

A photograph of several white wind turbines on a rolling green hill under a clear blue sky. The turbines are spaced out across the landscape, with one in the foreground on the right and others receding into the distance. The grass is a vibrant green, and the sky is a uniform light blue.

# Green transition, energy self-sufficiency and Enersense's role

Capital Markets Day 3 May 2022

Enersense International Plc

Jussi Holopainen

# Agenda

- **Interview with Jaakko Eskola, Chair of the Board**
- **Green transition, energy self-sufficiency and Enersense's role**  
Jussi Holopainen, President and CEO
- **Long term financial target and Enersense as a green energy producer**  
Mikko Jaskari, CFO
- **Profitable transformation in a growing market**  
Juha Silvola, Power, EVP
- **Offshore wind and its potential**  
Jaakko Leivo, Smart Industry, EVP
- **Securing connections and critical infrastructure**  
Juha Silvola, Connectivity, acting EVP
- **Strong position in the Baltic energy transformation**  
Margus Veensalu, International Operations, EVP
- **Summary and Q&A: Enersense is ready for the future growth**



**Making  
a zero-emission  
society a reality.**



An aerial photograph of a rugged coastline. The image shows dark, layered rock formations jutting out into a deep blue sea. White, frothy waves are crashing against the rocks, creating a stark contrast with the dark water and the brownish-grey of the stone. The perspective is from directly above, looking down at the coastline.

# Accelerating green transition





# Growing need for energy self-sufficiency



# Creator of zero-emission energy solutions

- Enersense is an energy company listed on the Nasdaq Helsinki, and it provides green energy services for the comprehensive implementation of an emission-free and energy self-sufficient society
- The company was established in 2005 and has its headquarters located in Pori, Finland
- The company's business areas are divided into four segments: Power, Connectivity, Smart Industry and International Operations

# Making a zero-emission society a reality

## Mission

We are central to implementing the energy revolution with our profitable business

## Vision

We are a significant promoter of a zero-emission society

# Our values



## Be brave

- We have courage to think big, fail fast and learn, and make decisions
- We use our pioneering expertise to bring value to the society every day
- We are open to future opportunities



## Grow responsibly

- We have hunger to grow our business responsibly with our people, customers and partners
- We consider sustainability in everything we do, continuously improve, and keep our promises. We value everyone's growth and diversity



## Together

- We respect everyone, show appreciation and communicate openly
- We take ownership of succeeding together and help each other
- We contribute to joy, wellbeing and safety every day



# Enersense in brief 2021

Turnover  
**239**  
MEUR

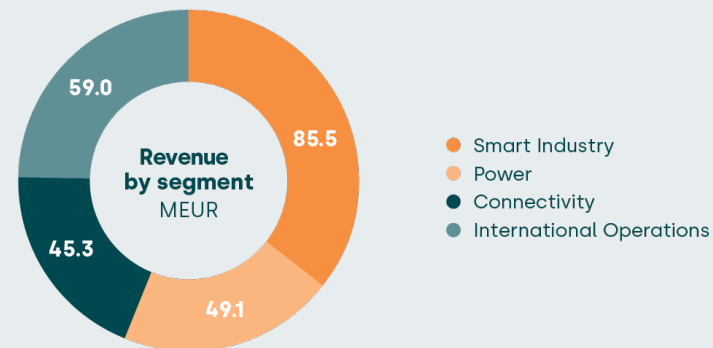
Order backlog  
**291**  
MEUR  
(31 December 2021)



Number of employees  
**1,942**  
Person-years  
(Average for the period)

EBITDA margin  
**7.0%**

Gearing  
**3.6%**





An aerial photograph of a dense, lush green forest. A narrow, light-colored dirt road or path winds through the center of the forest, curving from the left towards the right. The trees are tall and closely packed, creating a textured canopy of various shades of green. The lighting suggests a bright day, with some areas of the forest floor appearing slightly brighter than others.

