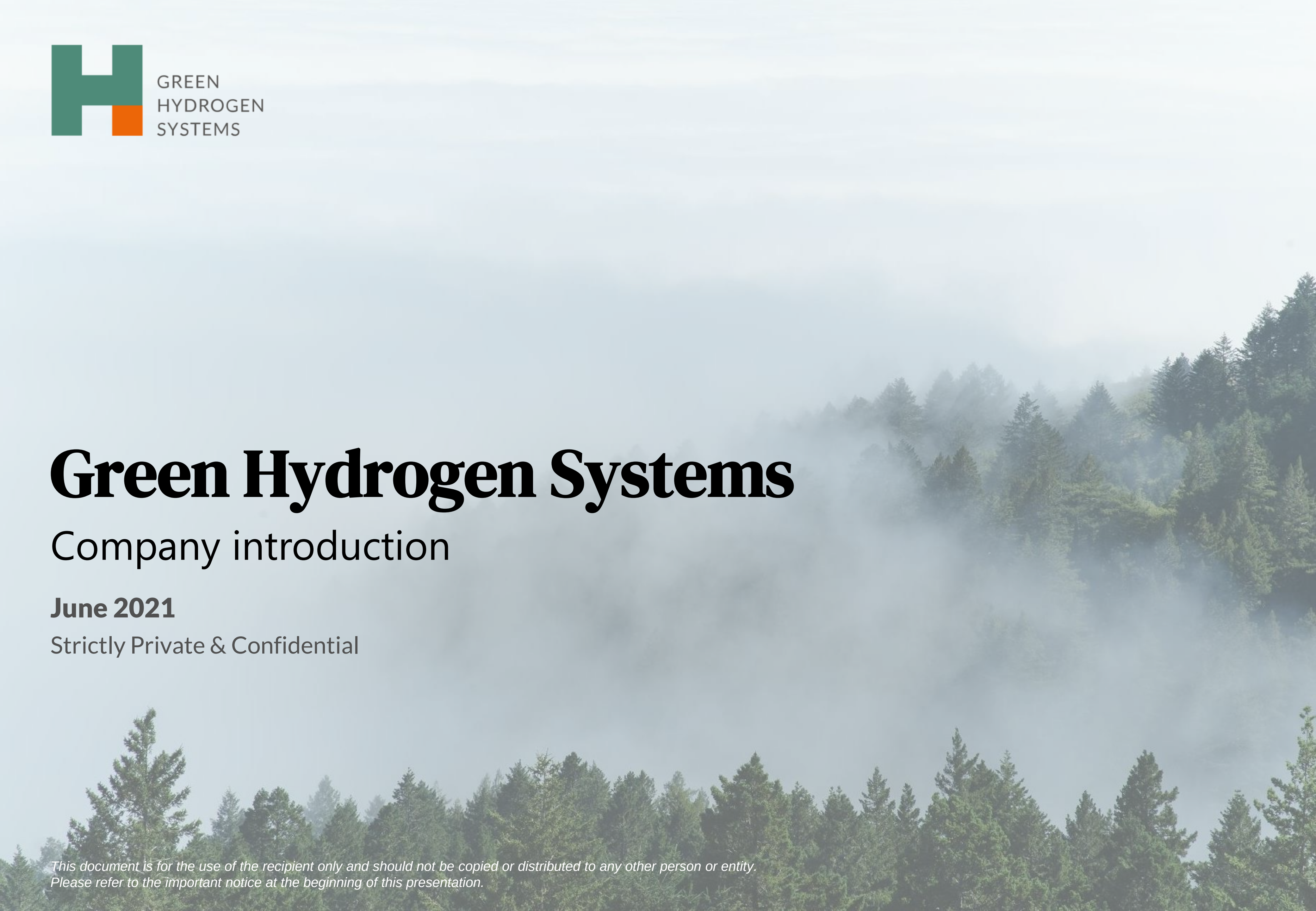
GREEN
HYDROGEN
SYSTEMS



Green Hydrogen Systems

Company introduction

June 2021

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Initial Public Offering of Green Hydrogen Systems A/S on Nasdaq Copenhagen

Offering structure, price and market value

Sale of new shares corresponding to **DKK 1,100m**

- Base offering of 27,500,000 new shares
- Overallotment option of up to 4,125,000 new shares (15% of base offering)

Net proceeds to be used to finance R&D efforts, scaling production and development facilities and strengthening of sales and marketing efforts and balance sheet

Price per share: **DKK 40.00**

- Valuation (pre-IPO): **DKK 2,014m**
- Free float (post-IPO): 42 - 45%[1]

Time table

Prospectus launch:	7 June
Offer period:	8– 21 June
Notification of allocation:	22 June
First day of trading:	22 June
Settlement:	24 June

The offer period may end before 21 June; however, not before 15 June 2021

Bank syndicate

- Joint Global Coordinators:
  ABG Sundal Collier, Carnegie and JP Morgan

Cornerstone investors and other commitments

A number of cornerstone investors have committed to subscribe for shares corresponding to a total amount of DKK 570m. The investors comprise:

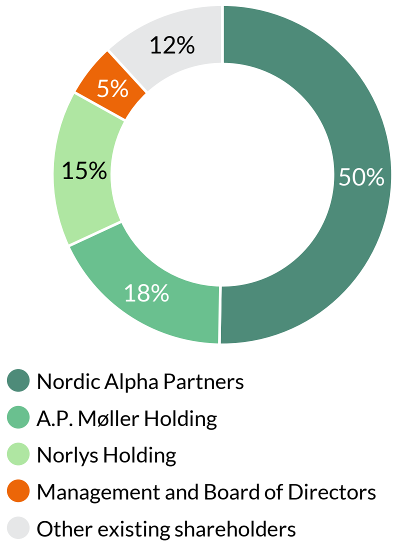
ATP :	DKK 200m
Vækstfonden:	DKK 100m
BankInvest:	DKK 100m
Nordea Asset Management:	DKK 100m
Spar Nord:	DKK 45m
MK Ventures:	DKK 25m

Existing shareholders and members of the Board of Directors have committed to subscribe for shares corresponding to:

Nordic Alpha Partners	DKK 37m
A.P. Møller Holding	DKK 37m
Norlys Holding	DKK 4m
Members of the Board	DKK 7.75m

Total commitment of DKK 656m

Pre-IPO shareholders



Lock-up

- The Company and main shareholders have agreed to a lock-up of 180 days
- The members of the Board of Directors, Executive Management and Key Employees have agreed to a lock-up of 360 days

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Notes: 1) Depending on exercise of overallotment option

Executive management team

○ Today's presenters

Sebastian Koks Andreassen

CEO

Joined GHS in 2020

+15 years experience in energy sector

- **CEO[1]**
  INEOS Oil & Gas Scandinavia
- **CFO of Oil and Gas, SVP[1]**
  Ørsted
- **Associate Director, Acquisitions**
  Copenhagen Airports

Kenneth Bergstrøm-Andersen

CFO

Joined GHS in 2020

+20 years CFO experience

- **VP Finance**
  DOVISTA
- **Group CFO (Interim)**
  Tvilum
- **Regional CFO, Northern Europe (Interim)**
  JELD-WEN
- **Group CFO & Executive VP**
  Tajco Group

Troels Hornsved

COO

Joined GHS in 2020

+6 years experience in energy sector

- **VP, Supply Chain & Operations**
  Universal Robots
- **Senior Manager, Production[1]**
  Vestas
- **Operations Development Manager**
  Martin Professional
- **Logistics Engineer**
  Grundfos

Jørgen Krogsgaard Jensen

CTO

Joined GHS in 2007

+29 years experience in energy sector

- **Engineering Manager, Cooling Solutions**
  Schneider Electric
- **Technical Leader, UPS 800-1,000 kW**
  APC

Søren Rydbirk

CCO

Joined GHS in 2021

+5 years experience in the energy sector

- **Senior VP, Head of Service Business Unit**
  FLSmidth
- **VP, Head of Commercial**
  Vestas
- **Director, Business Dev. and Marketing**
  Novozymes
- **Management Consultant**
  McKinsey & Company

Notes: 1) Latest role in the company

Introduction to Green Hydrogen Systems

Green Hydrogen Systems electrolyser

Hydrogen to play an instrumental role in reaching global targets for curbing the threat of climate change

Common goal of reducing emissions to curb climate change

66 countries

globally have announced commitments to reach net-zero emissions by 2050

55% reduction

in EU greenhouse gas ("GHG") emissions targeted by 2030[1]

The world's energy mix remains heavily dependent on fossil fuels

European primary energy demand by source (2017)[2]

Major challenges exist to reaching decarbonisation goals

①

The sectors emitting the most GHG depend heavily on fossil fuels and are **difficult to decarbonise**

Industry	Transportation	Buildings
~30%	~21%	~15%

% contribution to total EU GHG emissions[3]

②

Widescale integration of renewable energy **requires a viable energy carrier and storage solution to bridge intermittent supply and demand**

Supply	Demand
Renewable energy exhibits short- and long-term variation	Intra-day, weekly and seasonal variations are sizable

Hydrogen can be instrumental in meeting these challenges

Key advantages of hydrogen

Near-zero emissions when produced (if produced as green hydrogen using renewable energy) and when used[4]

Highly versatile with both direct applications in transportation and industry, indirect applications in Power-to-X and for grid stabilisation[5]

High gravimetric energy density, allowing easy and efficient storage and transportation of energy over time and distance[6]

Notes:1) Compared to 1990-levels – proposed target from the European Commission, has yet to be voted upon; 2) EU-27, based on McKinsey – Net-Zero Europe (2020), other energy sources include nuclear energy and bio energy; 3) EU-27, today = 2017, based on McKinsey – Net-Zero Europe (2020); 4) Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020); 5) EU FCH – Hydrogen Roadmap Europe (2019); 6) US Department of Energy (2020) – Hydrogen Storage.
Source: Hydrogen Council – Path to Hydrogen Competitiveness (2020); McKinsey – Net-Zero Europe (2020); EU FCH – Hydrogen Roadmap Europe (2019); Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020); US Department of Energy (2020) – Hydrogen Storage

GHS provides a leading technology for production of green hydrogen, distributed to the growing market for renewable energy solutions

Introduction to GHS

2007
Year of foundation

Kolding, DK
Headquarters located in Denmark's renewable energy cluster

90
Employees (more than 5x from end 2019 to May 2021)[1]

+153,000
R&D engineering hours invested to date (89 man years of R&D)[2]

Up to 75 MW
Max run-rate production capacity p.a. at current facilities in 2021[3]

22
HyProvide™ A-Series units ordered to date of which 5 orders have been produced[4]

Commercially proven platform
Blue-chip customers
SIEMENS Gamesa
Ørsted

Reputable investors
A.P. MØLLER
NORDIC ALPHA PARTNERS
NORLYS

Notes: 1) 90 equals total number of employees as of 1 May 2021; 2) Estimated R&D hours invested based on the number of employees in R&D between 2008 and 31 December 2020, assuming 144 working hours per month per employee. Estimation excludes R&D hours invested by external parties; 3) Estimation for max run-rate production capacity p.a. by year-end 2021. Estimation assumes implementation of first phase of capacity expansion plan which involves optimisation of production processes that will allow production capacity of 25 MW p.a. with one production shift to a maximum production capacity of 75 MW p.a. with the introduction of three shifts; 4) As of 6 may 2021. Source: Company information

GHS is a strong ESG-case with an ambition of being a pioneer in driving the sustainable energy transition

Innovation in sustainable technology

- ✓ Enabling hydrogen production from **renewable energy** sources
- ✓ Technology **independent of scarce resources**
- ✓ **Reduced complexity and environmental footprint** from assembly-based production
- ✓ Green hydrogen to play a **key role in decarbonising global energy systems:**

~0	*Near-zero emissions (kg CO_2 e/kgH_2) when produced and consumed*
50%	*CO_2 % avoidance potential of total EU gap to reach 2DS in 2050*[1]

Safety & health is priority #1

- ✓ **Attentiveness and a "take care" safety-mindset** central to the company culture
- ✓ **Risk mitigation and preparedness** secured through clear internal policies and guidelines
- ✓ **Immediate registration and handling of incidents** – whether on-site or off-site
- ✓ **Responsible and safe business operations** throughout the supply-chain:

Suppliers ⇄ *Employees* ⇄ *Customers*

Committed to corporate social responsibility

- ✓ Committed to company governance emphasising **diversity and inclusion**
- ✓ **Active promotion of sustainable practises** in all activities
- ✓ Research partnerships driving **increased activity and sustainable innovation**
- ✓ **Social impact through** contribution to the growing hydrogen economy:

1m	*Jobs in the EU hydrogen economy by 2050*[2]
+300	*Number of employees in GHS towards 2025*

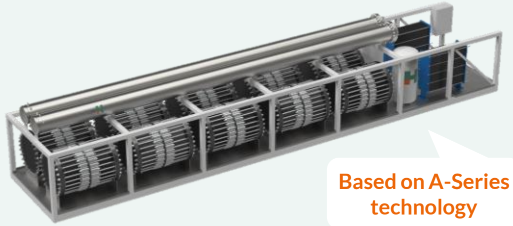
Notes: 1) EU FCH – Hydrogen Roadmap Europe (2019) – most ambitious scenario for hydrogen application; 2) Key element in the EU's hydrogen strategy ("green deal")
Source: Company information, EU FCH – Hydrogen Roadmap Europe (2019), European Commission – A Hydrogen Strategy for a Climate-Neutral Europe (2020)

GHS is an OEM and clean tech company offering a range of pressurised alkaline electrolysis units and supporting services

Electrolysis units overview

HyProvide™ A-Series | **HyProvide™ X-Series**

Current offering: A30, A60, A90 | Under development: A120, A150, X-versions[1]



Based on A-Series technology

	A30	A60	A90	A120	A150	X-versions[1]
Power consumption (kW)[2]	150	300	450	600	750	5 – 7,500[4] *(Upcoming series catering for larger projects)*
Units ordered (accumulated to date[3])	3	4	15	n/a	n/a	*Pre-sales: 2021*

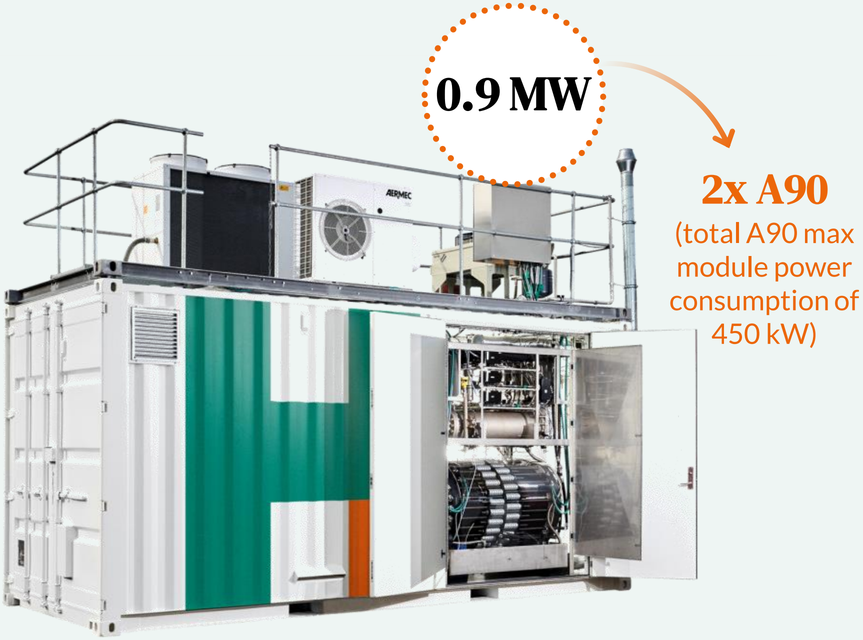
Ancillary solutions and supporting services

- Containerised solutions[5]
- Installation and engineering services[6]
- Service & Maintenance (contracts) for installed units[6]

