



**Nel ASA Q2 2016**  
Jon André Løkke, CEO

# FORWARD LOOKING INFORMATION

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This Presentation includes and is based, inter alia, on forward-looking information and statements that are subject to risks and uncertainties that could cause actual results to differ. These statements and this Presentation are based on current expectations, estimates and projections about global economic conditions, the economic conditions of the regions and industries that are major markets for Nel ASA and Nel ASA's (including subsidiaries and affiliates) lines of business. These expectations, estimates and projections are generally identifiable by statements containing words such as "expects", "believes", "estimates" or similar expressions. Important factors that could cause actual results to differ materially from those expectations include, among others, economic and market conditions in the geographic areas and industries that are or will be major markets for Nel's businesses, raw material prices, market acceptance of new products and services, changes in governmental regulations, interest rates, fluctuations in currency exchange rates and such other factors as may be discussed from time to time in the Presentation. Although Nel ASA believes that its expectations and the Presentation are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved or that the actual results will be as set out in the Presentation. Nel ASA is making no representation or warranty, expressed or implied, as to the accuracy, reliability or completeness of the Presentation, and neither Nel ASA nor any of its directors, officers or employees will have any liability to you or any other persons resulting from your use.

This presentation was prepared in connection with the Q2 release on August 25<sup>th</sup> 2016. Information contained within will not be updated. The following slides should be read and considered in connection with the information given orally during the presentation.

The Nel shares have not been registered under the U.S. Securities Act of 1933, as amended (the "Act"), and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements of the Act.

- Introduction
- Q2 highlights and financials
- This is Nel
  - Organisation
  - The hydrogen opportunity
- Market development
- Segment development
  - Nel Hydrogen Solutions
  - Nel Hydrogen Electrolyser
  - Nel Hydrogen Fueling
- Outlook
- Appendix: Q2 financials



# Q2 HIGHLIGHTS

- Revenues reflect the fluctuating nature of Nel's project business and certain customer projects being postponed to H2'16
- Earnings impacted by market development activities and preparation for production ramp-up
- Launched next generation hydrogen fueling station CAR-200
- Announced a NOK 85 million facility for production of fueling stations in Herning, Denmark
- Announced establishment of Nel Hydrogen Solutions and an extended management team
- Awarded contract for delivery of fueling station with integrated hydrogen production to Uno-X Hydrogen
- Announced Praxair to join Uno-X Hydrogen partnership
- Awarded hydrogen fueling station contract in Sweden
- Letter of Intent to establish a large-scale, low-cost hydrogen production facility in Glomfjord Industrial Park in Meløy, Norway
- Partnered with GREENSTAT for the development of large- and small scale hydrogen production facilities in Norway and internationally
- **Subsequent events:** Announced sale of two new CAR-200 stations and that production of new generation fueling station has been initiated
- Launched to new containerised turn-key electrolyzers

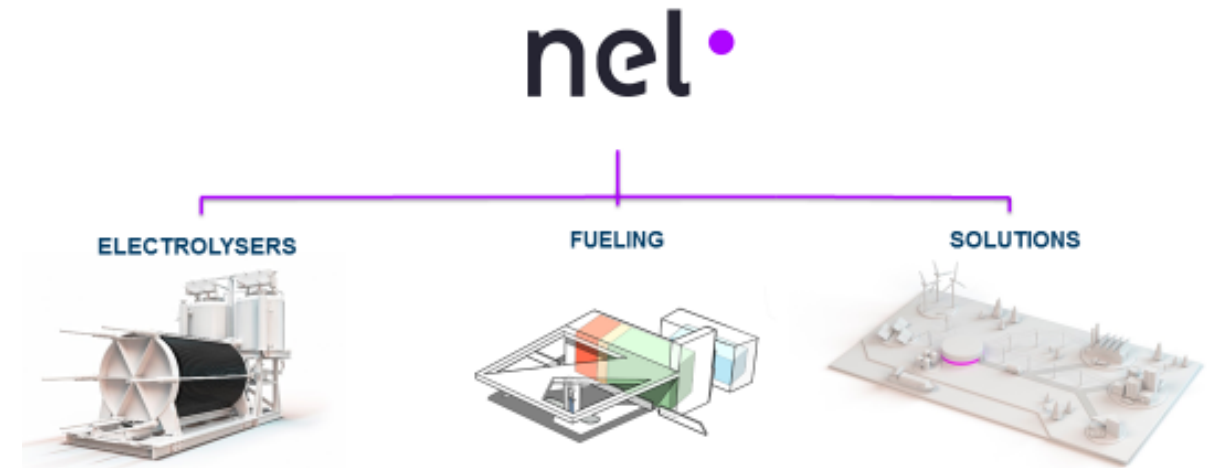
<i>(NOK million)</i>	<i>2016 Q2</i>	<i>2015 Q2</i>	<i>2015</i>
<b>Revenue</b>	13.5	16.0	99.9
<b>EBITDA</b>	-14.0	-5.3	-2.7
<b>EBIT</b>	-16.5	-9.0	-18.3
<b>Net profit</b>	-15.6	-7.6	-21.7
<b>Cash balance</b>	265.9	152.2	313.0



# A PURE-PLAY HYDROGEN COMPANY



- Leading hydrogen technology company, delivering optimal solutions to produce, store and distribute hydrogen from renewable energy
- Serves industry, energy and gas companies with leading hydrogen technologies
- Solutions cover entire value chain, from hydrogen production to manufacturing of hydrogen fueling stations, providing all fuel cell electric vehicles (FCEV) with the same fast fuelling and long range as conventional vehicles today



# NEL'S COMPETITIVE POSITION



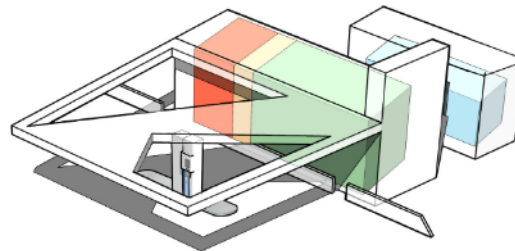
- PURE-PLAY HYDROGEN COMPANY
- STRONG MANAGEMENT TEAM IN PLACE
- SOLID BALANCE SHEET
- POSITIONED TO PLAY A LEADING ROLE IN FAST MOVING INDUSTRY

## ELECTROLYSERS



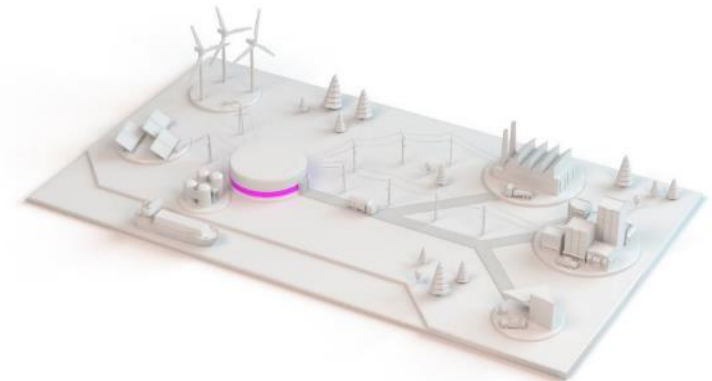
- NO. 1 SINCE 1927
- UNRIVALED PERFORMANCE
- TURN-KEY/CONTAINERISED
- GAME CHANGING ROTOLYZER