# Our strategy



# Strategy: Expanding in the value chain

Enersense will become a producer of clean energy and a key green energy company

- Transactions and new businesses have expanded our role in the value chain
- In addition to being a provider of project design, project implementation, maintenance and management services, Enersense will become a key zero-emission energy producer, owner and project developer
- Our business model will change as a result of the ownership, as we will also receive revenues from the energy produced

## Growth strategy

- Target stronger international expansion – all business areas in-scope (Power, Connectivity and Smart Industry)
- Exploration of potential new business segments in Finland and the Baltic countries
- Exploration of potential to expand vertically in the value chain (e.g. in wind power sector move from a pure service provider towards an active developer role)
- Active exploration of M&A targets to boost the growth

**CONTINUE EMPHASIS ON PROFITABILITY**



# Strategy

Enersense's core strategy is to be a provider of zero-emission energy solutions and an enabler of an emission-free society through profitable business operations. Enersense's strategy supports the ongoing energy transition in society, whereby energy production will increasingly be based on renewable energy sources, with end users being more aware of the impacts of energy production on the environment and society.

**TO ACHIEVE ITS STRATEGIC GOALS, ENERSENSE IS FOCUSING ON:**



**Developing capacity  
to maintain and  
win low-emission  
and zero-emission  
energy projects**



**Ensuring the best  
expertise and engaged  
teams delivering value  
to our customers**



**Improving  
the efficiency  
and flexibility of  
business operations**



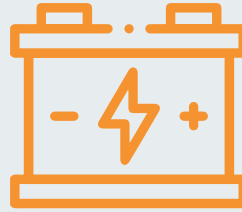
**Continuing  
profitable organic  
and inorganic growth**

# Megatrends

THE IMPACTS OF SOCIETY'S ENERGY TRANSITION ON OUR BUSINESS ENVIRONMENT:



**Sustainable  
development**



**Electrification**

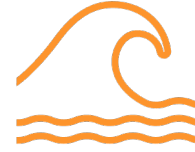


**Digitalisation**

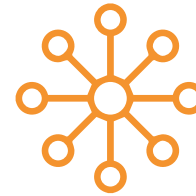
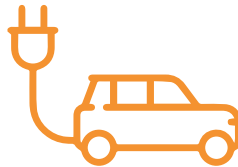
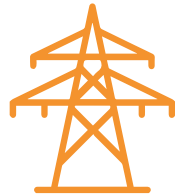
**Making  
a zero-emission  
society a reality  
in all phases.**



## Production of energy



## Energy transfer



## Energy storage



A photograph of a wind farm with several white wind turbines standing in a field of tall green grass under a blue sky with wispy clouds. The text 'Production of energy' is overlaid in the center.

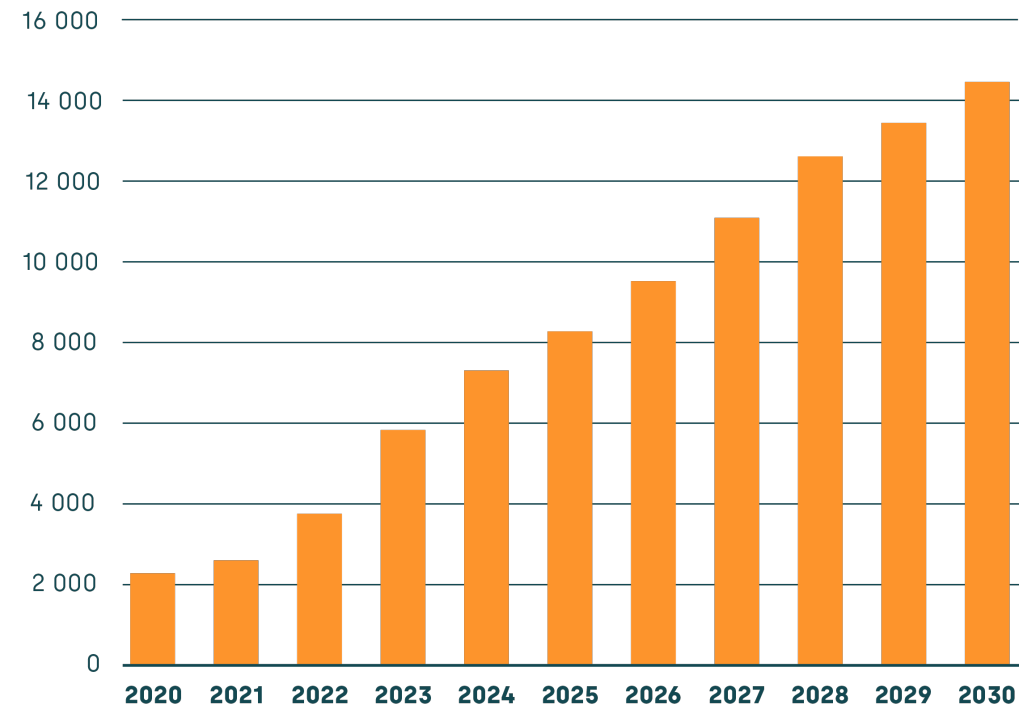
# Production of energy

# Onshore wind power

## ENERSENSE FACT:

- Enersense and its partners have projects in progress or in the feasibility study phase in different parts of Finland, with a total capacity of around 3,000 MW
- We maintain half of Finland's wind power farm's electrical networks
- Enersense will build 600 MW by 2027