Notes: 1) Versions under the X-Series could change as development is progressing; 2) Max module power consumption; 3) As of 6 May 2021, of which 5 units have been finalised for delivery; 4) 5-7.5 MW power consumption is the current working assumption (could change as development is progressing); 5) As at 6 May 2021, 21 A-Series units have been ordered for 15 containerized solutions (accumulated units) including 2xA30 in 2x20 foot containers, 2xA60 in 2x20 foot containers, 2xA60 in 1x40 foot container; 6xA90 in 5x20 foot containers, and 9xA90 in 5x40 foot containers; 6) 100% of units sold. Source: Company information

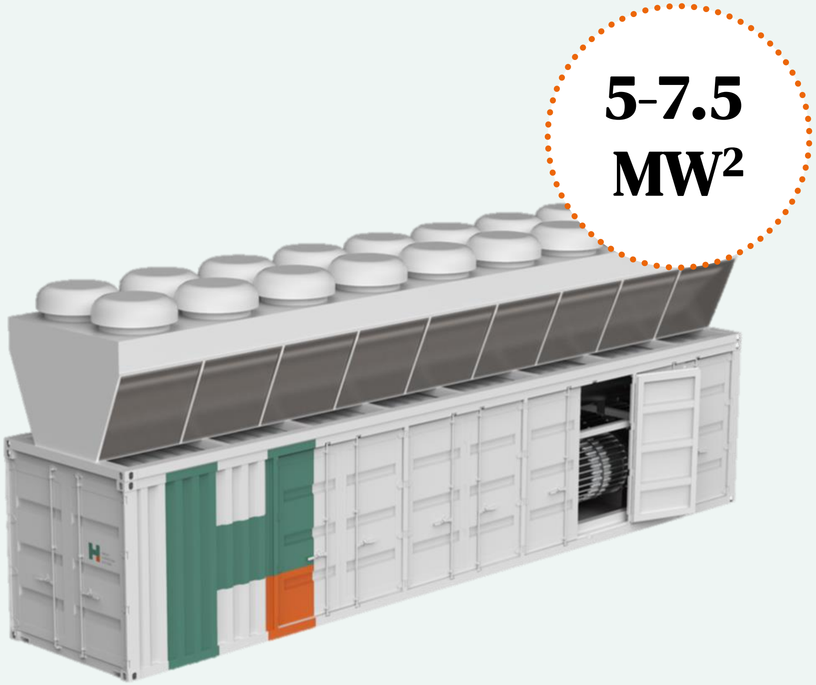
A-Series containerised unit offers a 0.9 MW modular, plug-and-play solution – containerised X-Series expected to enable up to 7.5 MW

HyProvide A-Series containerised solution



20-foot or 40-foot containers comprising 1-2x A90[1]
(includes auxiliary systems)

HyProvide X-Series containerised solution



Upcoming 40-foot container comprising 1x X-Series
(excludes auxiliary systems)

Notes: 1) 20-foot containers comprises one A-Series unit, whereas 40-foot containers can comprise two units; 2) 5-7.5 MW power consumption is the current working assumption (could change as development is progressing)
Source: Company information

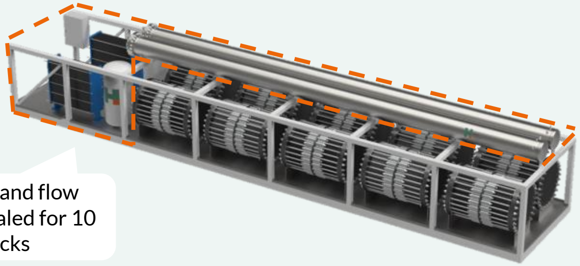
GHS leverages its existing technology platform in development of the X-Series

HyProvide™ A-Series

HyProvide™ X-Series

Balance of plant

Scaling of balance of plant requires limited R&D effort



Control and flow system scaled for 10 stacks

Stack

GHS' core technology

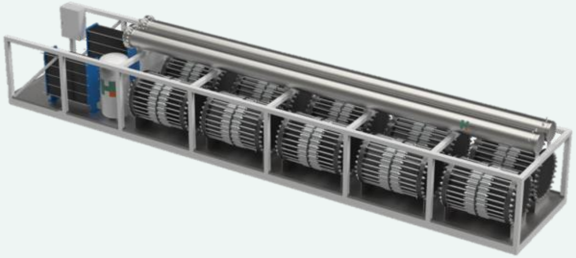
Development based on the existing technology platform

x 10

Electrolyser rack

X-Series is a continuation of the A-Series technology

Both platforms feature GHS' modular design philosophy



Source: Company information

Key highlights of Green Hydrogen Systems

Nilsson Energy refuelling station in Mariestad, Sweden, powered by GHS electrolysers with energy sourced directly from solar panels to power ~20 hydrogen cars

GHS is well-positioned to take advantage of the growing demand for green hydrogen

i **High-growth market** experiencing significant momentum as green hydrogen is set to be a **key enabler for decarbonisation** of global societies

ii **Commercially proven platform** with clear pathway to position **GHS as a leading supplier** to the hydrogen economy

iii **Ongoing scale-up of existing production facilities** to meet surging demand

iv Competitive edge through **favourable technological fundamentals** and **versatile system design**

v Clear cost-out plan in place to **drive down LCOH**[1]

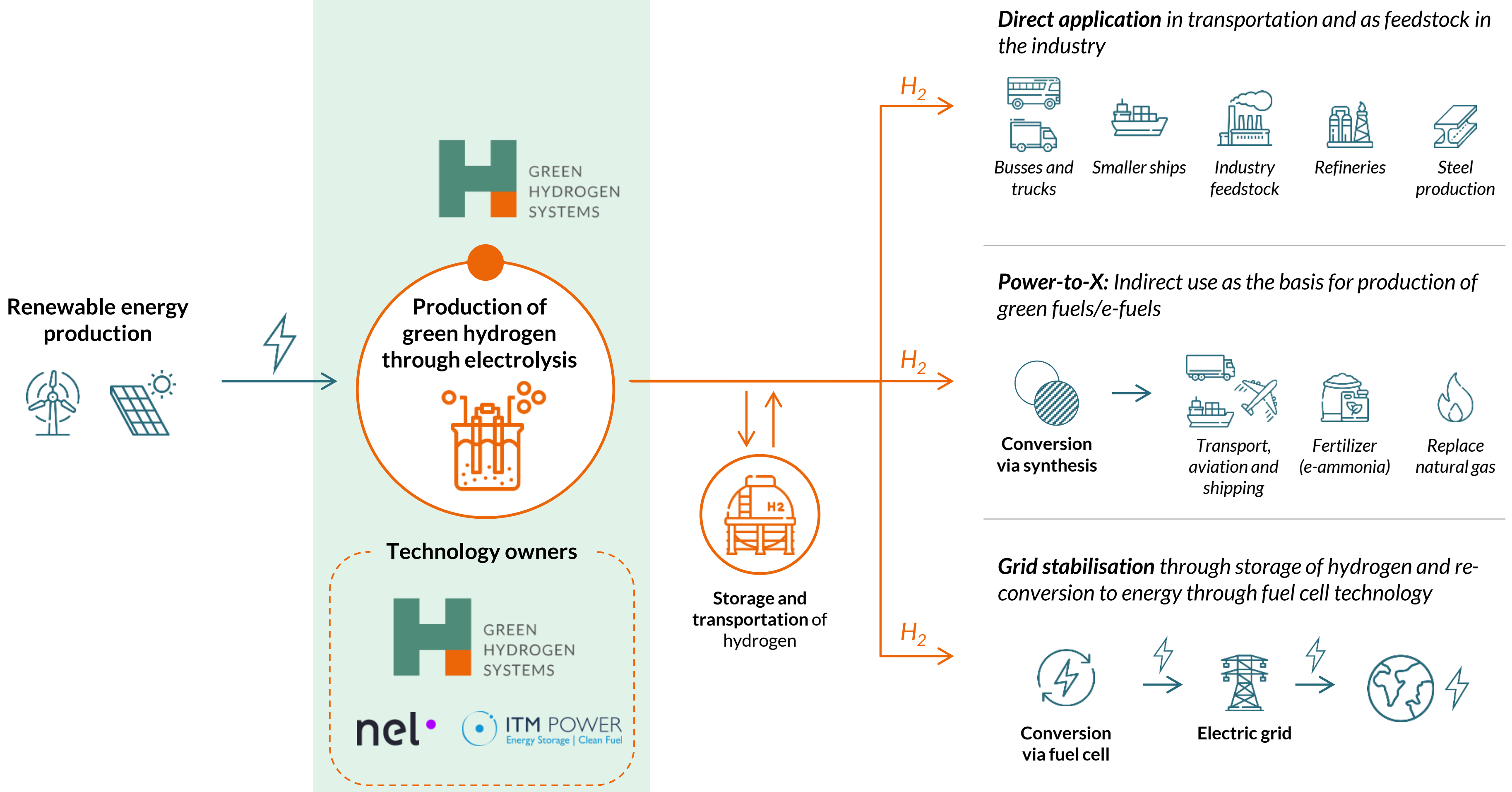
vi **Organisational backbone and infrastructure** in place to capture accelerated growth

GREEN HYDROGEN SYSTEMS

Notes: 1) LCOH = Levelised Cost Of Hydrogen

Green hydrogen to take a central role at the heart of the future energy system covering all parts of global societies

Green hydrogen's role in the future energy system



Renewable energy production

Production of green hydrogen through electrolysis

Technology owners

Storage and transportation of hydrogen

Direct application *in transportation and as feedstock in the industry*

Busses and trucks · *Smaller ships* · *Industry feedstock* · *Refineries* · *Steel production*

Power-to-X: *Indirect use as the basis for production of green fuels/e-fuels*

Conversion via synthesis → *Transport, aviation and shipping* · *Fertilizer (e-ammonia)* · *Replace natural gas*

Grid stabilisation *through storage of hydrogen and re-conversion to energy through fuel cell technology*

Conversion via fuel cell → **Electric grid** →

Sources: Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020)

Policy and industry forces are converging to create momentum in the hydrogen sector

Drivers of renewed interest in hydrogen

Stronger push to limit carbon emissions

55%
reduction in European GHG emissions targeted by 2030

66
countries have announced net-zero emissions targets by 2050

Falling costs of renewables and hydrogen technologies

80%
decrease in global average renewable energy prices since 2010

Up to 50%
estimated cost decrease of hydrogen towards 2030

Indicators of hydrogen's growing momentum

Strategic push in national hydrogen roadmaps

+70%
share of global GDP linked to hydrogen country roadmaps to date[1]

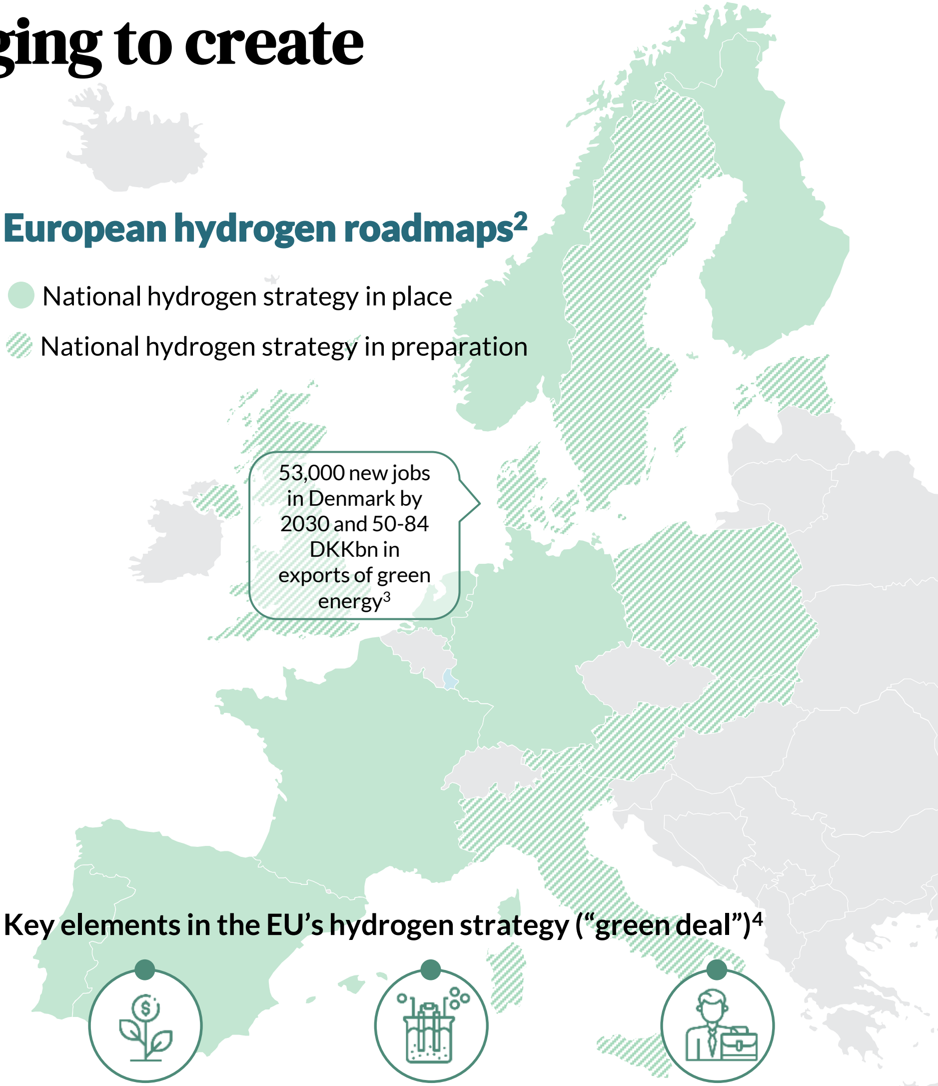
EUR 24-42bn
potential EU investments in electrolysers towards 2030[4]

Industry alliances supporting large investments

+100
members of the Hydrogen Council today, up from 13 members in 2017

+138 GW
electrolysis capacity in announced projects globally[5]

European hydrogen roadmaps[2]



🟩 National hydrogen strategy in place

▨ National hydrogen strategy in preparation

53,000 new jobs in Denmark by 2030 and 50-84 DKKbn in exports of green energy[3]

Key elements in the EU's hydrogen strategy ("green deal")[4]

H_2 production capacity investments of **EUR 180-470bn** towards 2050

6 GW electrolyser capacity by 2024 and by 2030 **40GW** in EU plus **40GW** externally

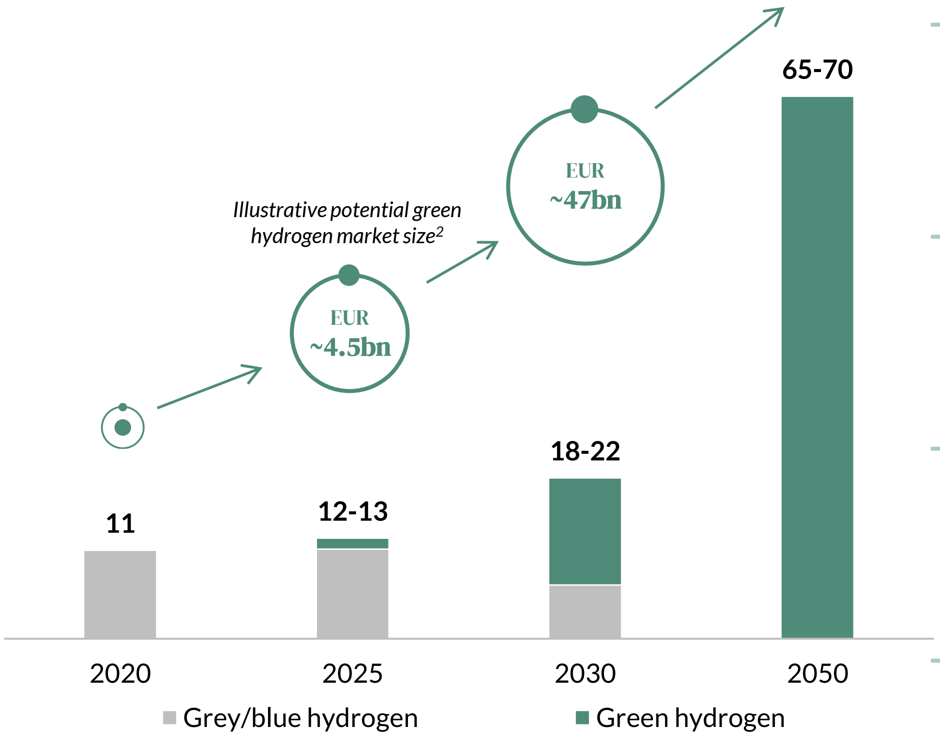
Up to **1m jobs** in the hydrogen economy by 2050

