



Hydrogen pro

Q4 2020 report

Company update

Mårten Lunde, CEO HydrogenPro

Lars Pleth Nielsen, Managing director ASP

22nd February, 2021

Hydrogen pro

Disclaimer

The following applies to this document, the oral presentation of the information in this document, and any question-and-answer session that follows the oral presentation (collectively, the “Information”). By receiving and/or attending a meeting where this presentation is made and in accessing the Information, you agree to be bound by the terms and conditions and limitations set out herein.

This presentation (the “Company Presentation”) has been prepared by HydrogenPro AS (the “Company”). The Company Presentation is strictly confidential and may not be reproduced, redistributed, published or passed on to any other person, directly or indirectly, in whole or in part. If this document has been received in error, it must be returned immediately to the Company.

The Company Presentation and any information provided is only preliminary and indicative and does not purport to contain the information that would be required to evaluate the Company. The Company Presentation and the Information does not constitute or form part of, and should not be construed as, an offer, solicitation or invitation to subscribe for, underwrite or otherwise acquire, any securities of the Company.

The Company Presentation have been prepared for the exclusive use of persons attending an oral briefing and meeting to which these materials relate given by a representative of the Company and/or persons to whom these materials have been provided directly by an authorized representative of the Company. Further, the materials are strictly confidential and by reviewing it, you acknowledge its confidential nature and agree to the terms of this notice. The materials may not be copied, distributed, reproduced, published or passed on, directly or indirectly, in whole or in part, or disclosed by any recipient, to any other person (whether within or outside such person's organization or firm) by any medium or in any form for any purpose.

No liability: The Company Presentation has been prepared by the Company. The Company does not accept any responsibility whatsoever, or make any representation or warranty, express or implied, for the contents of the Company Presentation, including its accuracy, completeness or verification or for any other statement made or purported to be made in connection therewith the Company. The information in this Company Presentation and any other material discussed is subject to change.

Any forward-looking statements contained in this Company Presentation, including assumptions, opinions and views of the Company or cited from third party sources, are solely opinions and forecasts and are subject to risks, uncertainties and other factors that may cause actual results and events to be materially different from those expected or implied by the forward-looking statements. The Company does not provide any assurance that the assumptions underlying such statements are free from errors nor accept any responsibility for the future accuracy of opinions expressed herein or as part of the Information, or the actual occurrence of forecasted developments.

Except where otherwise expressly indicated, this Company Presentation speaks as of the date set out on its cover. The delivery of this Company Presentation shall, under no circumstances, be construed to indicate or imply that there has been no change in the affairs of the Company since the date hereof. The Company does not assume any obligation to update or revise the Company Presentation or the Information.

The Company Presentation is subject to Norwegian law, and any dispute arising in respect of thereof is subject to the exclusive jurisdiction of Norwegian courts with Oslo District Court as first venue.

Content

I. Q4 Highlights

II. Q4 2020 financial results

III. Integration of ASP

IV. Company update



Hydrogen pro

Securing cost leadership and building organisation and further pipeline

Q4 highlights from report

- Operating profit of NOK 2,9 mill for the 4th quarter exclusive of IPO associated costs
- Acquisition and integration of Advanced Surface Plating secures cost leadership in green hydrogen
 - Pilot plant for technical full scale verification under development
- HydrogenPro's high pressure alkaline technology will enable production of green hydrogen gas @ US\$ 1,2 per kilo in 2022
- Key executives appointed, organisational scale up develops according to plan
- Progressing build-up of electrolyser supply chain and fabrication in Europe and the US
- High market activity with numerous tenders and projects
- Current contracts moving forward - new initiative announced relating to the Normandy project
- On January 8th, HydrogenPro signed a Letter of Intent with Repsol S.A to develop a 100MW project in Bilbao dependent on allocation of European Green Deal funding
- Global travel restrictions and extraordinary measures related to Covid-19 continued to have a certain negative impact on customer/partner work and dialogue.