## FUELING



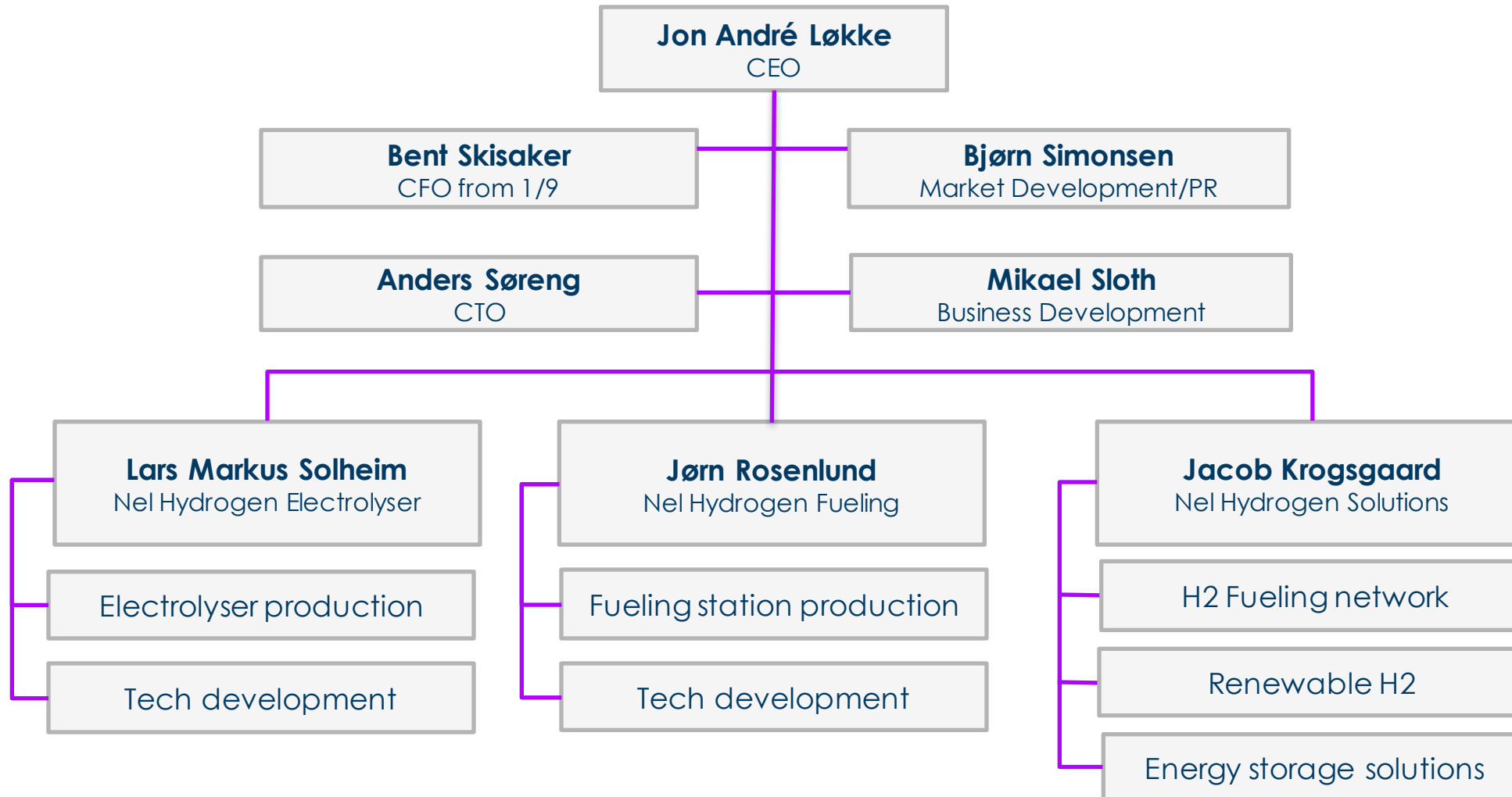
- WORLD-CLASS TECHNOLOGY
- LEADING POSITION IN KEY MARKETS
- EARLY MOVER IN NEW MULTI-BILLION DOLLAR MARKET

## SOLUTIONS



- ONLY PROVIDER OF INTEGRATED SOLUTIONS ACROSS VALUE CHAIN:
  - ✓ HYDROGEN FUELING NETWORKS
  - ✓ RENEWABLE HYDROGEN
  - ✓ STORAGE SOLUTIONS

# A STRONG AND DEDICATED TEAM IN PLACE



# SWEET SPOTS IN THE HYDROGEN VALUE CHAIN

Addressing all end markets for hydrogen

## Electricity production



Renewable energy

## Hydrogen production

nel<sup>•</sup>



Water  
electrolysers



Hydrogen production from  
water and electricity

## Energy storage



Hydrogen as a “battery”  
for renewable energy

## Distribution methods



Onsite



Trucked in



Pipeline

## End markets

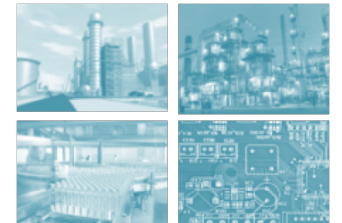
Hydrogen fueling stations

nel<sup>•</sup>



Industrial end markets

nel<sup>•</sup>



# SHOWCASE DENMARK

## The world's first country-wide network in daily operation:

- Nel constructed entire network
- Nel undertakes service, maintenance and surveillance
- Collaborating with leading oil, energy and gas companies\*

### Key facts:

- 100% of hydrogen from electrolysis
- 6 stations with onsite electrolysis
- 5 stations with centralized Nel electrolysis
- All stations approved by OEM's
- Same approach in other markets