Notes: 1) Based on 18 country roadmaps announced by the time of publication of the Hydrogen Council study (January 2020); 2) IRENA – Green hydrogen cost reduction (2020); 3) from Hydrogen Denmark – VE 2.0; Brint og PtX-strategi (2020); 4) from European Commission – A hydrogen strategy for a climate-neutral Europe (2020); 5) RechargeNews – Growing ambition: The world's 20 largest green hydrogen projects (April 2021)
Source: Hydrogen Council – Path to hydrogen competitiveness (2020); European Commission – A Hydrogen Strategy for a Climate-Neutral Europe (2020); Hydrogen Denmark – VE 2.0, Brint og PtX-strategi (2020); IRENA – Green hydrogen cost reduction (2020); European Commission – A hydrogen strategy for a climate-neutral Europe (2020);

Demand for green hydrogen is surging, requiring significant scale-up of electrolysis capacity

Estimated future demand for hydrogen in the EU[1]

From Dansk Energi. Hydrogen demand in million tonnes H_2

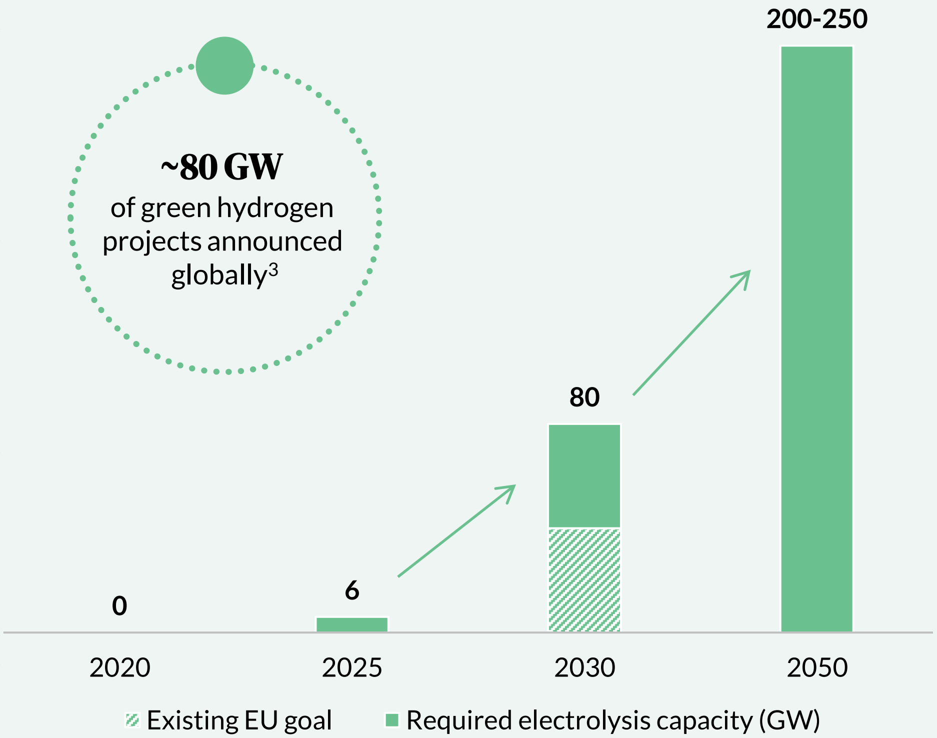


Illustrative potential green hydrogen market size[2]

Demand for hydrogen in Europe is expected to expand significantly

Required electrolysis capacity to meet EU demand[1]

From Dansk Energi. Electrolysis capacity in GW



~80 GW of green hydrogen projects announced globally[3]

To meet demand, supply must increase considerably from highly limited current capacity

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Notes: 1) EU-27; 2) Calculated from Dansk Energi (2020) (volume estimate) and EA Energianalyse (2020) (price estimates): 6 GW is estimated to produce 1.5 million tonnes H_2, price per kg H_2 estimated at 22.43 DKK/kgH_2 (~3.0 EUR/kgH_2) in 2025 which multiplied yields an expected market size of EUR ~4.5bn by 2025. In 2030, 80 GW is estimated to produce 20 million tonnes H_2, with price per kg H_2 estimated at 17.61 DKK/kgH_2 in 2030 (~2.4 EUR/kgH_2) – multiplied with expected million tonnes yields market size of EUR ~47m; 3) Recharge News – Gigawatt scale: the world's largest 13 green-hydrogen projects (2020). Source: Dansk Energi – Anbefalinger til en dansk strategi for Power-To-X (2020); EA Energianalyse - Brint og PtX i fremtidens energisystem (2020); Recharge News – Gigawatt-scale: the world's 13 largest green-hydrogen projects (2020)

GHS offers a commercially proven platform blue stamped by key industry players

GHS' backlog, commercial agreements and pipeline

Order backlog

Solid potential for further growth in existing orders

Select examples of partners and customers

SIEMENS Gamesa RENEWABLE ENERGY

Ørsted

alliander

Lhyfe

~7 MW
Electrolysis capacity

~57m
Revenue (DKK)

Commercial agreements

Commercial agreements anticipated to be converted to backlog

Green Hydrogen Systems, Eurowind Energy and Lhyfe has entered into a master supply agreement covering delivery of up to 24 MW electrolysis capacity

GreenLab skive

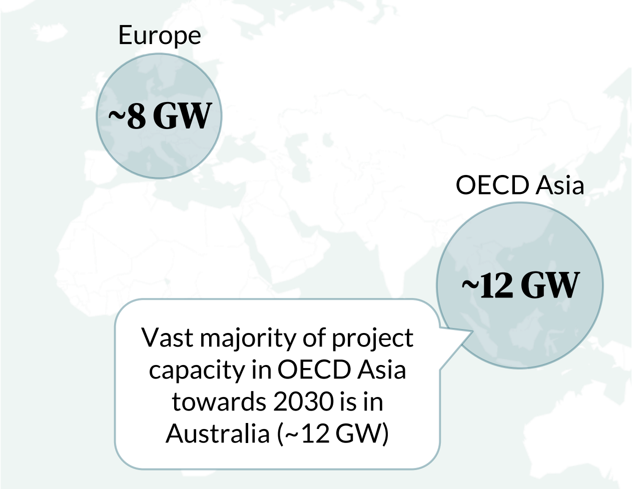
24 MW
Electrolysis capacity

Project capacity has the potential to increase beyond the initial 24 MW

Pipeline

Strong potential pipeline across customer segments and geographies

Electrolysis projects in core markets within ***Europe*** *and* ***OECD Asia*** *account for ~50% of globally disclosed capacity towards 2030*[1]



Vast majority of project capacity in OECD Asia towards 2030 is in Australia (~12 GW)

Notes: 1) Electrolysis capacity of disclosed projects globally towards 2030 from the IEA Hydrogen Projects Database (IEA, 2020), with Beijing Jingneng Inner Mongolia (5GW) manually added (from Recharge News - Gigawatt scale the world's 13 largest green-hydrogen projects (2020)). Source: Company information; IEA – Hydrogen Projects Database (2020); Recharge News - Gigawatt scale the world's 13 largest green-hydrogen projects (2020)

GHS partnership project, GreenHyScale, has been selected for the EU's Horizon 2020 funding programme

100MW electrolysis call

- Part of the overall EU Green Deal and the Horizon 2020 Framework programme
- The purpose of the project is the development and demonstration of **100MW** electrolysis system with a minimum of two years of operation from the end of 2024
- A grant from the EU may potentially provide **50% funding** of the costs to the 100MW electrolysis capacity

Project requirements

- ✓ Footprint
- ✓ CAPEX requirements
- ✓ Degradation levels
- ✓ Levelised cost of energy
- ✓ Efficiency levels
- ✓ Current density

GreenHyScale project overview

100 MW installation at GreenLab Skive

Purpose	Pave the way for large-scale deployment of electrolysis – both onshore and offshore
Timing and Location	Will run in parallel with GreenLab Skive To be located on or adjacent to the GreenLab Skive facility

6 MW → → **100 MW**

To be demonstrated as the first step

GHS will also deliver **7.5MW** for offshore deployment

Subject to performance of first 6MW

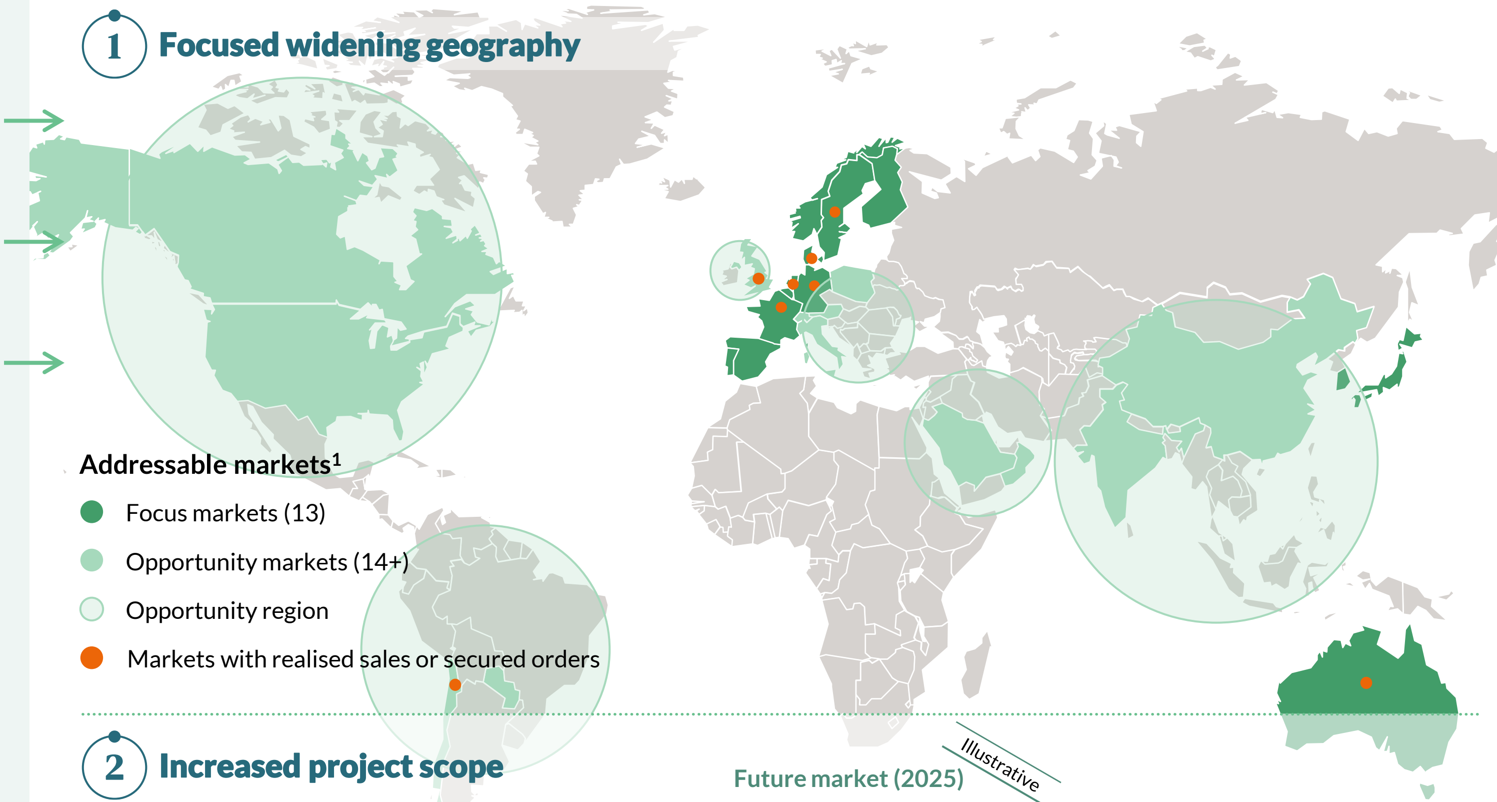
If 100 MW is to be delivered to the GreenHyScale project, GHS will be the sole supplier of necessary electrolyzers

Clear commercial go-to-market strategy of focused, widening geographic coverage and increasing project scope

Strategic priorities

1. Launch local sales resources in identified core markets
2. Develop 50 – 100+ MW market with a particular focus on industrial segment
3. Increase GHS technology and product awareness through scaled marketing efforts
4. Launch strengthened operations and maintenance strategy
5. Accelerate development of X-Series to meet market demand for increased project scope
6. Strengthen supply chain with EPC partnerships and secure manufacturing scale-up

1 Focused widening geography



Addressable markets[1]

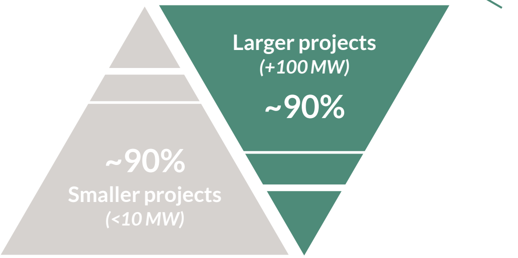
- ● Focus markets (13)
- ● Opportunity markets (14+)
- ○ Opportunity region
- ● Markets with realised sales or secured orders

2 Increased project scope

Market demand is expected to increasingly consist of centralised projects, with scopes reaching well beyond 10 MW per project

Future market (2025)

Illustrative



Current market (2020)

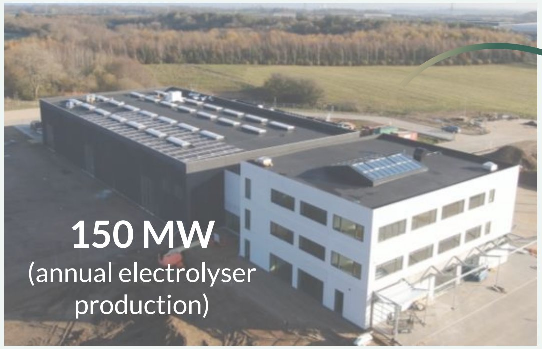
The scalable product platform enables GHS to meet the increasing demand for centralised projects exceeding 10MW

Source: Company information, Hydrogen Council – Path to hydrogen competitiveness (2020)

Ongoing scale-up to meet surging demand with clear plan for scaling current production site to +1,000 MW capacity

Ramp-up of production capacity[1]

- New facilities inaugurated in November 2020; **6x larger than previous site**
- Timing of ramp-up will be driven by GHS' commercial traction
- The Nordager production site is designed to be a standardised **factory blueprint** for efficient construction of additional production sites once commercially substantiated by order pipeline
- The Nordager site impacts GHS' financials through leasing costs related to the building(s) and CAPEX related to equipment, machinery and own-developed test facilities



150 MW
(annual electrolyser production)

Current facilities	2nd expansion	Add. expansions
150 MW[2]	**400 MW[3]**	**> 1,000 MW**
	Significant upfront investment in X-Series production line, but certain bottlenecks incl. warehousing limit the capacity to ~400 MW Expansion expected to commence **during 2021** with a lead time of 12 – 18 months	
Total floorspace **4,500 m²**	**17,000 – 18,000 m²**	**30,000 m²**

Capacity estimates include three shifts, new product launches and production efficiencies