Content

I. Q4 Highlights

II. Q4 2020 financials results

III. Integration of ASP

IV. Company update

Hydrogen pro



4Q financial summary

General

- Through an equity offering in October, the Company raised NOK 550 million in gross proceeds and was listed on the Oslo Stock Exchange Euronext Growth on 14th October
- ASP (Advanced Surface Plating ApS) was acquired in December and is fully consolidated in the Q4 and full-year 2020 financial statements. In the presentation below only the balance sheet is presented on a consolidated basis. The income statement shows HydrogenPro AS only as ASP had no material profit and loss impact.
- The number of shareholders in the company has increased from ~225 at the date of listing to 2,654 as of 18 February

Financial report

- The Company had income of NOK 15.6m in the quarter and NOK 26.7m for the year
- Personnel costs were NOK 2.9m in the quarter and NOK 11.0 in 2020
- The operating profit for the quarter was NOK 2,9 million exclusive of costs associated with the IPO of NOK 5,1 million
- The operating loss for the year was NOK 0,85 million exclusive of costs associated with the IPO (NOK 5,1 million)
- The tax effect of the Company's accrued deferred losses of NOK 7,7 million was reversed in Q2 2020
- Following this reversal, the net loss for 2020 was NOK 15,9 million (inclusive of NOK 5,1 million of costs associated with the IPO)

Income statement Q4 2020

NOK thousand

	HydrogenPro AS		
	Q4 2020	YTD 2020	2019
Revenue	15 595	26 694	25 156
Operating expenses excluding IPO related costs	-12 705	-27 548	-39 763
Operating profit/loss	2 890	-854	-14 607
IPO related costs	-5 100	-5 100	
Net financial items	324	-2 280	-2 013
Result before tax	-1 886	-8 234	-16 620
Tax	0	-7 726	3 749
Result after tax	-1 886	-15 960	-12 871

Q4 2020 Balance sheet

NOK thousand

	HydrogenPro AS		Group	
	2020	2019	2020	2019
Assets				
Intangible assets	8 456	13 620	55 307	0
Property, equipment, plant and machinery	2 756	66	2 756	0
Investments in subsidiaries, shares and other securities	36 540	57	57	0
Total fixed assets	47 752	13 743	58 120	0
Current operating assets	5 724	3 332	5 724	0
Bank and cash equivalents	506 111	9 992	506 111	0
Total current assets	511 835	13 324	511 835	0
Total assets	559 587	27 067	569 955	0
Equity and liabilities				
Total equity	515 677	-15 536	515 677	0
Provisions	0	0	10 307	0
Current operating liability	43 910	19 339	43 971	0
Long term liability	0	23 264	0	0
Total equity and liabilities	559 587	27 067	569 955	0

Content

- I. Q4 Highlights
- II. Q4 2020 financial results
- III. Integration of ASP**
- IV. Company update

Significant cost reduction step through integration of ASP

Driving down cost of hydrogen



- EU describes a target whereby green hydrogen is competitive with grey hydrogen in **2030**
- **Cost calculation based on HydrogenPro's new high-pressure alkaline technology shows a cost of USD 1.2 USD/kg (*)**
- **Ready for the market in 2022**

(*) Basis of calculation in Annex I

Making green hydrogen competitive to grey hydrogen

- Applying current high pressure alkaline solution
- Combining with the new proprietary ASP technology
- Increasing the efficiency of the electrolyser to 93% of the theoretical maximum
- Scaling up and automatization will gradually drive down capex and further reduce production costs

Without use
of noble
metals

Accelerating the global energy transition

Key component is the electrode technology acquired through the acquisition of Advanced Surface Plating

Transaction in brief

- Acquisition of 100% of the shares in ASP in December 2020
- Ownership of technology
 - Proprietary next-generation advanced electrode technology
 - Lower the voltage for hydrogen formation -> increased efficiency
 - Potential to improve operating efficiency of electrolyzers with up to **14%**
 - Current electrolyzers consume **4.4 MW** to produce **90 kg H₂/hour**
 - Tests show that this is reduced to **3.8 MW**
 - Reaching an efficiency factor of **93%** of theoretical maximum capacity
- Building a plating facility for full scale electrolyzer production



Technology verification through full scale testing program



Lab-scale research

Electrode size: $\sim 2 \times 2 \text{ cm}^2$



Pilot production (Up to 20 Nm³/h)

Electrode size: $\varnothing 0.6 \text{ m}$



Large scale units (4000 Nm³/h)

Electrode size: $\varnothing 1,8 \text{ m}$

2009

Lab-scale research and testing during several hundred hours indicate volt reduction of **0.3 V**

2017

Short term testing of medium-scale electrodes confirms average improvement of **0.3 V**