Onshore wind power forecast for 2020's



(Source: Fingrid)



# Offshore wind power

- EU's goal is to increase Europe's offshore wind power capacity from its current level of 12 GW to 300 GW by 2050

## ENERSENSE FACT:

- Enersense Offshore Oy has delivered
  - the frame for the world's first floating offshore wind power plant
  - the world's first offshore wind power plant pilot project for demanding icy conditions
  - the foundations for a wind farm operating in icy conditions
- We are applying for a design right for a platform solution developed especially for the part of the Baltic Sea that freezes during the winter





# Solar energy

- Solar power already provides an important contribution to the European energy mix, with 3.6% of EU-28 gross electricity generation in 2017 (Source: Eurostat)
- BloombergNEF estimates that solar has the potential to meet 20% of the EU electricity demand in 2040

## ENERSENSE FACT:

- Enersense has a project underway to build a 20 MW solar power plant in Mäntyluoto, Pori (an investment decision is expected to be made later)



# Hydro power

- The situation today and in 2030: hydro power is the most cost-effective and environmentally friendly way for flexible energy production required by the electricity system in Finland as the need for flexibility further increases as weather-dependent production increases (Source: Finnish Energy)

## ENERSENSE FACT:

- Operating and maintenance services:  
Vattenfall Oy, Koskienergia
  - 38 hydro power plants
  - Co-operation started in 2001

# Nuclear power

- In 2020, 10% of the world's electricity was produced by nuclear power
- In 2021, 51 reactors were under construction in 19 different countries (Source: Finnish Energy)
- Big market potential in the nuclear power sector: more than 430 running units and more than 60 new nuclear power plants under construction globally → there are dozens of brand-new countries planning or building nuclear power (Source: Finnuclear)

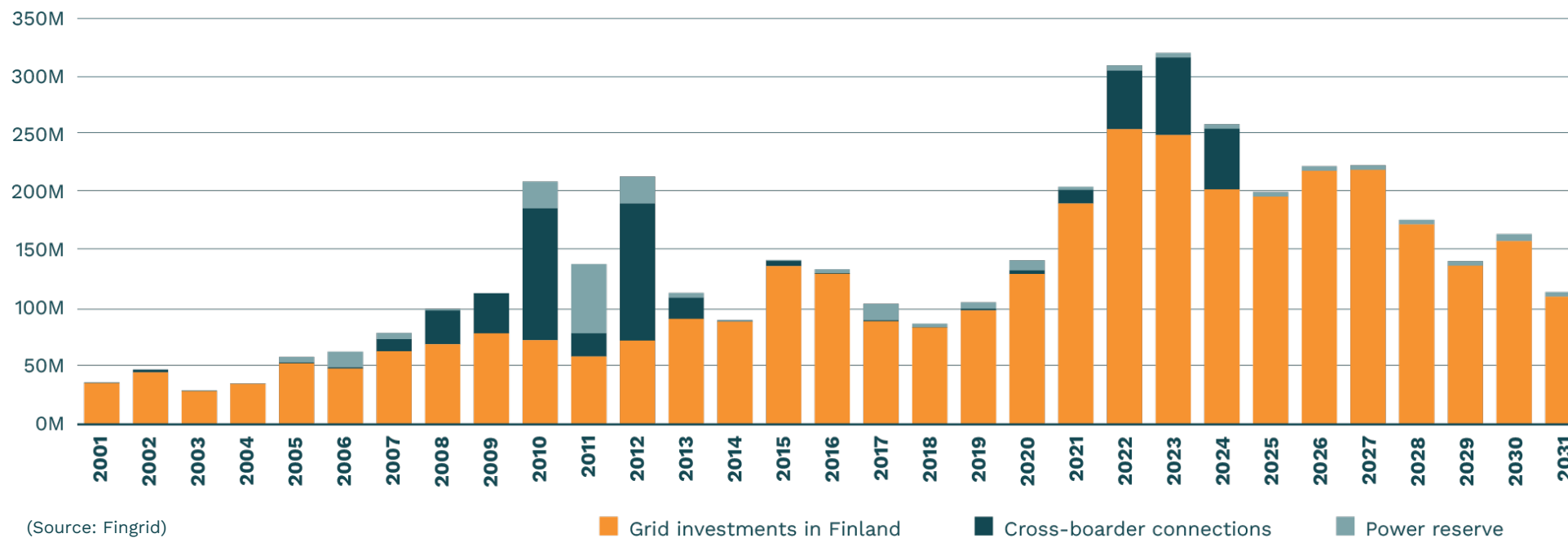
## ENERSENSE FACT:

- Project and service business
  - In Finland: Fortum's Loviisa power plant units 1 and 2, and Teollisuuden Voima's Olkiluoto power plant units 1, 2 and 3
  - Internationally: Hinkley (UK), Flamanville (France) and ITER (France) power plants



# Energy transfer

# Power lines



## ENERSENSE-FACT:

- We are a leading power line constructor and maintenance operator in Finland and in the Baltics



# Substations

	FROM THE BEGINNING OF 2019	AT THE BEGINNING OF 2030	NEW
Number of substations	118	137	26

## ENERSENSE FACT:

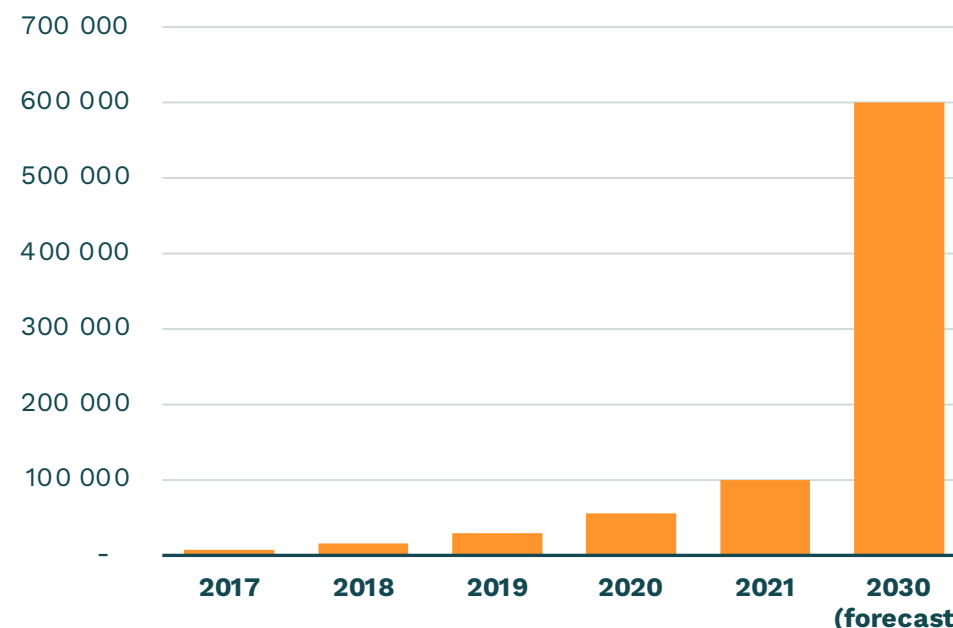
- We are one of the biggest constructors of the grid's (FG) substations
- Finland's biggest in substation maintenance

# Charging systems

## ENERSENSE FACT:

- Enersense is the largest contractor in Finland for the largest charging point operator in the Nordic countries (Recharge Infra)
- Our customers for high power charger instalments include e.g., McDonald's, ABC, K-Lataus
- We also provide housing companies with charging solutions
- In co-operation with Toyota Baltic, Enersense builds an electric car charging infrastructure for its entire retail network in Estonia, Latvia and Lithuania