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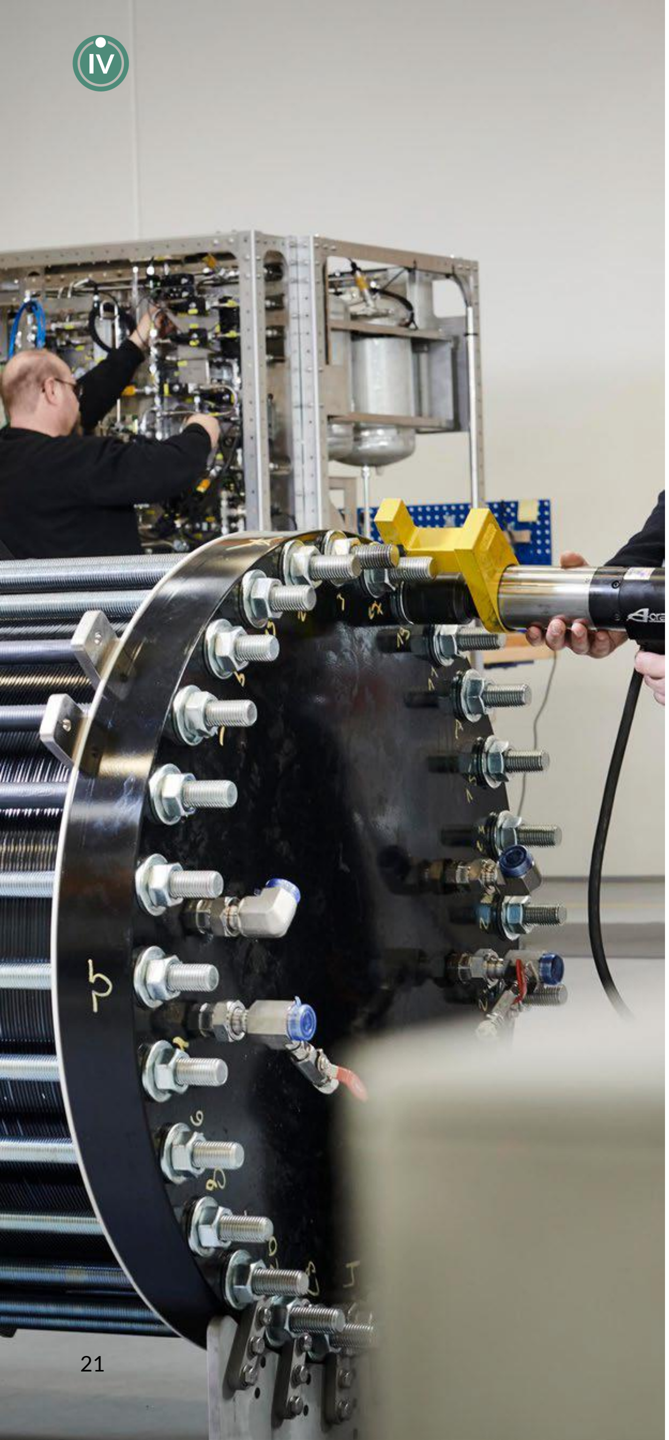
Notes: 1) No definitive agreements have been entered into or approvals obtained regarding the development and construction of additional facilities to support the increased production capacity. The Company expects to be able to enter into such agreements and obtain relevant approvals based on positive dialogues with the developer and the Muncipality of Kolding; 2)) Assumes the introduction of electrolysers with higher current density (A120 and A150 versions). Furthermore assumes learning curve effects, once industrial production is enabled and continuous improvements implemented; 3) At three shifts, but without new product launches and production efficiencies, the corresponding capacity would be ~250 MW. Source: Company information



GHS offers a well-positioned solution with several key selling parameters

FLEXIBLE

Solid capacity to operate dynamically at variable load rates

EFFICIENT

Competitive energy to hydrogen conversion rate

RELIABLE

High level of system uptime and durability

INDEPENDENT OF NOBLE METALS

Free from use of rare, noble metals such as iridium and platinum

MINIMUM FOOTPRINT

Minimal footprint relative to other electrolyser technologies

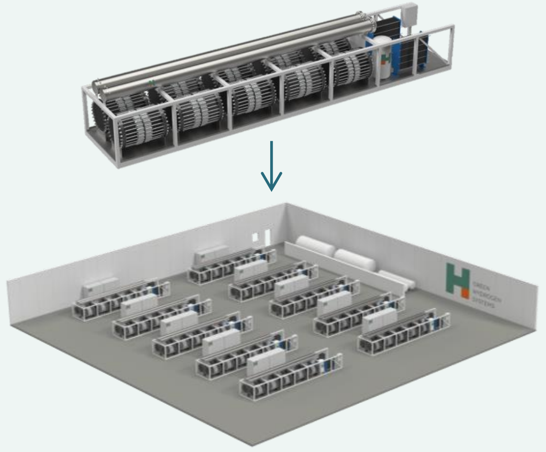
GHS' electrolysers have a modular and versatile design and are suited for serial production

IV

GHS provides a modular and versatile solution that is suited for scale-up and serial production

Modularity

Incremental build-out of plant exemplifies suitability for large-scale applications



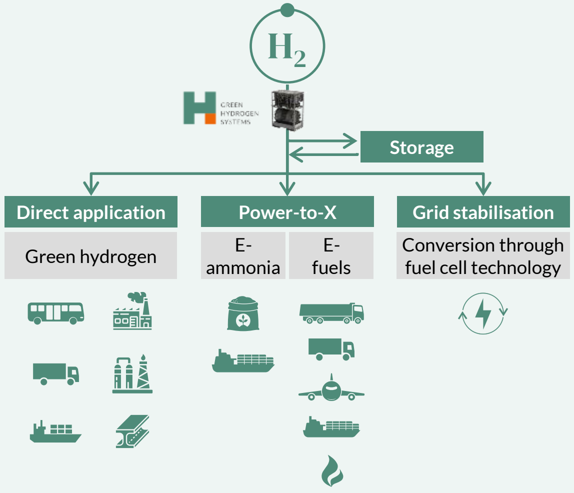
Illustrative 50 MW installation

Clustered solution

- Dynamic utilisation
- Automated redundancy
- Easy service and maintenance
- Incremental build-out

Versatility

Viable solution for all direct/indirect applications

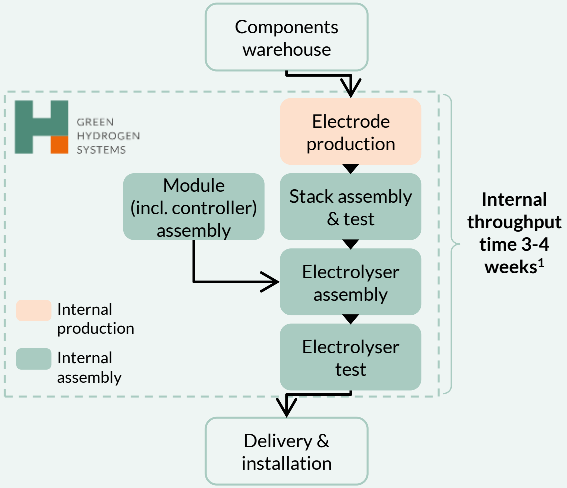


Key enablers for versatility

- Technology is compatible with renewable energy sources
- Small footprint with easy scalability
- High purity and low dew point

Serial production

Limited customisation allows for serial production



Standardised modules

Enables assembly-focused production setup and industrial approach to sourcing

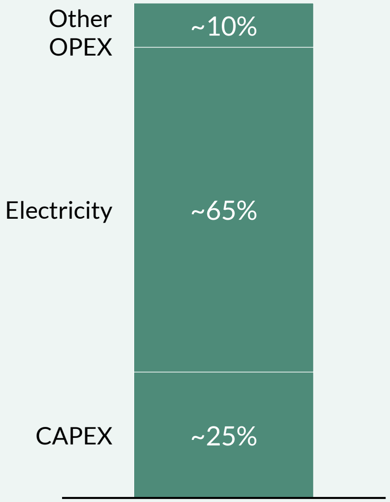
✓

Notes: 1) Throughput time of 3-4 weeks is end of 2021 target. +1 week if containerised system
Source: Company information

GHS can significantly influence key LCOH factors, enabling further cost-out potential

GHS' LCOH breakdown[1]

LCOH starting point estimated as competitive across technology regimes and competitors



Expected LCOH development

GHS has influence over majority of LCOH factors

H Factors under GHS' influence

LCOH

CAPEX

- H Electrolyser
- H Container
- H Stack replacement
- H Installation and delivery
- Site preparation
- Cost of capital

Electricity

- H System energy conversion efficiency
- Yearly hydrogen production
- Energy costs

Other OPEX

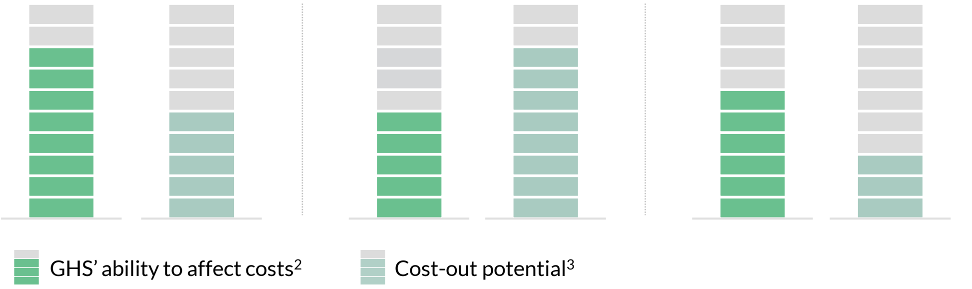
- H Operations and maintenance
- Cost for consumables (water & nitrogen)

Hydrogen production

- System capacity
- Load factor
- Utilisation factor

Underlying production assumptions for LCOH calculation

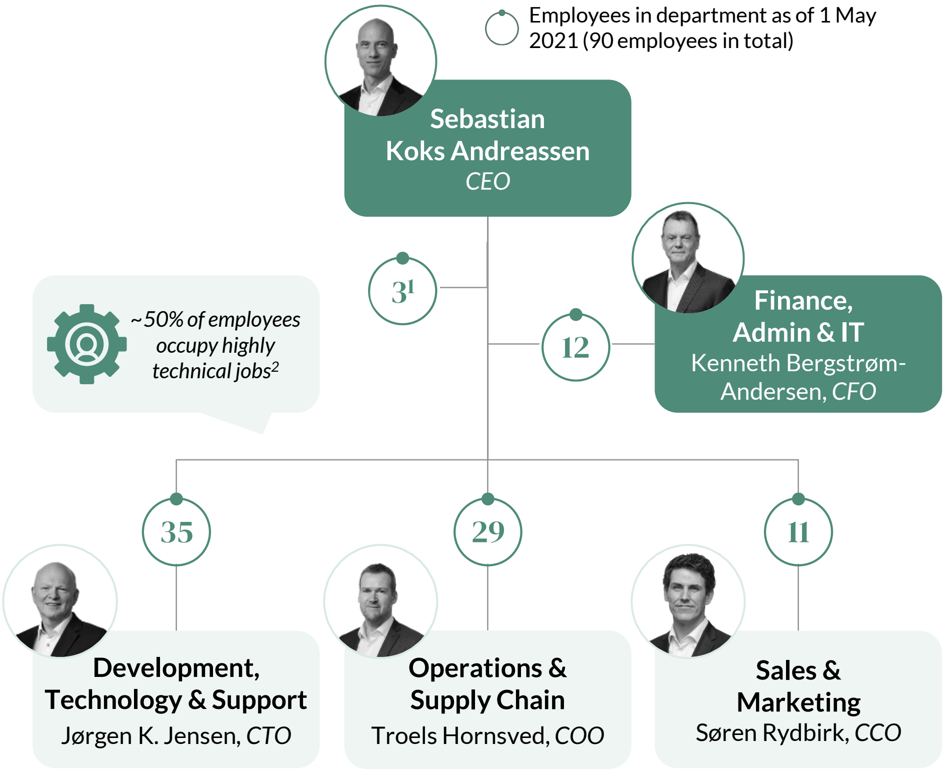
GHS' ability to affect costs and cost-out potential over time



Notes: 1) LCOH for GHS calculated based on estimated 2021 production cost side (i.e. without margins) for one A90 containerised unit (90 Nm3/h), assuming electricity input price of 40 EUR/MWh; 2) Indicative illustration of GHS' ability to affect costs based on influence over LCOH factors; 3) Indicative illustration of expected impact on LCOH over time. Source: Company information

Management team with high level of energy-sector and technology expertise backed by a professional Board of Directors

Organisational overview



Employees in department as of 1 May 2021 (90 employees in total)

~50% of employees occupy highly technical jobs[2]

Sebastian Koks Andreassen
CEO

3[1]

12

Finance, Admin & IT
Kenneth Bergstrøm-Andersen, *CFO*

35

Development, Technology & Support
Jørgen K. Jensen, *CTO*

29

Operations & Supply Chain
Troels Hornsved, *COO*

11

Sales & Marketing
Søren Rydbirk, *CCO*

Safety & health is the uncompromising priority number one, together with a dedicated focus on environmental standards and quality assurance (SHEQ)

Board of Directors

● Independent[3]

Thyge Boserup ●
Chairman of the Board
Green Hydrogen Systems Ørsted Saxo Bank DuPont Danisco

Troels Øberg
Vice Chairman of the Board
Nordic Alpha Partners AgroIntelli Flokk Ørsted

Thomas T. Andersen[4] ●
Board member
Ørsted LR VKR IMI Mærsk

Christian Clausen[5] ●
Board member
BlackRock [6] Sampo Nordic Alpha Partners BainCapital Nordea

Jakob Fuhr Hansen
Board member
Nordic Alpha Partners AgroIntelli Re-Match VF

Karen-Marie Katholm ●
Board member
DuPont NTG Nordic Terma

Lars Bertelsen ●
Board member
Norlys Eniig Aros Capital EY

Simon Ibsen ●
Board member
A.P. Møller KK Wind Solutions

Notes: 1) Including CEO Sebastian Koks Andreassen and two executive support employees (i.e. under no direct department); 2) Employees involved in highly technical engineering and R&D in 'Development, Technology & Support' and technical aspects of operations in 'Operations & Supply Chain' as a % of total employees; 3) Post-IPO independence; 4) Thomas T. Andersen has previously held an additional 3 board memberships that are not illustrated, including being Chairman of the Board for DeepOcean Group; 5) Christian Clausen has previously held an additional 8 board memberships that are not illustrated, including being President of Swedish Bankers Association; 6) Chairman of the Nordics. Source: Company information