2019

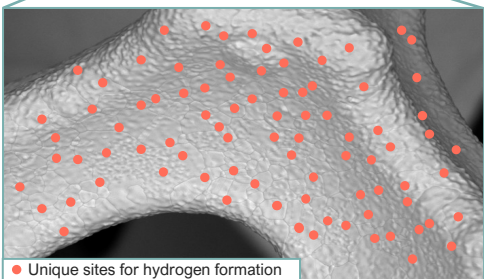
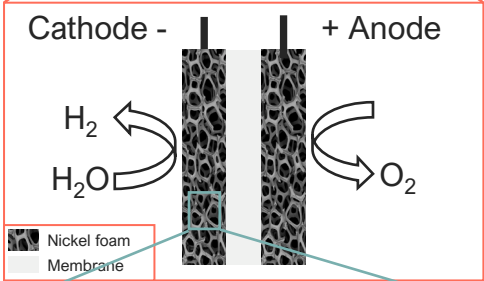
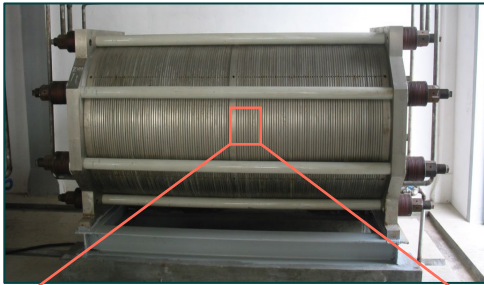
2021

Full-scale demonstration and long-term testing based on electrodes from ASP's new pilot plating facility

Initial deliveries to the market in 2022

First production of full scale electrodes in 2021, ready for market in 2022

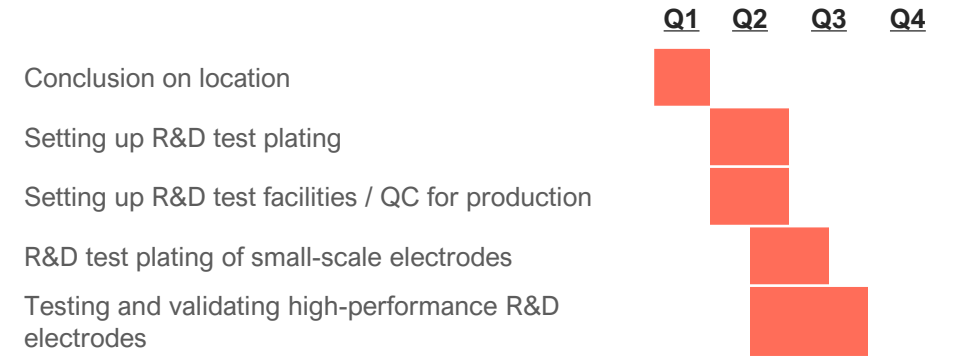
Purpose of the pilot plant facility



- Apply commercial Ni foam upgraded to high-performing Ni foam
- Supply the new electrodes to HydrogenPro's initial installations
- Demonstrate the lower voltage for hydrogen formation by 0.3V in large-scale HYPRO electrolyzers
- Test performance effects over time
- Yearly capacity close to 4,000 electrodes (Ø1.8m) corresponding to 100 MW electrolyser capacity

Illustration of active ASP sites for hydrogen formation inside an alkaline electrolyser

Preliminary timeline



Content

- I. Q4 Highlights
- II. Q4 2020 financial results
- III. Integration of ASP
- IV. Company update

Securing key appointments and increasing organisational capacity

Organisational update

Consistent with the information provided during the company's IPO process the organisation has been strengthened:

- New CFO starting 1 March
- New COO starting no later than 1 June
- QHSE Director started 1 February
- Automation & Commissioning engineers (2-3 persons)
- Electro engineer
- Two senior technical experts within Advanced Surface Plating (ASP)
- 6 highly experienced international experts from construction, commissioning and operation of electrolysers