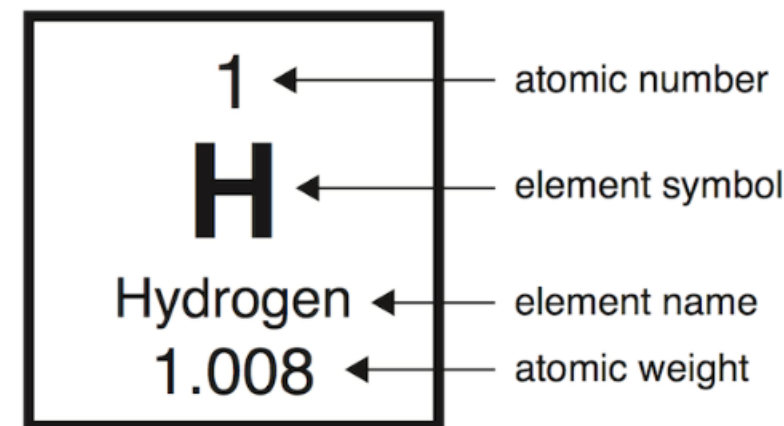


# THE HYDROGEN OPPORTUNITY

# RENEWABLE HYDROGEN WILL BE #1

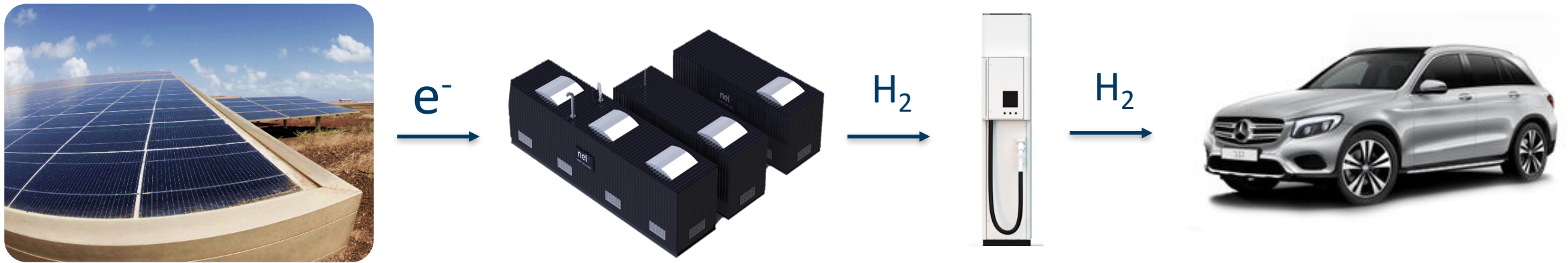
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- World needs a new energy carrier to replace oil and gas
- The element with highest energy density is Hydrogen
- Hydrogen can be produced from water and renewable energy
- Access to renewable energy is practically infinite
- Electric grids do not have capacity to handle entire future energy demand loads
- Intermittent/captive renewable energy can be found in more and more locations, ideal for generating low cost hydrogen

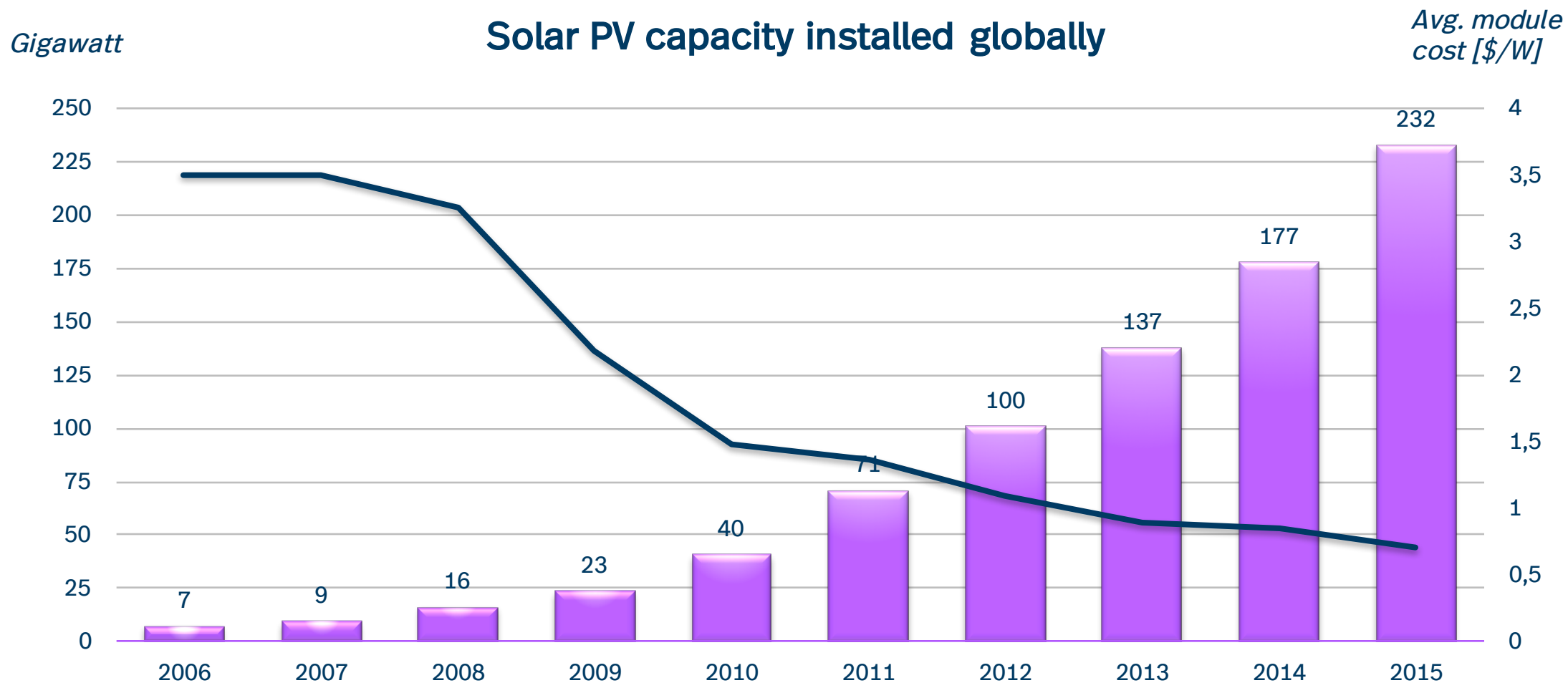


# WHY NOW?

1. Renewable electricity is becoming competitive
  - Timing of supply/demand do not always match
  - Need hydrogen solutions to realise full potential
2. Hydrogen cars are coming, affordable and available
  - Focus on zero-emission transportation
  - Major car companies launching ambitious programs



# RENEWABLE ENERGY BECOMING COMPETITIVE



# AVAILABLE AND AFFORDABLE

- Hyundai, Toyota, Honda, BMW, Daimler, GM, Nissan, Ford, Audi, and Volkswagen have all launched, or announced launch, of FCEVs
- **Formidable cost reductions enable introduction:** Toyota to launch new 20% cheaper Mirai in 2019...ramping up production to 30,000 units/year from 2020\*



2014



TOYOTA

2015



HONDA

2016



2017



Audi



2018 - 2020



# MARKET DEVELOPMENT

# NEW ENERGY BILL SECURES NETWORK ROLLOUT

- New Norwegian energy bill changes hydrogen policy and political consensus
- Earlier project-based focus expected to shift to towards a network roll-out model from beginning of 2017
- Reduced political uncertainty

ENIGHET OM UTBYGGING SIKTER MOT 50.000 HYDROGENBILER

## Vil bygge hydrogenstasjoner for 800 mill.



**HYDROGENLØFT:** Nestleder i Venstre og leder i Energi- og miljøkomiteen på Stortinget, Ola Elvestuen, ønsker å bygge ut et nasjonalt nettverk av hydrogenstasjoner.