GREEN HYDROGEN SYSTEMS

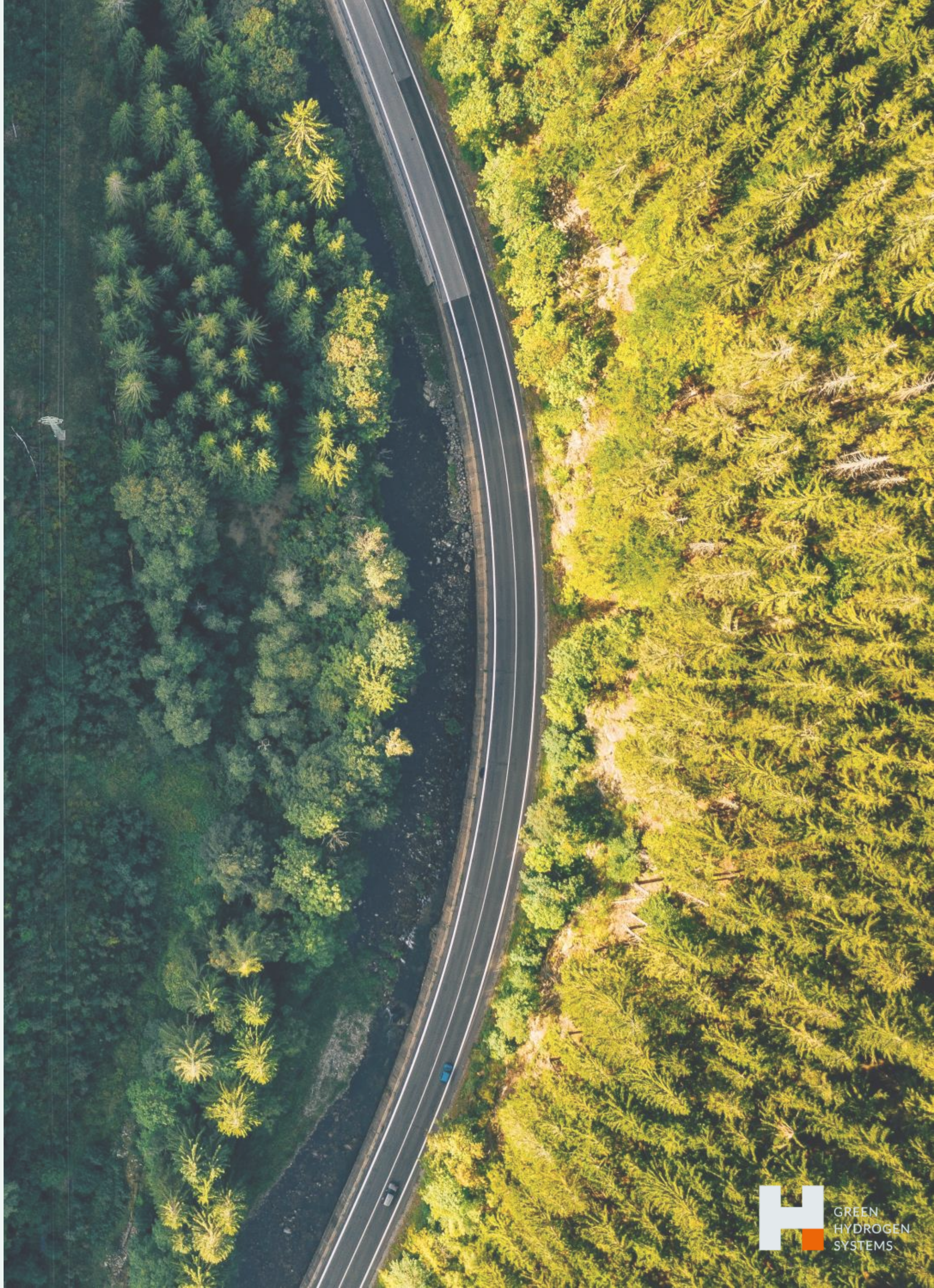
Guidance, medium-term targets and use of proceeds

Green Hydrogen Systems electrolyser stack

GHS' guidance for 2021

Guidance:	2021
Revenue[1]	DKK 40-60m
Gross profit[2]	Broadly neutral in absolute terms
EBITDA	DKK -105m to -115m
EBIT	DKK -120m to -130m
R&D	DKK 75-85m
CAPEX	DKK 30-35m *(CAPEX related to production and development equipment)*

Notes: 1) Revenue defined as revenue from customer contracts; 2) Gross profit is defined as revenue from customer contracts, less direct product and labour costs



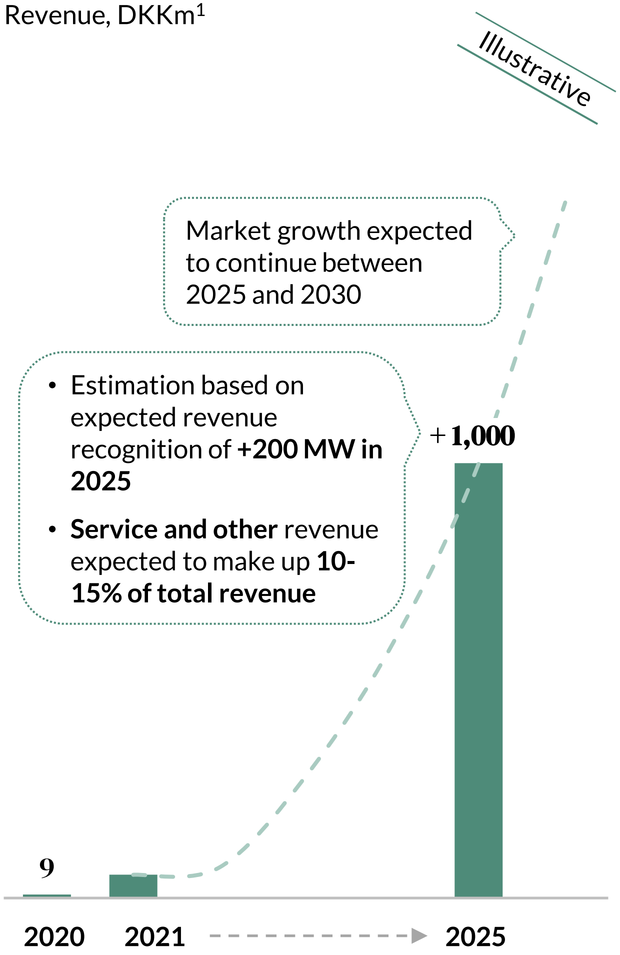
GHS' medium-term targets

Medium-term targets: 2025

Revenue[1]	**DKK +1,000m**
Gross profit[2]	**~25%** Gross profit margin by 2025
EBITDA	Upper-end **single-digit margin** by 2025
R&D	**DKK ~450m** total R&D spend towards 2025 *(of which ~10% is expensed)*
CAPEX	**DKK ~400m** Total CAPEX spend towards 2025 *(CAPEX related to production and development equipment)*

Targeted revenue development

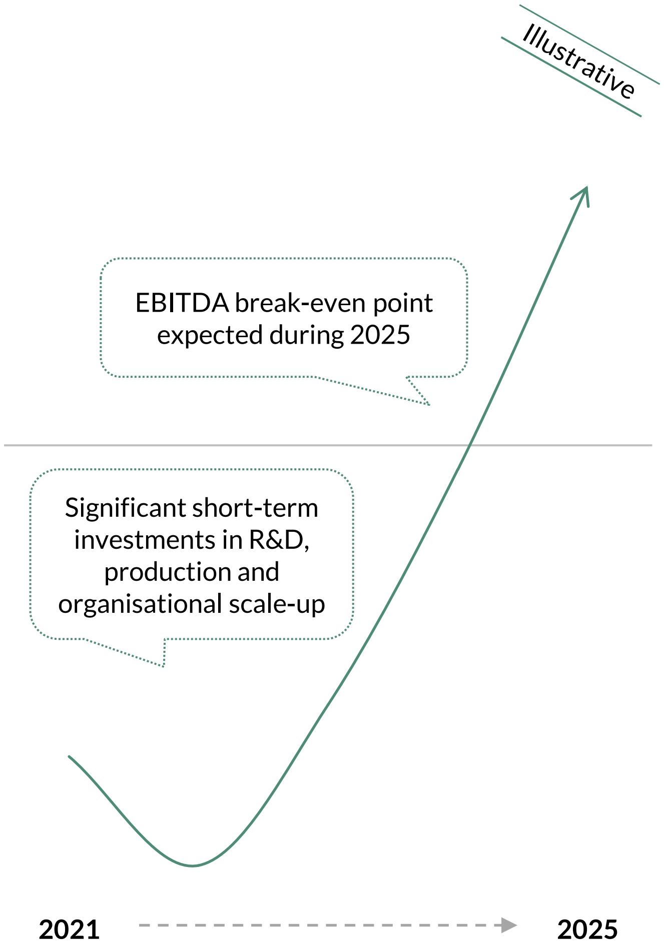
Revenue, DKKm[1]



Market growth expected to continue between 2025 and 2030

- Estimation based on expected revenue recognition of **+200 MW in 2025**
- **Service and other** revenue expected to make up **10-15% of total revenue**

Targeted EBITDA development



EBITDA break-even point expected during 2025

Significant short-term investments in R&D, production and organisational scale-up

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Notes: 1) Revenue defined as revenue from customer contracts; 2) Gross Profit is defined as revenue from customer contracts, less direct product and labour costs

Vision

Green Hydrogen Systems will pioneer the field of green hydrogen to drive a sustainable global energy transition

Mission

Advance and deploy our modular, standardised and versatile best-in-class electrolyser technology to drive and develop the market and meet the demand from customers and other stakeholders

Green Hydrogen Systems is well-positioned for an attractive growth trajectory, based on promising market and business fundamentals

- Attractive and rapidly expanding market driven by the need for a decarbonised energy system
- Favourably positioned with a commercially proven platform based on strong technological fundamentals and system design
- Well underway with capacity scale-up to meet surging demand

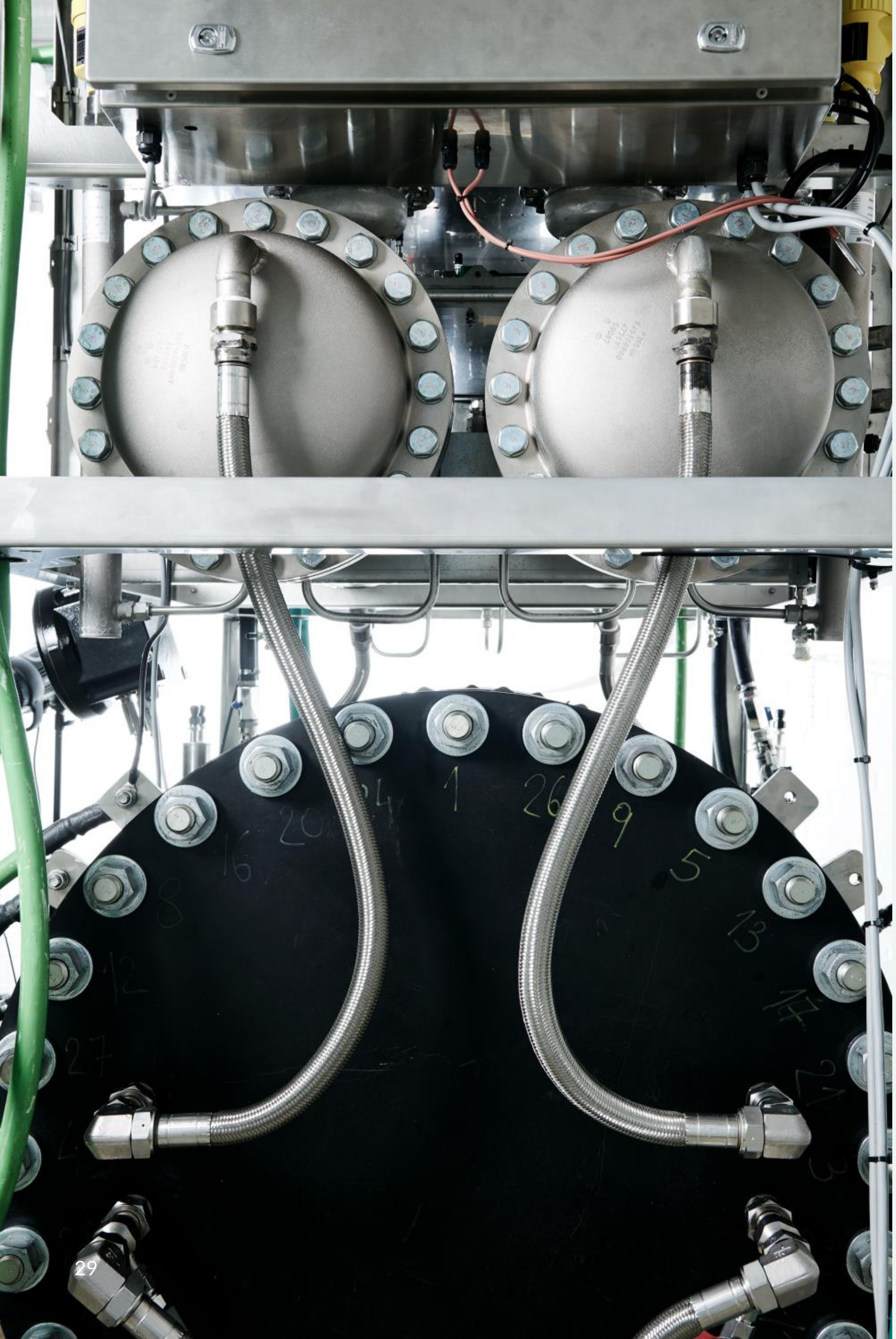
New capital and use of proceeds

Target: DKK ~1 billion in proceeds

Uses:

- Continuation of R&D efforts
- CAPEX investments to enable production scale up
- Expansion of sales and marketing efforts
- Organisational ramp-up and support initiatives
- Strengthening of balance sheet and general corporate purposes

Source: Company information



Appendices

Green hydrogen electrolyser

Income statement – Full year

Income statement (FY2018 – FY2020)

DKKm	FY2018	FY2019	FY2020
Revenue from customer contracts	4.2	14.2	9.4
Other operating income	0.2	1.9	2.8
Total revenue	**4.4**	**16.1**	**12.2**
Changes in inventory	4.1	(2.0)	0.0
Raw materials & consumables used	(8.1)	(11.0)	(17.2)
Work performed and capitalised	3.2	1.3	10.5
Employee costs	(4.5)	(8.7)	(39.6)
Other operating expenses	(2.9)	(7.5)	(35.6)
EBITDA	**(3.9)**	**(11.7)**	**(69.6)**
Depreciation and amortisation	(0.3)	(0.3)	(3.1)
EBIT	**(4.1)**	**(12.0)**	**(72.7)**
Financial income	0.0	0.0	0.0
Financial expenses	(0.0)	(0.1)	(2.9)
EBT	**(4.2)**	**(12.1)**	**(75.5)**
Income tax	1.4	1.4	2.3
Profit (loss) for the period	**(2.8)**	**(10.7)**	**(73.2)**

KPIs			
Order intake (DKKm)[1]	14.3	4.3	41.8
Order intake (MW)[1]	0.6	0.5	4.6
Total R&D spend (DKKm)[2]	4.6	5.6	20.4
Employees (end of period)	9	18	55

Commentary

Total revenue

- The MaHyTec (2018), Mariestad (2019), Aalborg (2019) and Siemens Gamesa (2020) projects generated revenue from customer contracts in the respective years. Revenue decrease from 2019 to 2020 was driven by orders expected in 2020 being postponed to 2021
- Other operating income comprises grants and subsidies for development projects, for example from the Danish Energy Agency and Innovation Fund Denmark
- Revenue from electrolyser sales and installation is recognised at site acceptance test (SAT). Revenue from service is recognised following SAT and is periodic, but exact timing varies from project to project

COGS

- Higher sales as well as inventory write-downs related to electrode production, sourced components and old technology have driven the increase in raw materials & consumables used
- Work performed and capitalised was driven by a higher R&D activity
- R&D costs are expensed and capitalised, respectively, based on IFRS recognition criteria for intangible assets

Employee costs and other operating expenses

- The increase in employee costs can be attributed to the organisational ramp-up as well as value adjustments to warrants in 2020
- Other operating expenses comprise costs related to facilities, sales & marketing, administration and other, where development from 2019 to 2020 was mainly driven by consulting fees

Depreciation and amortisation

- The increase in 2020 was primarily driven by initiated depreciation of development projects taken into use and depreciation of new right-of-use assets including leased buildings and cars

Notes: Figures reported on IFRS basis. 1) Based on orders signed during the year; 2) Including indirect production costs
Source: Annual report for 2020 and comparable figures for 2019 and 2018

Balance sheet – Full year

Total assets (Dec-18 – Dec-20)

DKKm	Dec-18	Dec-19	Dec-20
Intangible assets	5.5	7.0	16.5
Property, plant and equipment	0.2	0.2	20.6
Right-of-use assets	-	0.4	14.5
Deposits	0.0	0.0	6.2
Non-current assets	**5.7**	**7.6**	**57.8**
Inventories	4.7	8.0	7.6
Trade receivables	1.2	12.6	4.1
Income tax receivables	1.4	1.4	2.5
Prepayments	0.1	0.2	0.2
Other receivables	0.8	1.7	4.7
Cash and cash equivalents	0.6	9.4	156.0
Current assets	**8.8**	**33.3**	**175.1**
Total assets	**14.5**	**40.9**	**232.9**

Total liabilities (Dec-18 – Dec-20)

