Norway hydrogen infrastructure strategy
Uno-X Hydrogen
Roger Hertzenberg
Green Executive Officer
Uno-X Hydrogen
Uno-X Norway
A leading Norwegian retail company

Over 400 refuelling stations in Norway and over 250 refuelling stations in Denmark
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Cost reduction & funding
Mission
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Our roots.

15 years of hydrogen refueling stations
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The H2-20 Project.

Target to build 20 hydrogen refuelling stations & adjoining hydrogen production capacity in Norway as soon as possible.

Currently in dialogue with the Norwegian government regarding the establishment of a public-private partnership to reach target.
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Our challenges.

- Large areal footprint of the stations
- High cost of H2 filling stations
- Heavy weight of storage units against energy capacity
- High system complexity
- The perceptions of people on hydrogen safety
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Is it expensive?

FCEVs and BEVs have equivalent infrastructure costs

Full infrastructure for 50% FCEV share will incur a cost of roughly $1000 – $2000 per vehicle.

Full infrastructure for battery-electric vehicles will incur a cost of roughly $1500 – $2500 per vehicle + upgrading of local electric grid.

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Which came first?
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Why 20 stations?

Infrastructure of minimum 20 hydrogen stations:

- FCEV vehicles will come to Norway
- Customers will buy their FCEV only if the stations are already there
- To gain experience with different setups
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Tools to Overcome The Challenges.

- International networks & cooperation
- Usage of renewable energy
- Non-explosive storage on lorry and on site
- Make H2 “just another fuel”
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1 of 20: Lighthouse Project, Solar-to-H2

Collaboration With Asplan-viak & Entra, Supported By Enova & Akershus CC
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2 of 20: Uno-X Åsane
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3 of 20: Uno-X Hvam — opens Nov. 2018
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Flexible and Scalable Station
Recent survey increases the importance of hydrogen as a fuel

Fuel cell electric mobility is now the #1 trend until 2025

There will not be a single solitary drive-train technology
The range that you need - no worries

The hydrogen car has a long range, high comfort and clean water as the only emission.

20 stations in 2020 | Uno-X
Oslo - Bergen on pure water

Within 2020 we will make it possible to drive Fuel Cell cars efficiently between the major cities of Norway with zero toxic emissions.

20 stations in 2020 | Uno-X
The comfort that you are familiar with

The Fuel Cell car has a long range, a high level of comfort and pure water as the only emission.

20 stations in 2020 | Uno-X
MISSION: POSSIBLE
Thanks for the ride, dinosaurs! We’ll take it from here.
Thank you
for your attention