**NEL: Fjerner usikkerhet rundt Norges hydrogenambisjoner**

### INDUSTRI: Regjeringspartienes ambisjoner om utbygging av et eget hydrogennettverk kan innebære 100 norske hydrogenstasjoner innen 2027.

HANS IVER ODENRUD  
HANS.IVER.ODENRUD@NOVA-RESEARCH.NO

– Dette er fantastiske nyheter. Det fjerner mye av usikkerheten rundt Norges ambisjoner innen hydrogen, sier Jon André Løkke, adm. direktør i hydrogenelskapet NEL.

Regjeringspartiene Høyre, FrP og samarbeidspartiene Venstre og KrF er enige om å starte byg-

gen for en som ønsker å kjøpe hydrogenbil.

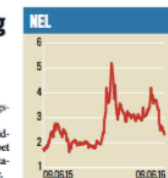
#### 800 millioner på stasjoner

Elvestuen i Venstre sier til Dagsavisen at målet er å ha 50.000 hydrogenbiler i løpet av 10 år, men har ingen formening om hva en utbygging vil koste, hvor mange hydrogenstasjoner som er nødvendig eller

hydrogennettverk gitt et stortingsvedtak.

Finansavisen har imidlertid tidligere skrevet at hydrogenelskapet NEL leverer ferdige hydrogenstasjoner for rundt 1 million dollar.

Selskapet har dessuten ambisjoner om å bygge ut 20 hydrogenstasjoner sammen med Uno-X innen 2020, som vil ha tilstrekkelig kapasitet på verdensbasis er verdt å være



830 hydrogenstasjoner på verdensbasis innen 2020.



**JUBLER:** NEL-sjef Jon André Løkke.

Selskapet selger i dag elektrolyse-

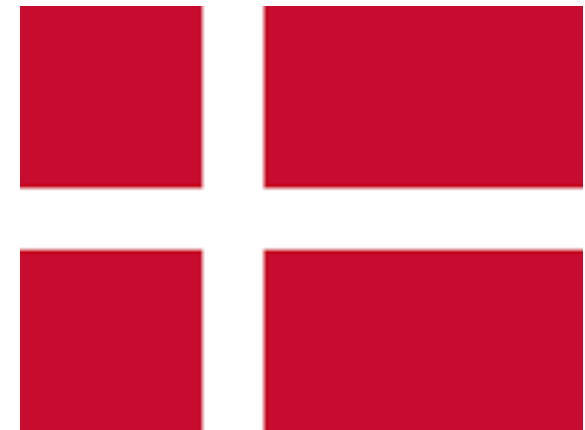
## NORWAY

- Joint venture with Praxair and Uno-X to build hydrogen production/fueling network in Norway
  - Target to build 20 hydrogen fueling stations and matching hydrogen production capacity by 2020
- Joint venture with Meløy Energi, Meløy Næringsutvikling og Greenstat to build large-scale renewable hydrogen production in Glomfjord



## DENMARK

- Delivered the world first country-wide network in daily operation
  - May add a few more stations to the network
- Nel performs service, maintenance and surveillance of the entire network



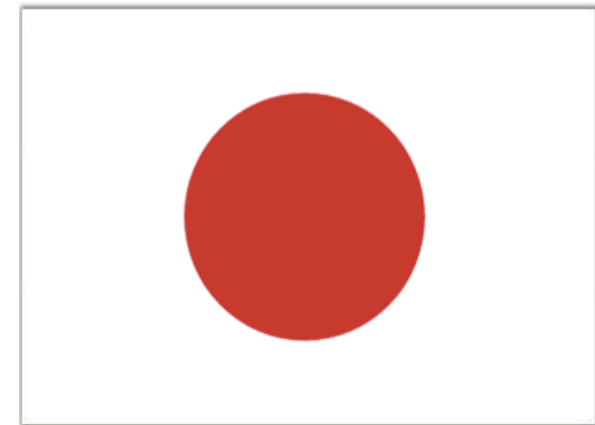
## GERMANY

- Supplier to H2 Mobility, a joint venture among Air Liquide, Daimler, Linde, OMV, Shell and Total
  - H2 Mobility is building a Germany-wide network of 400 hydrogen fueling stations within 2023 and a total investment of EUR 400 million
  - Nel has historically delivered 3 stations to Germany, have one CAR-200 in order backlog for delivery to Rostock
- Well positioned to deliver more stations



## JAPAN

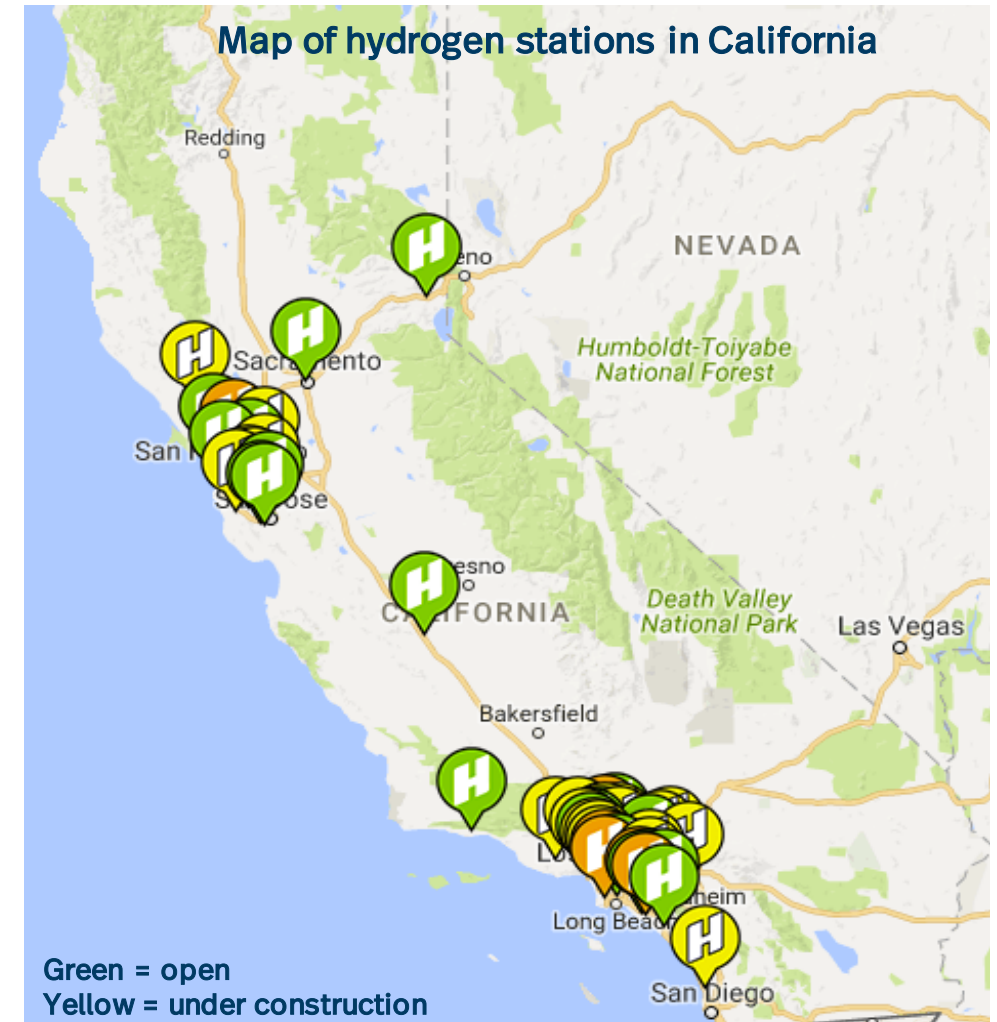
- Home market for key FCEV manufacturers
- Target of 160 hydrogen fueling stations by 2020 and 320 by 2025
- Partner with Mitsubishi Kakoki Kaisha, Ltd. for Japanese version of CAR-100, have reached the final stages of conversion