DKKm	Dec-18	Dec-19	Dec-20
Equity including reserves	12.9	45.3	88.3
Retained earnings	(12.8)	(24.8)	(92.4)
Total equity	**0.1**	**20.5**	**(4.1)**
Borrowings	2.9	3.3	170.3
Lease liabilities	-	0.1	12.3
Provisions	-	0.2	-
Other payables	-	0.3	1.4
Non-current liabilities	**2.9**	**3.9**	**183.9**
Borrowings	-	0.5	4.1
Trade payables	1.1	5.6	25.4
Lease liabilities	-	0.2	2.2
Contract liabilities	6.7	5.6	7.9
Deferred income	2.9	3.4	3.2
Provisions	0.2	0.4	1.0
Other payables	0.5	0.6	9.2
Current liabilities	**11.4**	**16.4**	**53.0**
Total liabilities	**14.4**	**20.4**	**237.0**
Total equity and liabilities	**14.5**	**40.9**	**232.9**

- Intangible assets was in 2020 driven by increase in development activities and technology
- PPE mainly comprises GHS-owned test facilities (DKK ~10m), test equipment (DKK ~7m) as well as production equipment for the new production facility (DKK ~2m)
- Right-of-use assets and deposits relate to leasing of the new HQ facility and cars, which is also reflected in higher lease liabilities in 2020
- Development in inventories and trade receivables reflect the change in project activity

- Borrowings comprise loans from the Danish Green Investment Fund (DKK ~17m), APMH (DKK ~111m) and existing shareholders (DKK ~43m), which is also reflected in the higher cash & cash equivalents in 2020
- Increase in trade payables can be attributed to change in project activity and consulting fees
- Contract liabilities include prepayments from customers
- Other payables are higher as a result of increasing payroll liabilities (FTE ramp-up) and derivative elements in borrowings (DKK ~3m)

Notes: Figures reported on IFRS basis
Source: Annual report for 2020 and comparable figures for 2019 and 2018

Cash flow statement – Full year

Cash flow statement (FY2018 – FY2020)

DKKm	FY2018	FY2019	FY2020
Profit (loss) for the period	(2.8)	(10.7)	(73.2)
Changes in net working capital	2.0	(11.4)	31.3
Adjustments	(0.9)	(0.4)	16.0
Interests received	0.0	0.0	0.0
Interests paid	(0.0)	(0.5)	(0.6)
Income taxes paid/received	0.4	1.4	1.4
CF from operating activities	**(1.3)**	**(21.7)**	**(25.2)**
Payment for PPE	(0.1)	(0.1)	(20.6)
Payment for development costs	(3.7)	(1.3)	(11.0)
CF from investing activities	**(3.8)**	**(1.4)**	**(31.6)**
Principal elements of lease payments	-	(0.0)	(1.0)
Proceeds from borrowings	2.9	5.4	203.0
Repayment of borrowings	-	(4.5)	(0.7)
Proceeds from share issues	1.9	31.0	3.1
Purchase of treasury shares	-	-	(1.1)
CF from financing activities	**4.8**	**31.9**	**203.3**
Net cash flow for the year	**(0.3)**	**8.8**	**146.5**

KPIs			
Tangible CAPEX (DKKm)	(0.1)	(0.1)	(20.6)
Intangible CAPEX (DKKm)	(3.8)	(1.7)	(11.5)
Net working capital (DKKm)	(4.4)	7.0	(24.3)
Cash spend (DKKm)	(5.1)	(23.1)	(56.8)

Notes: Figures reported on IFRS basis
Source: Annual report for 2020 and comparable figures for 2019 and 2018

Commentary

CF from operating activities

- Changes in net working capital can primarily be explained by higher trade receivables (DKK ~10m) from 2018 to 2019 and by higher trade payables (DKK ~20m) and other payables (DKK ~13m) from 2019 to 2020
- Adjustments primarily comprise warrants, D&A and value adjustment of derivative elements in borrowings

CF from investing activities

- Investing activities include payments related to GHS-owned test facilities, test equipment, production equipment for the new production facility as well as R&D costs for development activities

CF from financing activities

- Proceeds from borrowings in 2020 derive from APMH investing in GHS alongside existing shareholders Nordic Alpha Partners and Norlys
- Proceeds from share issues relate to two investments rounds in 2019 (entry by Nordic Alpha Partners) and 2020 (capital raise from existing shareholders)

KPIs

- Tangible CAPEX includes payments for PPE, reflecting investments in facilities and equipment for test and production
- Intangible CAPEX includes R&D costs for development activities
- Cash burn reflects cash flows from operating and investing activities
- Net working capital includes deposits, inventories, trade receivables and payables, prepayments, contract liabilities, deferred income and other receivables and payables

Income statement – Quarterly

Income statement

DKKm	Q1 2021	Q1 2020
Revenue from customer contracts	0.3	0.1
Other operating income	0.3	1.3
Total revenue	**0.6**	**1.4**
Changes in inventory	1.0	0.7
Raw materials & consumables used	(3.2)	(3.2)
Work performed and capitalised	6.6	1.2
Employee costs	(23.1)	(4.7)
Other operating expenses	(18.2)	(2.9)
EBITDA	**(36.5)**	**(7.5)**
Depreciation and amortisation	(1.7)	(0.6)
EBIT	**(38.2)**	**(8.1)**
Financial income	0.0	0.0
Financial expenses	(6.2)	(0.0)
EBT	**(44.3)**	**(8.1)**
Income tax	1.4	0.3
Profit (loss) for the period	**(43.0)**	**(7.9)**

Commentary

Total revenue

- Increase in revenue from customer contracts in Q1 2021 is mainly related to product revenue in GHS' industry segment coming from Europe
- A reduction in other operating revenue is related to reduced government grants

COGS

- Increase in total costs reflects the ramp-up of the company
- Work performed and capitalised was driven by a higher R&D activity
- R&D costs are expensed and capitalised, respectively, based on IFRS recognition criteria for intangible assets

Employee costs and other operating expenses

- The increase in employee costs are attributed to the organisational ramp-up as well as value adjustments to warrants
- Other operating expenses comprise costs related to facilities, sales & marketing, administration and other, where development from Q1 2020 to Q1 2021 was mainly driven by consulting fees

Depreciation and amortisation

- The increase in Q1 2021 was primarily driven by initiated depreciation of development projects taken into use and depreciation of new right-of-use assets including leased buildings and cars

Notes: Figures reported on IFRS basis.
Source: Interim report for March 2021

Balance sheet – Quarterly

Total assets

DKKm	Mar-21	Dec-20	Mar-20
Intangible assets	23.0	16.5	7.8
Property, plant and equipment	25.5	20.6	0.2
Right-of-use assets	37.9	14.5	0.6
Income tax receivables	1.4	-	-
Deposits	7.2	6.2	3.2
Non-current assets	**94.9**	**57.8**	**11.8**
Inventories	16.7	7.6	10.2
Trade receivables	0.4	4.1	1.5
Income tax receivables	2.5	2.5	1.7
Prepayments	1.2	0.2	0.2
Other receivables	8.2	4.7	3.2
Cash and cash equivalents	102.6	156.0	1.2
Current assets	**131.7**	**175.1**	**18.0**
Total assets	**226.6**	**232.9**	**29.8**

Total liabilities

DKKm	Mar-21	Dec-20	Mar-20
Equity including reserves	93.8	88.3	44.9
Retained earnings	(135.5)	(92.4)	(33.3)
Total equity	**(41.6)**	**(4.1)**	**11.6**
Borrowings	175.9	170.3	3.3
Lease liabilities	33.2	12.3	-
Other payables	1.4	1.4	0.3
Non-current liabilities	**210.4**	**183.9**	**3.6**
Borrowings	4.4	4.1	0.5
Trade payables	26.5	25.4	2.6
Lease liabilities	4.9	2.2	0.6
Contract liabilities	12.4	7.9	5.6
Deferred income	2.2	3.2	3.5
Provisions	1.6	1.0	0.6
Other payables	5.8	9.2	1.2
Current liabilities	**57.8**	**53.0**	**14.6**
Total liabilities	**268.2**	**237.0**	**18.2**
Total equity and liabilities	**226.6**	**232.9**	**29.8**

- Intangible assets increased in Q1 2021 primarily as a result of increase in development projects and acquisition of new software licenses
- PP&E mainly comprises GHS-owned test facilities, test equipment as well as production equipment for the new production facility
- Right-of-use assets and deposits relate to leasing of the new HQ facility and cars
- Development in inventories and trade receivables reflect the change in project activity

- Increase in trade payables since Q1 2020 can be attributed to change in project activity and consulting fees
- Contract liabilities include prepayments from customers
- Other payables are higher as a result of increasing payroll liabilities (FTE ramp-up) and derivative elements in borrowings

Notes: Figures reported on IFRS basis
Source: Interim report for March 2021

Cash flow statement – Quarterly

Cash flow statement

DKKm	Q1 2021	Q1 2020
Profit (loss) for the period	(43.0)	(7.9)
Changes in net working capital	(10.7)	1.8
Adjustments	11.9	0.3
Interests received	-	-
Interests paid	(0.8)	(0.1)
Income taxes paid/received	-	(0.0)
CF from operating activities	**(42.6)**	**(5.8)**
Payment for PPE	(4.4)	(0.0)
Payment for development costs	(6.5)	(1.2)
CF from investing activities	**(10.9)**	**(1.2)**
Principal elements of lease payments	(0.6)	(0.1)
Proceeds from share issues	0.7	-
Purchase of treasury shares	-	(1.1)
CF from financing activities	**0.2**	**(1.1)**
Net cash flow for the period	**(53.3)**	**(8.2)**

Commentary

CF from operating activities

- Changes in net working capital can primarily be explained by increase in inventories
- Adjustments primarily comprise warrants, D&A and value adjustment of derivative elements in borrowings

CF from investing activities

- Investing activities include payments related to GHS-owned test facilities, test equipment, production equipment for the new production facility as well as R&D costs for development activities

CF from financing activities

- Proceeds from share issues relate to proceeds from share issues

KPIs

- Tangible CAPEX includes payments for PPE, reflecting investments in facilities and equipment for test and production
- Intangible CAPEX includes R&D costs for development activities
- Cash burn reflects cash flows from operating and investing activities
- Net working capital includes deposits, inventories, trade receivables and payables, prepayments, contract liabilities, deferred income and other receivables and payables

Notes: Figures reported on IFRS basis
Source: Interim report for March 2021

Building on 13+ years R&D of modular pressurised alkaline electrolysers, GHS is now ready for significant scale-up

Company history

Technology development

2007

Founded in Kolding (Denmark)

2016

Development of HyProvide™ A-Series Mk0[1] finalised in collaboration with Siemens and DTU

2017

HyProvide A-Series Mk0[1] ready for commercial launch

- Founding phase with focus on product and technology development of modular pressurised alkaline electrolysers
- Several years of trial-and-error (10 years) needed to calibrate product for commercial launch and establish a competitive edge

Commercialisation

2017

First order received for HyProvide A-Series Mk0[1]

2019

Nordic Alpha Partners entered as new main investor

2020

Orders received from Siemens Gamesa and Ørsted. 12MW in final neg. of commercial terms with GreenLab Skive

- Initiation of commercial platform, including first orders received
- Following commercial proof-of-concept, Nordic Alpha Partners entered as new main investor to ramp up GHS' activities

Scale-up

2020

APMH entered as a new investor

2020

Nordager production facility completed[2]. Organisational ramp-up accelerated

2021

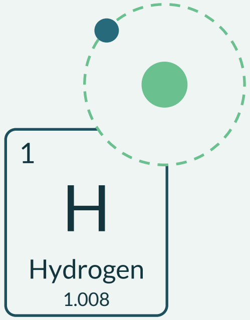
A90[3] serial production and development of new HyProvide™ X-Series[4] commenced

- GHS initiated scale-up of production capacity and its organisation to capture a significant part of the green hydrogen market
- APMH entered as investor to further support GHS' growth journey

Notes: 1) Mk0 refers to first version of the A-Series; 2) Construction of buildings finalised in November 2020. Production facility was ready in 2020 and testing facility in January 2021. 3) Latest unit in the HyProvide™ A-Series; 4) Upcoming product series with expectation of up to 7.5 MW max module power consumption (see page 12 for product overview). Source: Company information

Hydrogen is a clean, efficient and versatile energy carrier

Introduction to hydrogen and key advantages

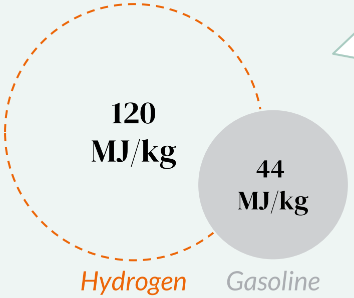


The first element in the periodic table and the **smallest and lightest atom**

Hydrogen is the **most abundant substance in the universe**

1. Hydrogen releases no GHG when burned and can be produced with **zero carbon footprint** if made via electrolysis (splitting hydrogen from water) with renewable energy (“**green hydrogen**”)
2. **Highly versatile** with multiple direct applications in transportation and industry, indirect applications in Power-to-X as a basis for production of ammonia and e-fuels and in grid stabilisation
3. **High gravimetric energy density,** implying that hydrogen can efficiently store energy with minimal energy loss, both over time and across distances

Energy density on a mass basis



Energy density of hydrogen in practical use depends on storage methods, which are continuously being optimised

Production methods

GHG emissions at production[2]

0 kg CO_2 e/kgH_2

Green hydrogen

Made through electrolysis using 100% renewable energy – expected to account for the lion’s share of future hydrogen production[3]

9 kg CO_2 e/kgH_2

Grey hydrogen

Made using fossil fuels such as natural gas, oil and coal – accounts for the majority of current hydrogen production; however, expected to decrease significantly[3]

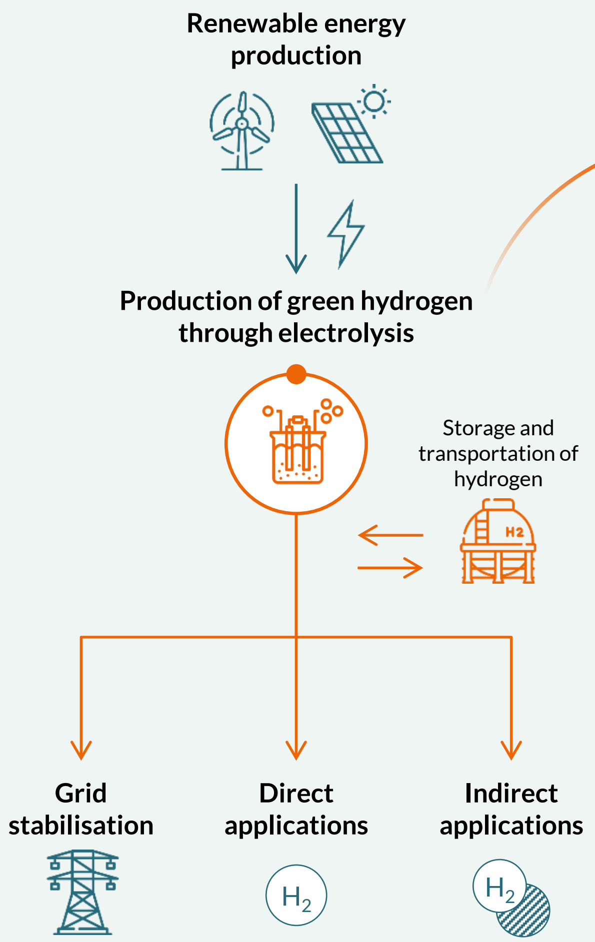
~1 kg CO_2 e/kgH_2
(assuming 90% capture)

Blue hydrogen

Hydrogen production, which is decarbonised through carbon capture – in a European context, blue hydrogen is estimated to fulfil a more transitional role towards green hydrogen[3]

Notes: 1) Based on US Department of Energy (2020) – Hydrogen Storage; 2) CO_2 footprint based on Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020); 3) McKinsey – Net-Zero Europe (2020). Source: Shell - Shell Hydrogen Study – Energy of the Future? (2017); US Department of Energy – Hydrogen Storage (2020); Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020)