Key appointments

Organisational update, continued



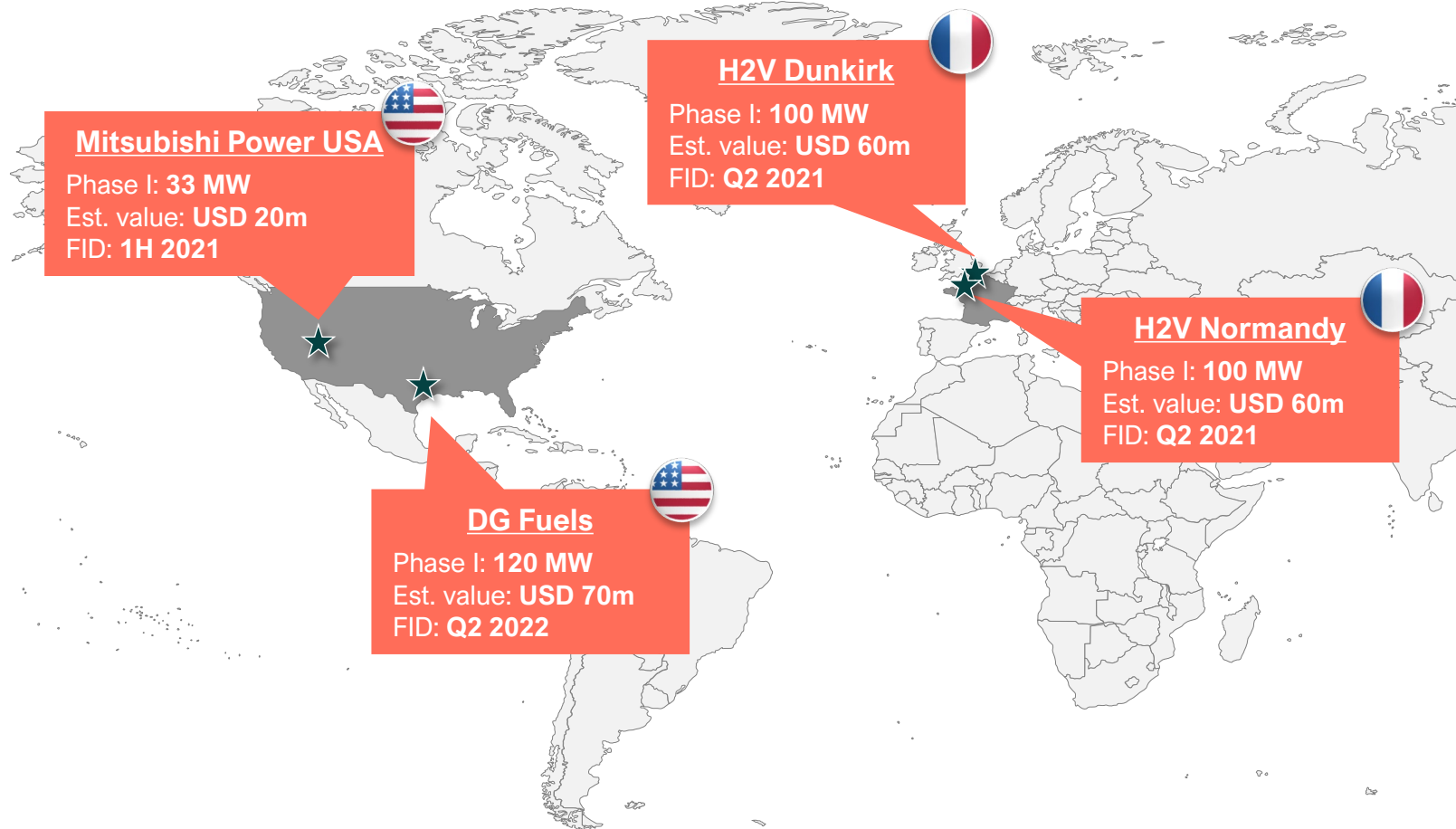
Sindre Utne has been appointed as **COO**. Sindre comes from the role as General Manager at Wärtsilä where he is heading the global business of Power & Energy Management Systems. Sindre has broad experience from business operations, strategy development, risk management and cost control. Has been part of several management teams with a broad range of development- and operational responsibilities and has combined experience working through tendering, concept, definition and EPCI phases for complex multiportfolio projects. Sindre has a M.Sc. Offshore Safety and Risk Management



Martin Thanem Holtet was appointed as **CFO** in December 2020 and will join Hydrogen pro on 1st March 2021. Martin comes from the position as VP, Head of Treasury and M&A in Hurtigruten. Prior to this, he worked with strategy and M&A in Yara International and Corporate Finance in Carnegie. Martin holds a master's degree from Norwegian School of Economics (NHH) with a major in financial economics

The 4 key projects are progressing according to plan

Current status on the 4 key projects



H2V

- Approval process with French authorities still ongoing for both projects
- HydrogenPro working on comprehensive ITB process
- Air Liquide (as 40% owner of Normandy project) announced MoU with Siemens on 8 February 2021 for PEM electrolyser co-operation. Normandy project mentioned as opportunity for Siemens PEM electrolyser
- Dunkirk not impacted by this MoU

Mitsubishi Power

- Some delay on the pilot project in the US. Continuous and frequent dialogue about the project