# MARKET STRATEGY AND OUTLOOK

## CALIFORNIA

- California Energy Commission has doubled GFO\* to USD 33 million, target to reach 100 hydrogen fueling stations by 2020
- Nel submitted tender 19/8, allocation expected during Q4
- Leading hydrogen technology brings Nel to the forefront in offering solutions to other companies tendering for GFO
- Direct and indirect approach to hedge market entry
- First orders for hydrogen refueling stations expected in Q1'17
- Opportunity within hydrogen production, as 33% of the hydrogen must be renewable, currently none TRUE RENEWABLE
- Connecting hydrogen production to solar/wind, working alongside leading industry actors

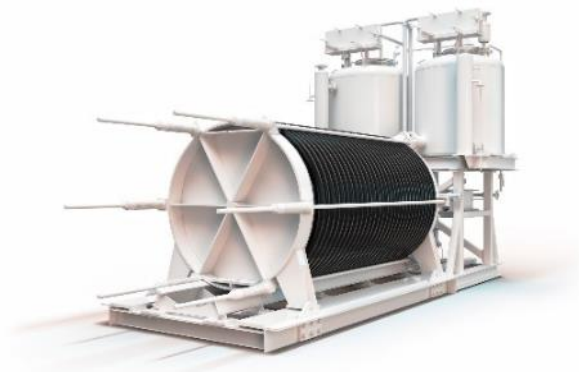




# SEGMENT DEVELOPMENT

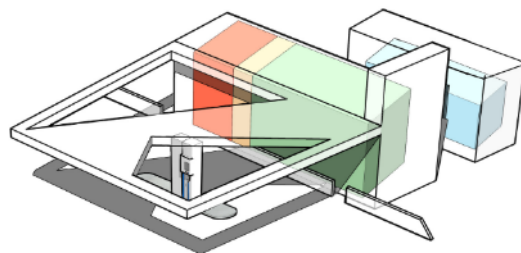


## ELECTROLYSERS



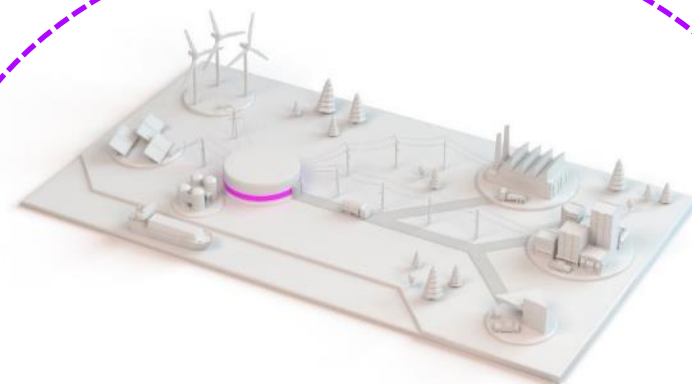
HYDROGEN PRODUCTION  
TECHNOLOGY

## FUELING



HYDROGEN FUELING  
TECHNOLOGY

## SOLUTIONS



SYSTEM INTEGRATION  
PROJECT DEVELOPMENT  
FINANCING & OWNERSHIP

## Nel Hydrogen Solutions established to utilize market opportunities across the Nel group

- Efficient system integration, project development and sales across segments
- Only provider of integrated solutions along the entire value chain:
  - Hydrogen fueling networks
  - Renewable hydrogen
  - Storage solutions

### New developments:

- Awarded hydrogen fueling station contract in Sweden
- Awarded repeat sale of two new fueling stations to European customer
- High interest in turn-key solutions from multiple markets
- Continue to actively develop markets, like California, using same approach as in Norway and Denmark
- Received requests for bus solutions in combination with renewable hydrogen

## FUELING NETWORKS

- Develop entire fueling networks, incl. renewable hydrogen production
- Service and maintenance
- Network monitoring services



## RENEWABLE HYDROGEN & STORAGE SOLUTIONS

- Storage solutions and “constant” renewable supply
- Renewable hydrogen
- Production based hydro, wind or solar
- Large, medium or small scale





# 1<sup>ST</sup> OF 20, LIGHT-HOUSE PROJECT, SOLAR-TO-H<sub>2</sub>





# 1<sup>ST</sup> OF 20, LIGHT-HOUSE PROJECT, SOLAR-TO-H<sub>2</sub>





# APPLYING THE WINNING FORMULA

## UNO-X HYDROGEN AS

- JV between Uno-X (41%), NEL (39%) and Praxair (20%)
- Target to build nationwide hydrogen fueling station network in Norway by 2020
- Strong partners with complementing knowledge and experience, Nel to provide hydrogen technology and competence
- Norway is attractive for FCEV-users:
  - World-class FCEV incentives, with no vehicle or value-added tax, free access to public transport lanes, free public parking, and free passage on toll roads
  - Hydrogen in Norway is 100% renewable