Electric cars in Finland

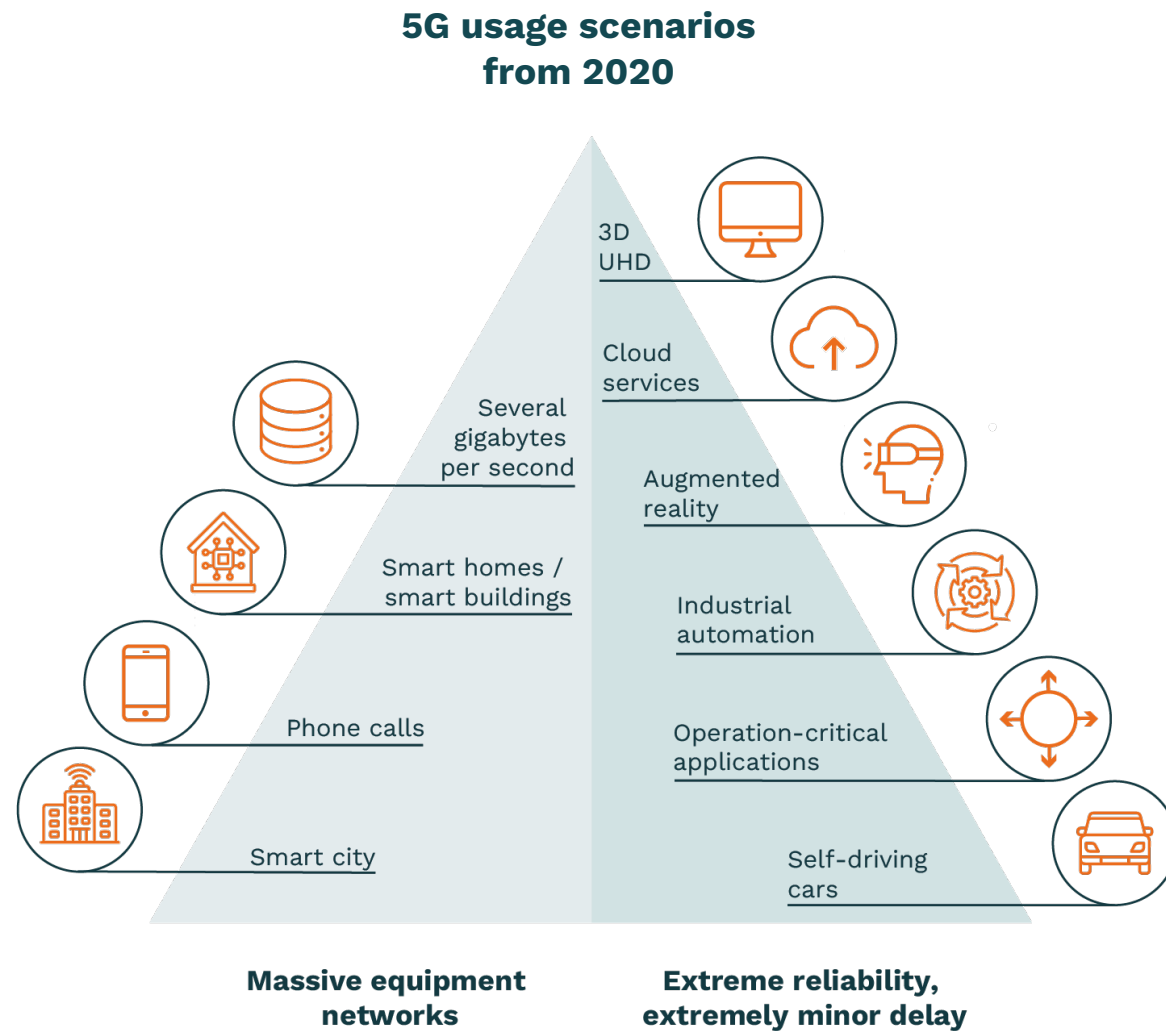


(Source: VTT, Ministry of Transport and Communications and the Finnish Information Centre of Automobile Sector)

# Data networks

## ENERSENSE FACT:

- In 2021 we installed more than 500 5G base stations
- We are third in the Finnish market for mobile construction



(Source: Oulu University)



An aerial photograph of an energy storage facility. The facility consists of several blue shipping containers arranged in rows, each with a small white structure on top. The containers are situated on a gravel surface and are enclosed by a chain-link fence. In the background, there is a dense forest of tall, thin trees. The text "Energy storage" is overlaid in the center of the image.