Hydrogen electrolysis splits water into hydrogen and oxygen



Renewable energy production

Production of green hydrogen through electrolysis

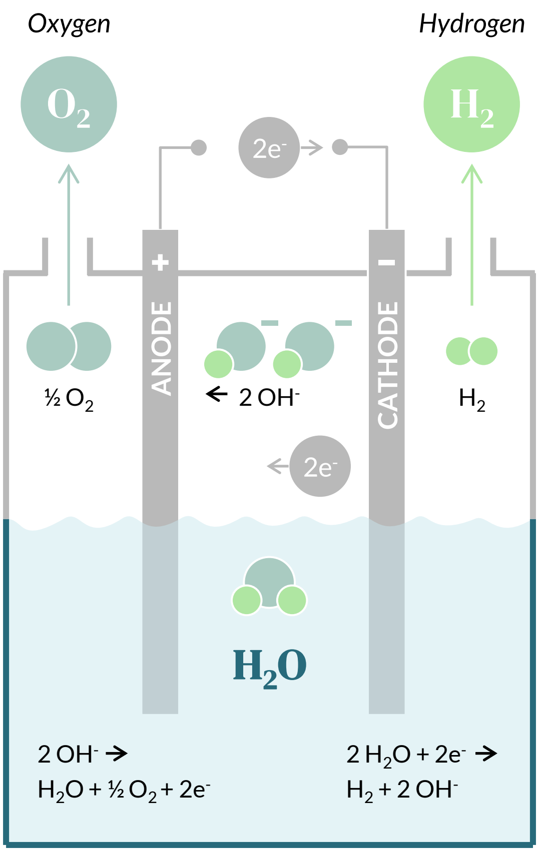
Storage and transportation of hydrogen

Grid stabilisation

Direct applications

Indirect applications

Hydrogen electrolysis process



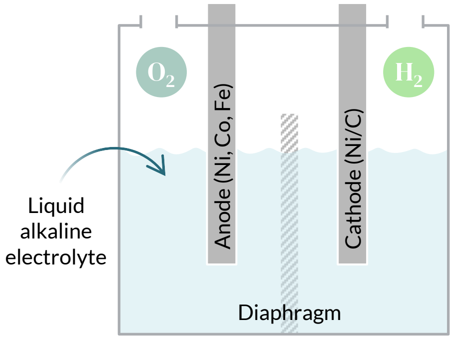
Hydrogen electrolysis is a process that splits water into hydrogen and oxygen using electricity

If the electricity is derived from renewable energy sources, the produced hydrogen is considered green

The process of green hydrogen electrolysis is completely fossil-free, as the only by-product is oxygen and the power used in electrolysis is generated from renewable sources

Currently offered technologies on the electrolyser market primarily consist of atmospheric and pressurised alkaline and PEM

Atmospheric alkaline



Relatively mature technology with long commercial history

Long history in the chemicals industry

Has been through continuous development since the late 1800s to early 1900s

Pressurised alkaline

Same fundamental operating principle as atmospheric alkaline; however, with operation at higher pressure

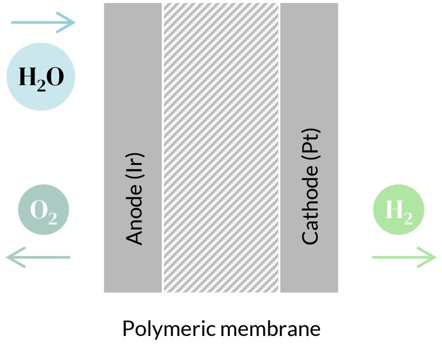
Development on the mature atmospheric alkaline mature technology

First pressurised system was developed in the late 1940s

GHS represents the 4th generation of pressurised electrolysers

PEM

(Polymer electrolyte membrane)



Relatively newer technology with short commercial history

First developed for small commercial applications in the 00s, based on development over the previous 20-30 years

GREEN
HYDROGEN
SYSTEMS

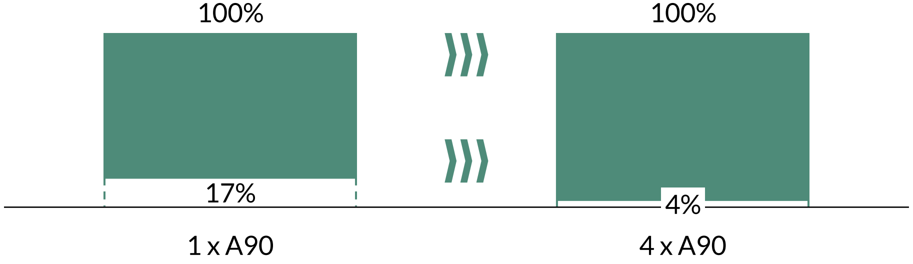
Source: Yujing Guo et al – IOP Conf. Series – Comparison between hydrogen production by alkaline water electrolysis and hydrogen production by PEM electrolysis (2019); Foteini et al., Progress in Energy and Combustion Science – Electrocatalysts for the generation of hydrogen, oxygen and synthesis gas (2017); Diego et al – Quim. Nova – Hydrogen production by alkaline water electrolysis (2012)

GHS' technology is suited for renewable energy sources due to its operating flexibility while being independent of scarce resources

Operating flexibility

GHS' static flexibility measured by the static range[1]

Multiple stacks can facilitate a higher static range and makes GHS' flexibility competitive across technologies and competitors



GHS' dynamic flexibility measured by ramp-up/ramp-down rates[2]

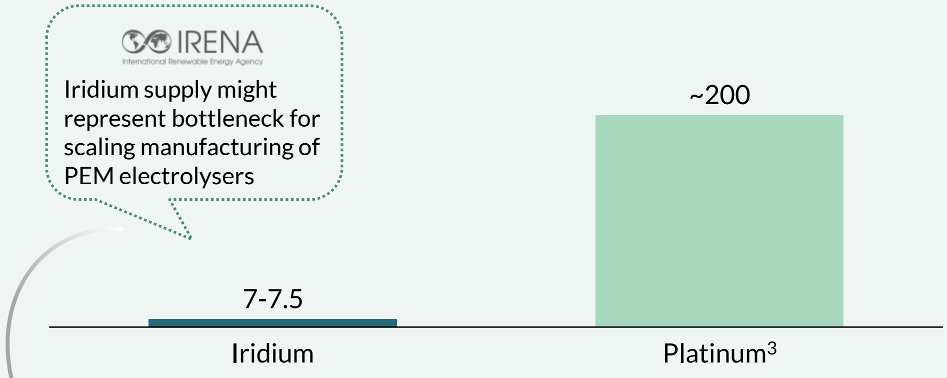
Competitive ramp-up rate that matches renewable power output fluctuations in e.g. a wind farm

25%/s
Ramp-up rate

4 s
Load factor 0-100%

Scarce resources used in PEM

Global production of scarce resources that PEM depends on (t/year)



Iridium supply might represent bottleneck for scaling manufacturing of PEM electrolysers

Resources required in PEM hydrogen production

Iridium	Platinum
1-2.5 g/kW	1 g/kW

Estimated annual PEM electrolysis capacity based on iridium and platinum supply

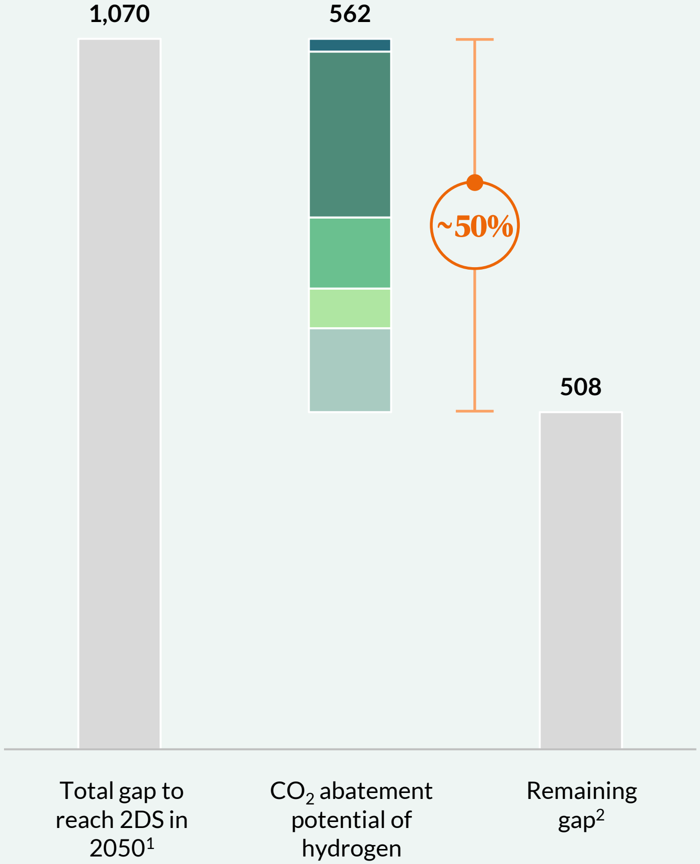
Iridium	Platinum
2.8-7.5 GW	~80 GW

Notes: 1) Static range flexibility is understood as the minimum and maximum range of electric loads at which the electrolyser can continue operations without risk of crossover. During operation, especially at lower loads, hydrogen can permeate through the diaphragm towards the oxygen side (crossover), increasing the risk of oxyhydrogen production; 2) Ramp-up/ramp-down rates are determined by the percentage change in load possible per second; 3) Global platinum production can potentially be increased through recycling of catalytic reformers in cars and electronic equipment. Source: Company information; IRENA – Green hydrogen cost reductions (2020)

Green hydrogen to play a key role in decarbonising energy systems

Green hydrogen is estimated to be able to contribute 50% of the necessary European CO_2 reduction[1]

From EU FCH. CO_2 avoidance potential by segment, 2050, Mt



Enable the renewable energy system

19mt — **Renewables integration and power generation**

Enable sector coupling, connecting renewable energy to e.g. transportation and enable transportation of renewable energy across distances

Viable option for storage of (surplus) renewable energy as batteries are not suitable for storing large amounts of energy

Decarbonise end uses

250mt — **Transportation**

Replacement of combustion engines in cars, trains and ships with hydrogen powered units, along with decarbonisation of fuels through hydrogen-based synthetic fuels

107mt — **Building heating & power**

Decarbonisation of natural gas heating for aging building stock through blending with existing grid – or complete conversion to synthetic natural gas

60mt — **Industry heat**

Replacement of natural gas for high grade heat processes, where electrification becomes less efficient (relative to low- and medium grade heat)

126mt — **Industry feedstock**

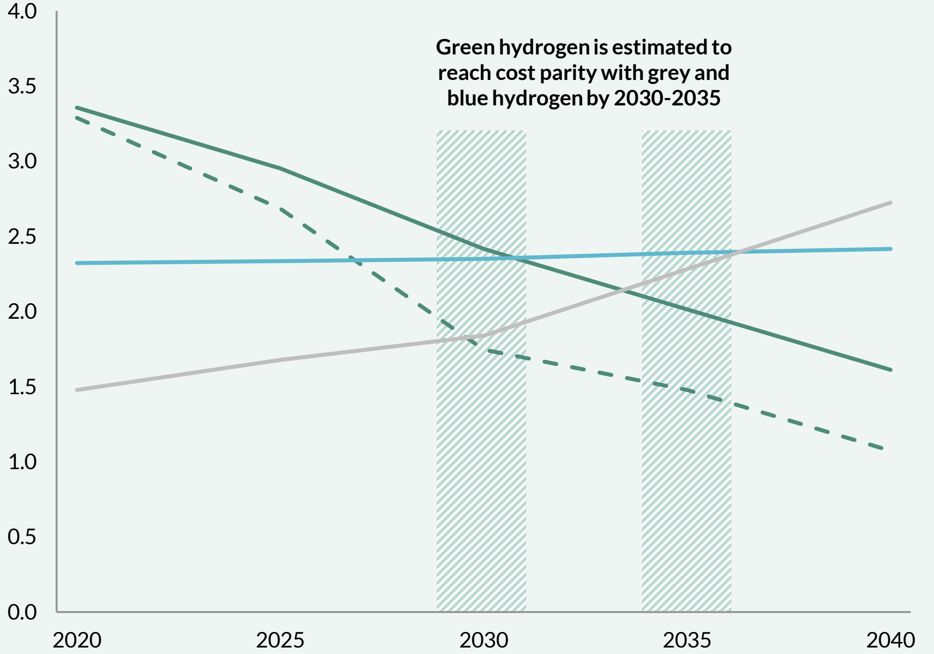
Switch from grey hydrogen production to green for current usages as industry feedstock, and develop new feedstock uses, e.g. in steel production to switch away from blast furnaces

Notes: 1) Estimated CO_2 reduction required to reach a 2-degree consistent pathway in Europe as set out by the Paris Agreement; 2) Remaining gap expected to be covered by other levers such as electric vehicles and shift to more renewable energy generation (solar, wind, etc. instead of coal and other traditional sources). Source: EU FCH – Hydrogen Roadmap Europe (2019)

Green hydrogen is expected to be a competitive zero-carbon option across several applications by 2030

Est. development in production cost of hydrogen[1]

From Dansk Energi. Price development for hydrogen produced in Denmark, EUR/kg. H_2



Green hydrogen is estimated to reach cost parity with grey and blue hydrogen by 2030-2035

Central estimate

Low estimate

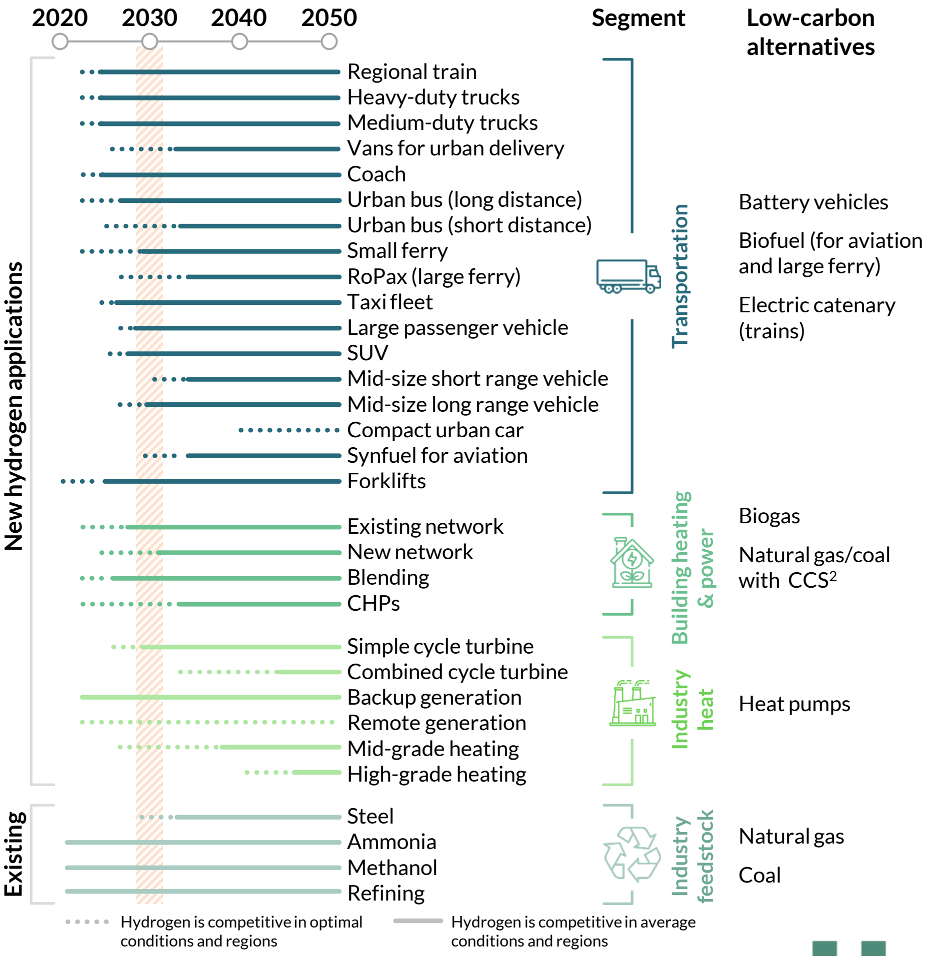
Green hydrogen
Decreasing cost driven by falling prices on renewable energy and gradual maturity of electrolysis technology and manufacturing