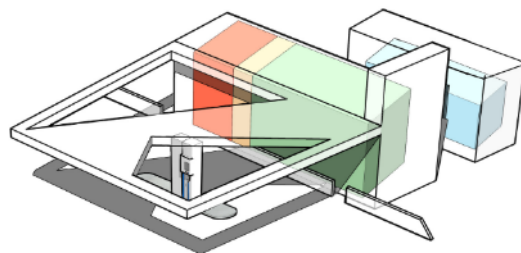


## ELECTROLYSERS



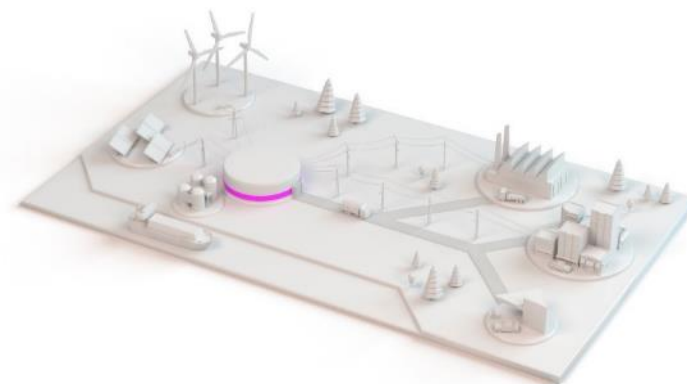
HYDROGEN PRODUCTION  
TECHNOLOGY

## FUELING



HYDROGEN FUELING  
TECHNOLOGY

## SOLUTIONS



SYSTEM INTEGRATION  
PROJECT DEVELOPMENT  
FINANCING & OWNERSHIP

## Global leader within large-scale hydrogen production plants

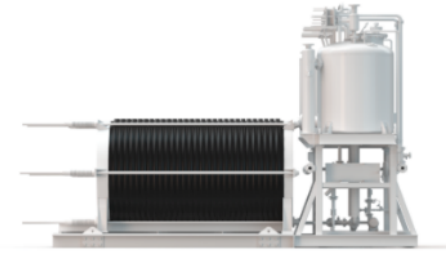
- Highest uptime, lowest conversion cost, robust and reliable
- World leading supplier of technology for hydrogen production for decades
- Delivered >850 large-scale electrolyzers in 59 countries
- Scalable production capacity for industrial and energy/transport applications
- Low-cost contract manufacturing in Hungary

## New developments:

- Have developed turn-key, containerised solution pre-assembled before delivery
  - Reduced time for installation and commissioning
- Pressurised electrolyser to be installed at Kjørbo
- Compact, game-changing technology - Rotolyzer

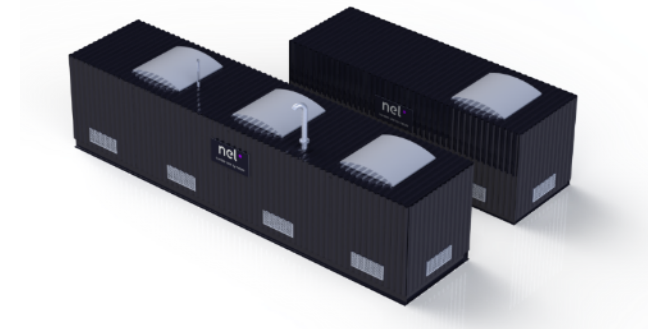
## WORLD-CLASS ELECTROLYSER TECHNOLOGY

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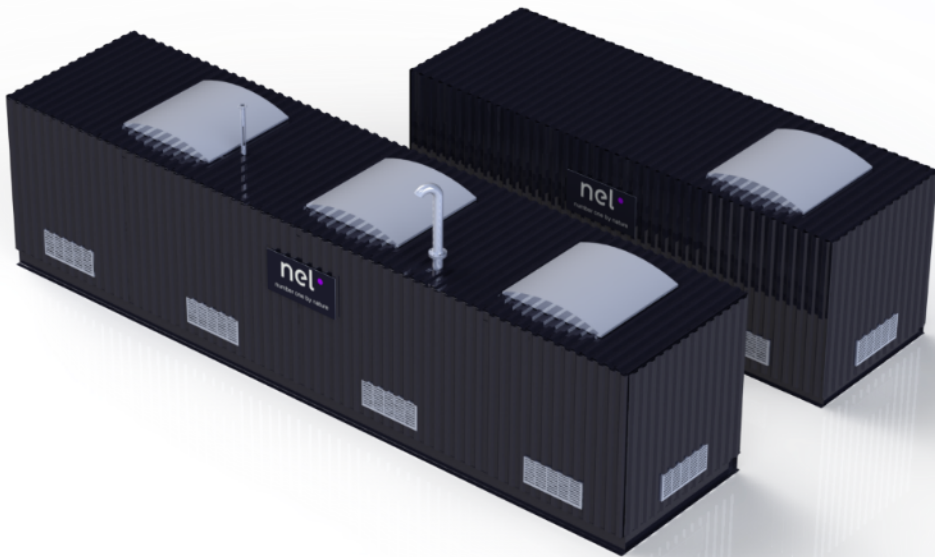
## PRE-ASSEMBLED, TURN-KEY SOLUTION

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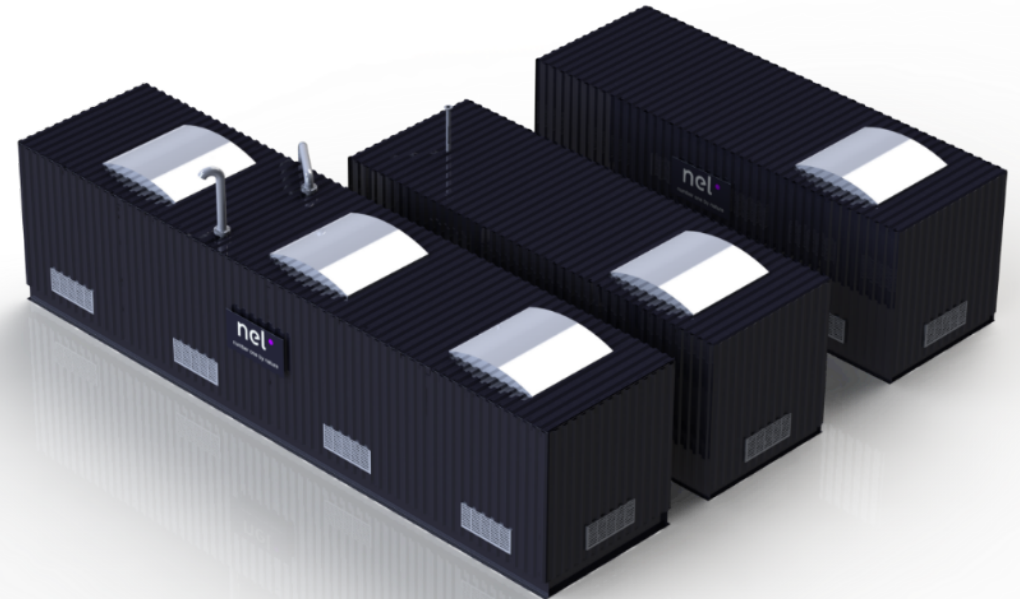
## C-150

150 Nm<sup>3</sup>/h (330 kg/day)  
700 kW system



## C-300

300 Nm<sup>3</sup>/h (660 kg/day)  
1.4 MW system



Turn-key, both delivering 200 bar output pressure



# EXAMPLES OF LARGE-SCALE PLANTS

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# EXAMPLES OF LARGE-SCALE PLANTS



