among others



Ongoing research Project

Ongoing research Project...

- A digital mapping tool
- Hydrogen and electric infrastructure
- Main features
 - Mapping existing/planned infrastructure
 - Scenario analysis's hydrogen/battery
 - Calculation of electric drivetrains
- Launched summer 2023

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Fasta installationer ^

4 results Filter

Parturient Dapibus
Liquid hydrogen

Inceptos Ullamcorper Venenatis
Compressed hydrogen

Nullam Tortor
Charging electricity

Lorem Adipiscing
Onshore power supply

Scenario v

Calculate v

Sjöra Dyrön
Marstrand
Tjåkå
Kämså
Håbo
Rjörkö
Öckerö
Hönö
Fotså
Ålperö
Brännö
Västra Långby
Torslehed
Torslanda
Norsvik

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Thank you for listening!

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