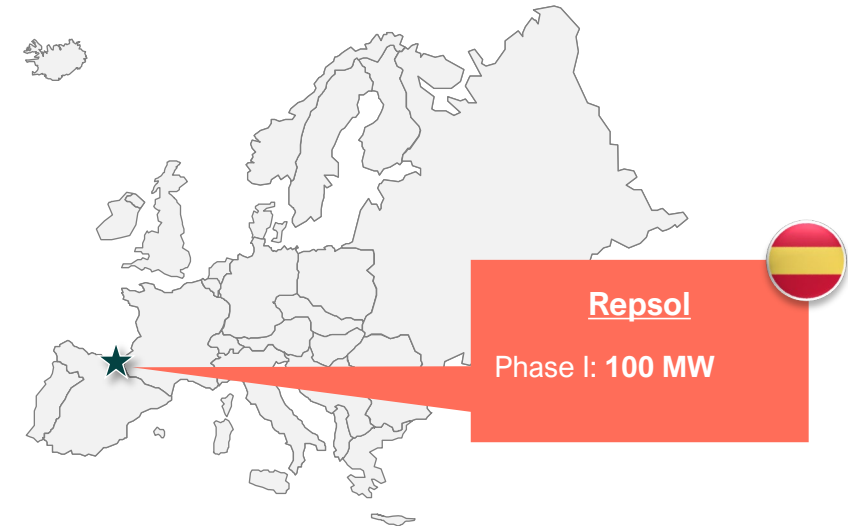
DG Fuels

- Still in process and accelerated recently due to «green» re-focus in the US

Signed MoU to develop joint hydrogen projects with Repsol and Ariema

Contract in brief

- LOI with Repsol and Ariema
- Plan to develop joint hydrogen projects
- Possible 100 MW project for the Petronor refinery close to Bilbao, Spain
- A key component of the project is to implement the latest electrolyzer technology with improved efficiency to design an optimized 100 MW green hydrogen plant
- Ariema will support and assist HydrogenPro in establishing a supply chain for electrolyzer projects in Spain
- Subject to Green Deal funding
 - Application of European Green Deal financing
 - Application deadline on 26 January 2021, award Jun-Sep 2021
 - Possible production start in 2024



- **Repsol** is a global multi-energy provider with a net-zero emission target by 2050
- 25,000 employees across 34 countries
- A major player in the Spanish electricity and gas market
- Operates low-emission electricity generation assets and develops a wide range of renewable solar and wind energy projects



- **Ariema** is a Spanish company that works with hydrogen and fuel cell technology with 30 years of sector experience
- Offers advice, support, training and consulting all the way up to construction and installations

Work with main pipeline is developing
















Project	Location	FID	Client	Segment	Size (MW)
Pipeline #1	South America	2021	Energy major	Power-to-gas	14
Pipeline #2	EU	2021	Energy major	Power-to-gas	120
Pipeline #3	Norway	2021	Gas company	Fuel cell	15
Pipeline #4	EU	2022	Industrial major	Steel industry	70
Pipeline #5	EU	2022	Agriculture company	Ammonia	100
Pipeline #6	EU	2022	Industrial client	Power-to-gas	50
Pipeline #7	EU	2023	Energy major	Power-to-gas	100
Pipeline #8	EU	2023	Industrial client	Power-to-gas	100
Pipeline #9	North America	2023	Energy company	Power-to-gas	100
Pipeline #10	North America	2023	Energy company	Power-to-gas	200
Sum pipeline					869

Huge flow of tenders and project opportunities



▪ Note: The pipeline is defined as potential projects which, in HydrogenPro's opinion, has a 50% or higher probability of materializing, excluding add-on potential from the four key projects

Developing an European and US supply chain and fabrication

<u>Components</u>	2021	2022	2023
Electrolyser	China 	Semi-finished China 	Europe and the US 
Gas separator	China 	Europe 	Europe and the US 
Electrodes	China or Europe 	Europe 	Europe and the US 
Other	Europe 	Europe 	Europe and the US 
Installation	Europe 	Europe 	Europe and the US 

European and US supply chain in combination with local assembly



Hydrogen pro

www.hydrogen-pro.com

Annex I – basis for calculation of cost of hydrogen

- Efficiency of new electrodes from pilot plant facility @ **93%**
- Electricity price of **0,02 USD/kWh**
- Based on a **100 MW facility** comprising electrolyser, power electronics, control & safety system
- Hydrogen @ pressure of **15 bar**
- Civil work and auxiliaries not included (project specific)
- Interest costs not included (client specific)
- Use or sale of **pressurized O₂** as a bi-product with possible economical upside (not attributed value in calculation)