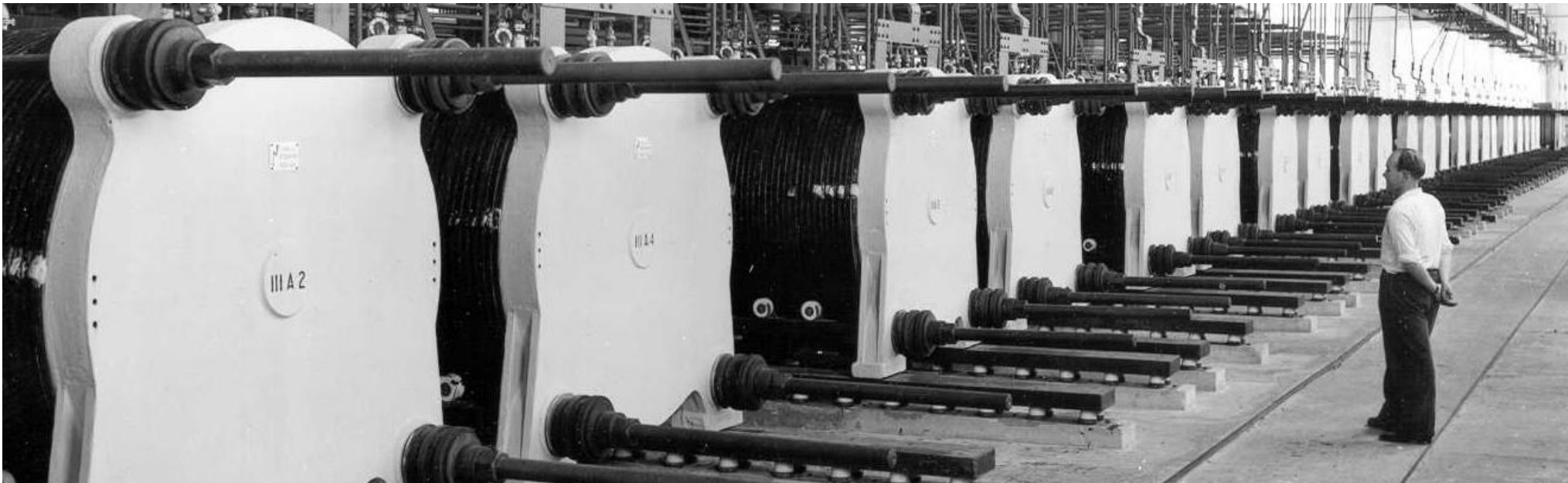
Company: NitolSolar  
Industry: Polysilicon  
Capacity: 1 940 Nm<sup>3</sup>/h  
Energy: 8,8 MW  
Source: Hydro Power



Company: Tokuyama  
Industry: Polysilicon  
Capacity: 2 500 Nm<sup>3</sup>/h  
3 000 Nm<sup>3</sup>/h  
Energy: Total 25 MW  
Source: Hydro Power

# UPCOMING LARGE-SCALE OPPORTUNITY

- **Glomfjord Hydrogen AS** established to develop large-scale, low-cost hydrogen production in Glomfjord Industrial Park in Meløy, Norway
- Initial target capacity of 6000 kilograms of low-cost hydrogen per day (13-15 MW)
- Plant will provide hydrogen for industrial applications, as well as personal- and public transportation incl. boats and ferries



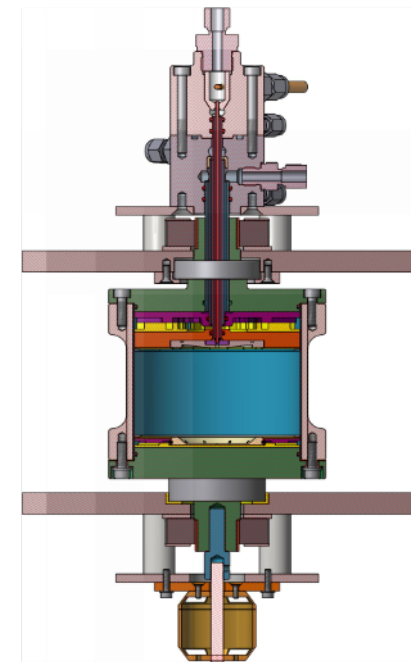
One of the history's largest water electrolyser plants was located in Glomfjord, Norway, until the 1990s



## Rotating electrolyser with several advantages:

- **Optimal production and flow of hydrogen and oxygen**
  - Cost efficient and compact
    - Dramatically increased active area on electrodes → less material needed → more compact
    - Increased gas-lye separation and less distance between electrodes → increased efficiency due to less ohmic resistance
- **Pressurised stack**
  - Higher pressure → more compact & no need for 1<sup>st</sup> stage compression downstream
  - Works as a centrifugal pump – no need for lye pumps

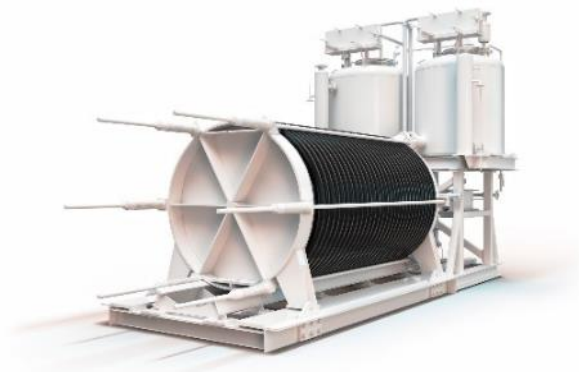
100x  
smaller\*



\*cell stack, compared to atmospheric alkaline

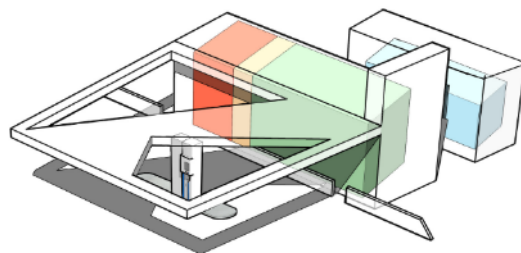


## ELECTROLYSERS



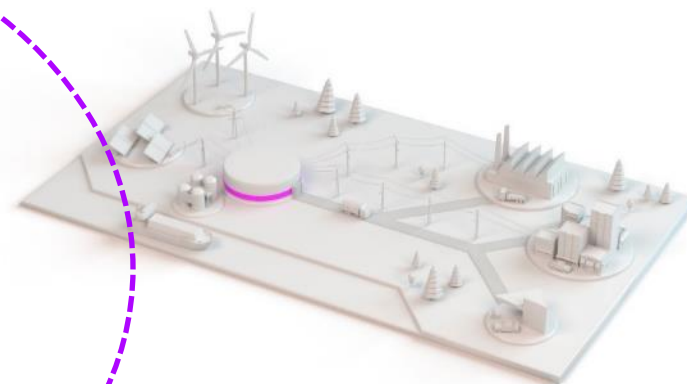
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TECHNOLOGY

## FUELING



HYDROGEN FUELING  
TECHNOLOGY

## SOLUTIONS



SYSTEM INTEGRATION  
PROJECT DEVELOPMENT  
FINANCING & OWNERSHIP

## World leading supplier of hydrogen fueling stations

- 30 stations delivered in 8 countries across Europe
- More than 15.000 fuelings (40 tons of hydrogen)
- Strategic collaboration with Mitsubishi Kakoki Kaisha in Japan for CAR-100

## New developments:

- Have developed the world's most compact and flexible hydrogen fueling station – CAR-200
- Have started production of first units for delivery to Kjørbo/Sandvika, Norway
- Preparing for takeover of new production facility