Blue hydrogen
Relatively flat cost per kg with slight increase from increasing CO_2 quota on the ~10% CO_2 which cannot be carbon captured

Grey hydrogen
Currently, grey hydrogen receives free CO_2 quotas from the EU – this is expected to be removed, resulting in a significant price increase

Hydrogen path to cost-parity with low-carbon options[2]

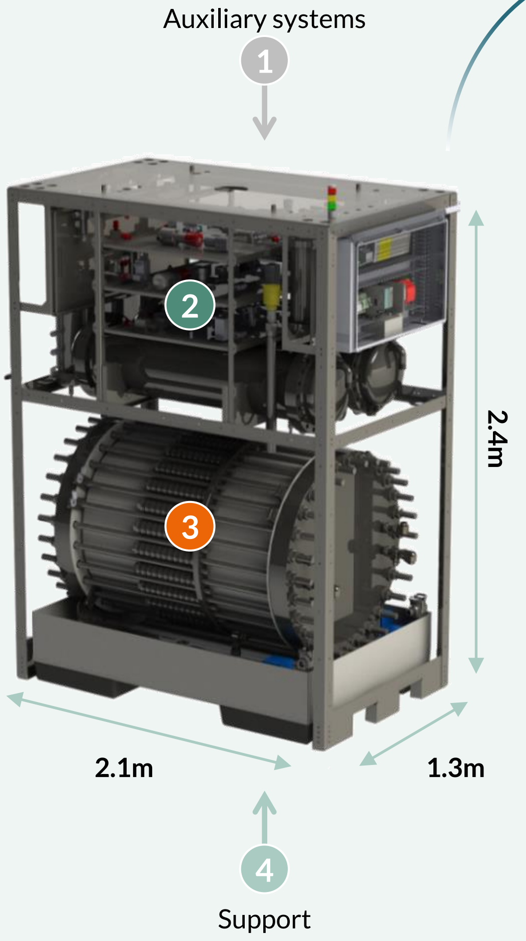
From Hydrogen Council. Measures hydrogen competitiveness vs best low-carbon alternative



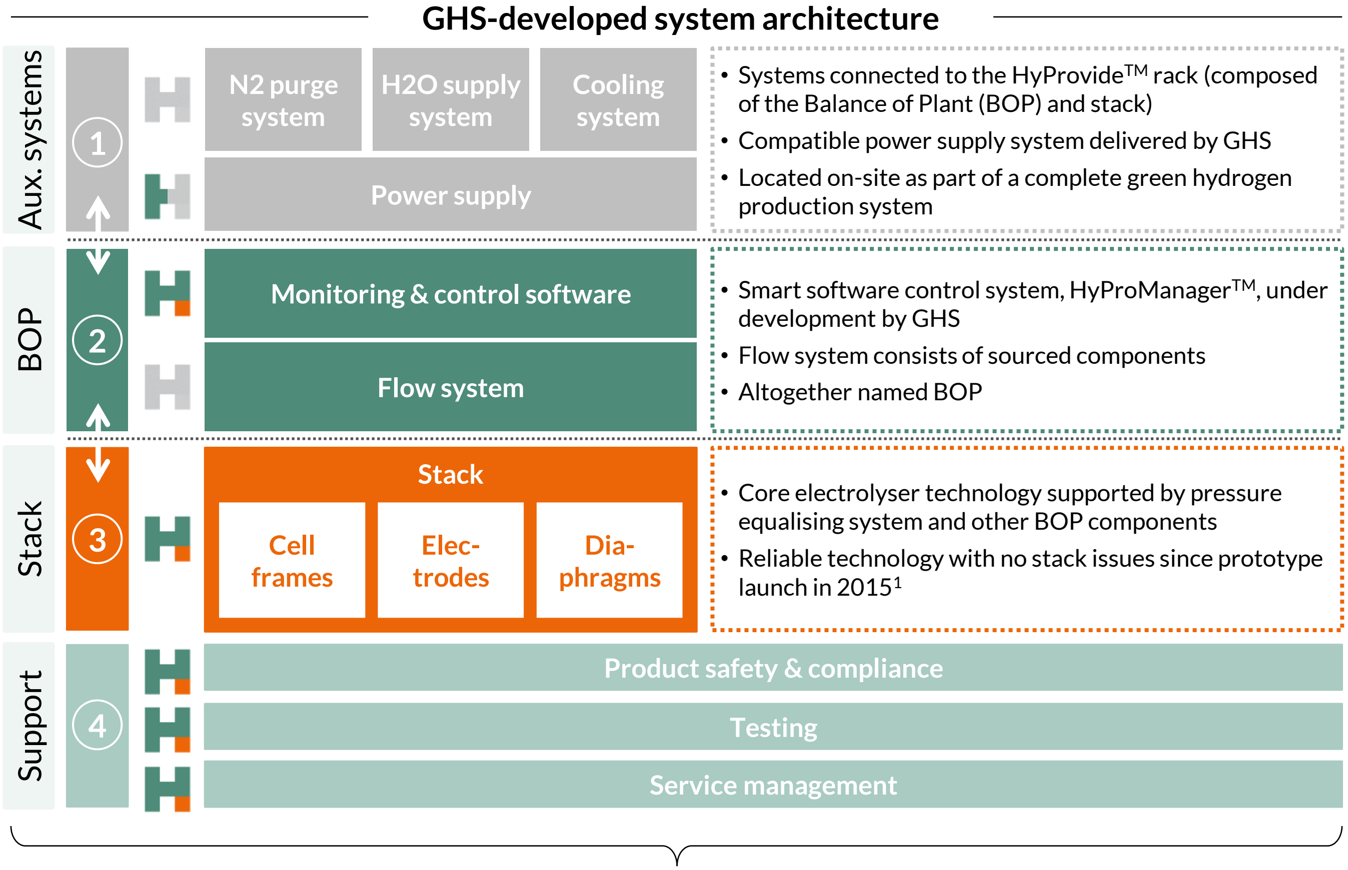
Notes: 1) Based on Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020); 2) Based on Hydrogen Council – Path to hydrogen competitivenes (2020) – shows competitiveness with alternative low-carbon options; 2) CCS: Carbon Capture and Storage. Source: Dansk Energi – Anbefalinger til en dansk strategi for Power-to-X (2020); Hydrogen Council – Path to competitiveness (2020)

The A-Series platform is built on a GHS-developed system architecture with mature subsystems

The HyProvide™ A-Series



Platform system architecture and subsystems



Aux. systems

- Systems connected to the HyProvide^{TM} rack (composed of the Balance of Plant (BOP) and stack)
- Compatible power supply system delivered by GHS
- Located on-site as part of a complete green hydrogen production system

BOP

- Smart software control system, HyProManager^{TM}, under development by GHS
- Flow system consists of sourced components
- Altogether named BOP

Stack

- Core electrolyser technology supported by pressure equalising system and other BOP components
- Reliable technology with no stack issues since prototype launch in 2015[1]

System architecture and mature subsystems working in unison enable a robust electrolyser platform

GHS core technology & processes

GHS peripheral technology

Notes: 1) Incl. 8,000 hours of extreme condition tests
Source: Company information

Modular system design enables targeting of increasingly large projects

Modular system design

- Standardised and pre-tested "plug-and-play" electrolyser modules
- Quick and easy addition/ installation of new modules on-site like building blocks
- Fully automated operation with minimal manpower requirements[1]
- Modular in-a-box design allowing for clustered solutions and incremental project build-out
- Small footprint/MW consumption increasing number of applications

Scalable and footprint efficient offering

Multi-MW projects

GreenLab skive

~45 x A90

GHS electrolysers

24 MW

Electrolysis capacity[2]

6 sqm./MW[3]
Factory floor
system footprint

33 sqm./MW[4]
Containerised
system footprint

Future GW-scale projects

X-Series ready for commercialisation in 2023

Beyond 2025

~133 x 7.5MW[5]

GHS electrolysers

GW scale

Electrolysis capacity[6]

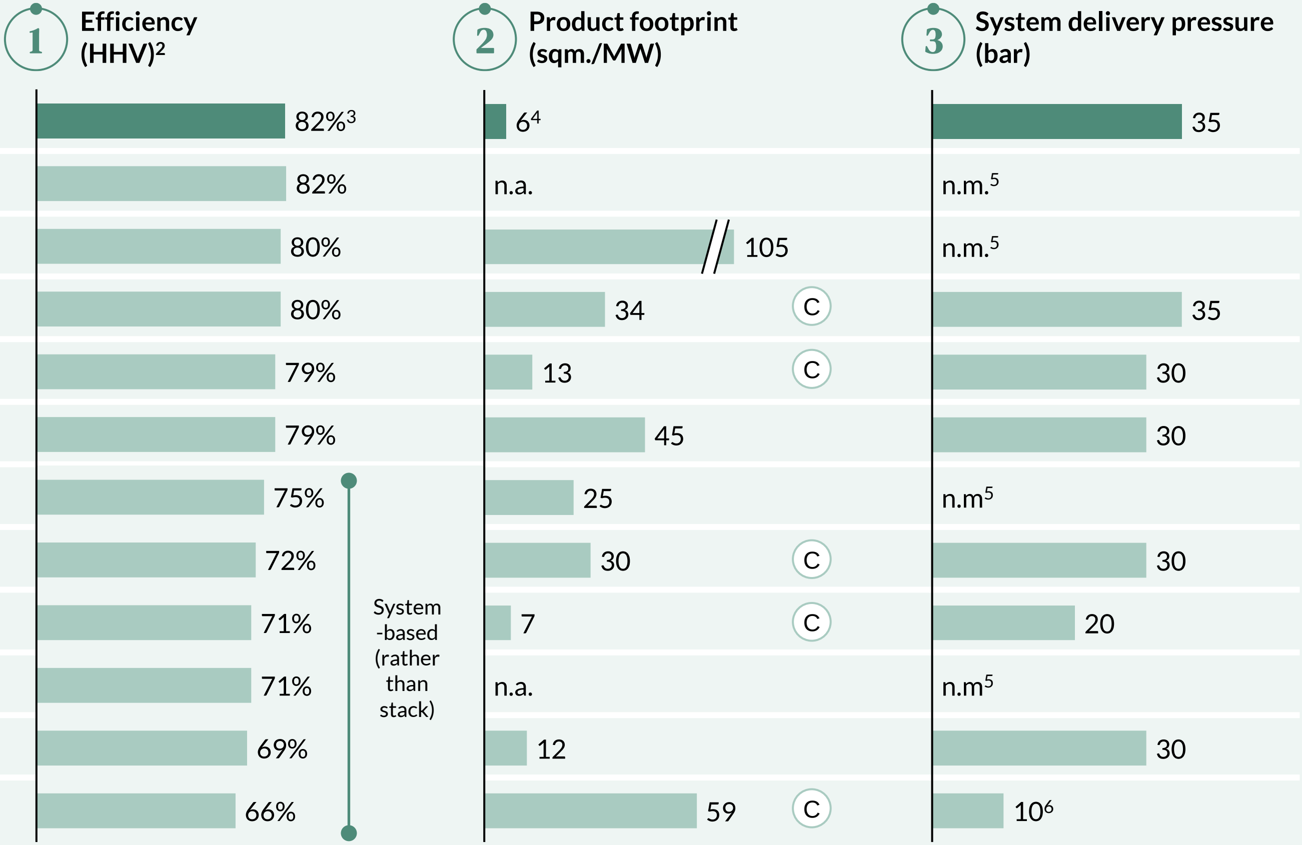
~8-12 sqm./MW[7]
Indicatve containerised
system footprint

Increasingly large projects over time, delivering solutions with high efficiency per sqm.

Notes: 1) GHS' HyProManager smart control system is currently under development; 2) Electrolysis capacity is slightly lower than max module power consumption to alleviate the effects of potential reduced efficiency over product lifetime; 3) A90 Mk1 factory floor solution; 4) GHS' containerised solution includes all auxiliary systems and has a footprint of 33 sqm./MW; 5) 5-7.5MW max module power consumption is the current working assumption of the new X-Series (could change as development is progressing); 6) Max module power consumption; 7) Indicative footprint based on containerised X-Series electrolyser system (including auxilliary system). Source: Company information

GHS' HyProvide-A90 is well-positioned on efficiency, product footprint and system delivery pressure

Different electrolysers on selected parameters



Company	Technology	Product[1]	① Efficiency (HHV)[2]	② Product footprint (sqm./MW)	③ System delivery pressure (bar)
Green Hydrogen Systems 🇩🇰	PAWE	HyProvide-A90	82%[3]	6[4]	35
thyssenkrupp 🇩🇪	AWE	10 MW	82%	n.a.	n.m.[5]
nel 🇳🇴	AWE	A485	80%	105	n.m.[5]
AREVA H₂Gen 🇫🇷	PEM	E200	80%	34 Ⓒ	35
nel 🇳🇴	PEM	MC500	79%	13 Ⓒ	30
McPhy 🇫🇷	PAWE	McLyzer 800-30	79%	45	30
SIEMENS 🇩🇪	PEM	Silyzer 300	75%	25	n.m[5]
H-TEC 🇩🇪	PEM	ME 450	72%	30 Ⓒ	30
ITM POWER Energy Storage | Clean Fuel 🇬🇧	PEM	HGAS3SP	71%	7 Ⓒ	20
AsahiKASEI 🇯🇵	AWE	FH2R	71%	n.a.	n.m[5]
Cummins 🇺🇸	PEM	HyLYZER-500-30	69%	12	30
Cummins 🇺🇸	PAWE	HySTAT-100-10	66%	59 Ⓒ	10[6]

System-based (rather than stack)

Reduces use of electricity

Impacts versatility, LCOH and ease of use

Impacts cost of versatility

Ⓒ Footprint for a containerised solution

Notes: 1) The most recent, marketable product has been included in the benchmarking. If a product of multiple identical modules is offered (e.g. 4x the same module), the single-module product is shown, because GHS' A90 is a single-module product; 2) HHV = Higher heating value. Efficiency is calculated as 39.35 kWh/kg (a HHV constant) divided by the product's power consumption in units of kWh/kg; 3) GHS' system-based efficiency equals 75% excuding dryer losses and 73% including dryer losses; 4) Factory floor solution. GHS' containerised solution includes all auxiliary systems and has a footprint of 33 sqm./MW. However, it is not directly comparable with other containerised solutions which do not include all auxiliary systems; 5) Not a pressurised technology; 6) 27 bar optional. Source: Company information and websites

Cost-out programme in place to realise LCOH CAPEX reduction of estimated ~30-40% by 2024 on the A90 Mk1

~80 cost-out initiatives with bill-of-material impact currently identified

	Should-cost analysis	Sourcing	Design to cost		Total
Overall ambition	*Reducing cost for product inputs*	*Improving GHS' current procurement terms*	*Designing the electrolyser for production at scale*	*Changing specific components to less expensive ones*	**~30-40%** *Estimated LCOH CAPEX cost-out (A90 Mk1 by 2024)*
Examples of initiatives	• Review of cost dimensions for key cost-driving components such as scrubber vessel • RFQ process with Central & Eastern European supplier to select future supplier	• Price discounts with current vendors (e.g. through larger orders and competitive buying & negotiation) • Changing to cheaper vendors (incl. vendors in Eastern Europe)	• Change of cooling system for the power supply • Optimising control box architecture to reduce amount of sensors and valve wires	• Implement casting of stack end flanges instead of machining • Change (where employed) niche components to generally available standard industrial components	***Initiatives will be implemented in waves to ensure adequate testing of products prior to product release***
# of initiatives currently identified	~15	~30	~15	~20	~80
Dimension	*Key cost driving components*	*Commodity and catalogue parts*	*Process optimisation*	*Component optimisation*	Σ

Initiatives are analysed and evaluated based on iterative feedback process

Source: Company information

GREEN HYDROGEN SYSTEMS

Thank you!