## H2STATION® CAR-200

- One-module system with fast installation
- 3x capacity, 1/3 footprint of previous model
- Standardized and module based design
- Industrial production
- Patented technology



## H2STATION® FOR LARGE VEHICLES

- Easy and fast installation
- 35MPa fuelling for large and small fleets of industrial vehicles or buses
- Technology adaptable for other l vehicles, e.g. fork trucks
- Flexible hydrogen supply
- Patented fueling technology



# SCALING UP THROUGH NEW FACTORY INVESTMENT



# 300

stations per year

- Next generation fueling stations ready for volume production according to lean principles
  - Series production for standardisation and volume, enabling Nel to offer better products at a lower cost
- Total capex of NOK 85 million, including land, building, and production equipment
- Will ensure continuous improvement and scale benefits
- EU & U.S. stations built at same production line



# H2STATION<sup>®</sup> CAR-200



**10 m<sup>2</sup>**  
footprint

**100 kg/3 hr**  
for peak hour

- New generation H2Station<sup>®</sup> for 70MPa fueling, designed for EU and USA
- 1/3 footprint and 3 times capacity vs. previous version
- 1 hose configuration with 200kg per day, prepared for upgrades
- Peak "rush hour" capacity of up to 100kg per 3 hours (one hose)
- Dimensioning of storage fully flexible to fit any demand and supply source



# NEW & COMPACT HYDROGEN DISPENSER

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**1/3**  
footprint

**50 m**  
from station

- Dispenser at 1/3 footprint of conventional gasoline dispensers
- Flexible placement at site, up to 50m away from H2Station®
- Shares fueling lane with gasoline/diesel
- Useable from any side
- No equipment underground
- Intuitive designed user-interface

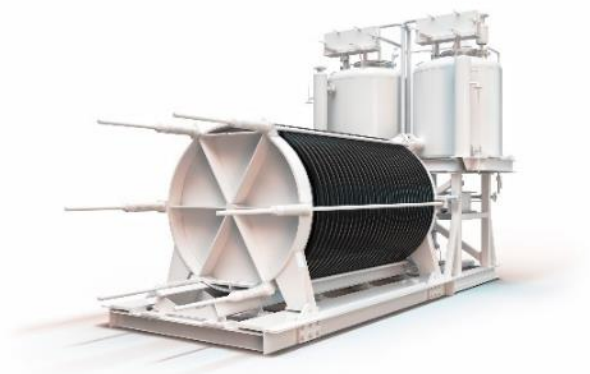
# GROUP OUTLOOK





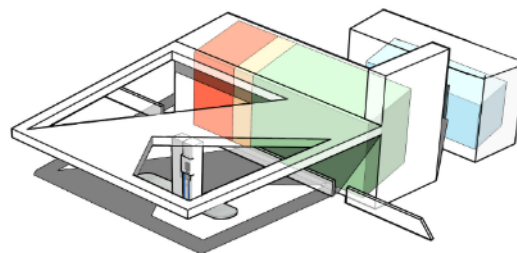
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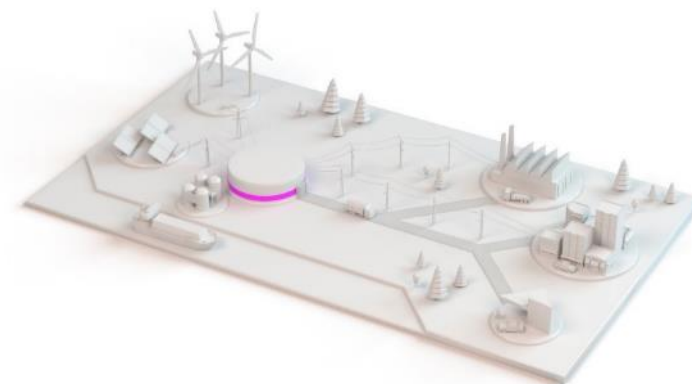
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## FUELING



- WORLD-CLASS TECHNOLOGY
- LEADING POSITION IN KEY MARKETS
- EARLY MOVER IN NEW MULTI-BILLION DOLLAR MARKET

## SOLUTIONS



- ONLY PROVIDER OF INTEGRATED SOLUTIONS ACROSS VALUE CHAIN:
  - ✓ HYDROGEN FUELING NETWORKS
  - ✓ RENEWABLE HYDROGEN
  - ✓ STORAGE SOLUTIONS

## Nel Hydrogen Electrolyser

- All time high level of sales leads, both in traditional and new markets
- Strong pipeline, expect to close traditional sales to industrial market in H2'16
- Strong interest in new containerised turn-key solution, contribution to order backlog expected in H2'16

## Nel Hydrogen Fueling

- Initiated production of CAR-200 in August, expect to begin delivery in H2'16
- New Herning facility on budget and schedule. Investment activities expected in connection with take over and plant rebuild, amounting to NOK 35-40 million in H2'16
- Continuing technology development, expected to become an integrated part of future generation fueling station

## Nel Hydrogen Solutions

- Opportunities within integrated renewable hydrogen production and fueling stations
- California: Leading hydrogen technology brings Nel to the forefront in offering solutions both directly and indirectly to partners. 2016 allocation under current governmental hydrogen program expected in Q4'16
- Norway: Roll-out expected to start in 2017 following new energy bill
- Japan: Partner with Mitsubishi for Japanese version of CAR-100, have reached the final stages of conversion

Q&A

nel.

number one by nature

# APPENDIX

# APPENDIX: PROFIT AND LOSS

<i>(NOK million)</i>	<i>Q2 2016</i>	<i>Q2 2015</i>	<i>2015</i>
Revenue	13.5	16.0	99.9
Operating costs	29.9	24.9	118.2
EBITDA	-14.0	-5.3	-2.7
EBIT	-16.5	-9.0	-18.3
Pre tax profit	-16.0	-8.6	-27.8
Net profit	-15.6	-7.6	-21.7
Total comprehensive income	-17.9	-7.6	-8.3

# APPENDIX: BALANCE SHEET

<i>(NOK million)</i>	<i>Q2 2016</i>	<i>Q2 2015</i>	<i>2015</i>
<b>Fixed assets</b>	433.1	417.2	435.0
<b>Current assets</b>	340.3	197.3	380.6
<i>-of which is cash and cash equivalents</i>	265.9	152.2	313.0
<b>Equity</b>	704.3	526.8	731.0
<b>Long term liabilities</b>	16.1	17.2	14.6
<b>Short term liabilities</b>	32.9	48.0	49.0
<b>Total balance</b>	773.3	614.4	815.6
<i>Equity ratio (%)</i>	91.1%	85.7%	89.6%

# APPENDIX: CASH FLOW

<i>(NOK million)</i>	<i>Q2 2016</i>	<i>Q2 2015</i>
Pre-tax profit (loss)	-16.0	-8.6
Net cash from operations	-24.2	-1.5
Net cash from investments	-8.6	-75.4
Net cash from financing	9.7	64.7
Net change in cash and cash equivalents	-23.1	-12.3
Cash at end of period	265.9	152.2