# Energy storage





# Electricity storage

## ENERSENSE FACT:

- We have about 56 MW of electricity storage capacity in maintenance and we are responsible for all of Finland's largest electricity storages, Neoen's 30 MW electricity storage in Yllikkälä being the largest
- 90 MW battery energy storage is being completed in Olkiluoto (Source: Fingrid)

# Market outlook: hydrogen

## 2030 - 2050

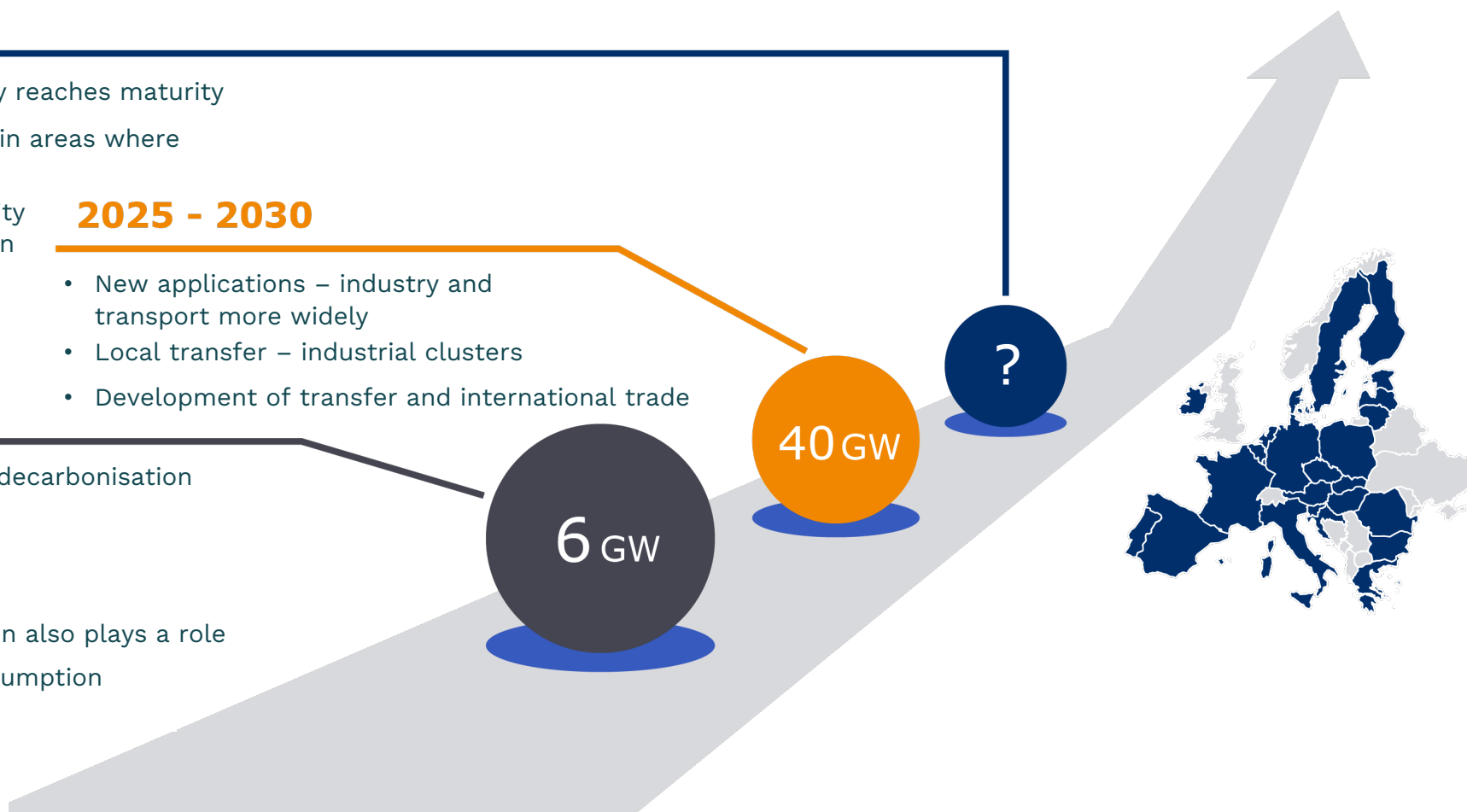
- Renewable hydrogen technology reaches maturity
- Deployment on large scale and in areas where decarbonisation is difficult
- A quarter of renewable electricity perhaps for hydrogen production in 2050
- Transfer develops

## 2025 - 2030

- New applications – industry and transport more widely
- Local transfer – industrial clusters
- Development of transfer and international trade

## 2020 - 2024

- Chemical industry's decarbonisation as spearhead
- Heavy traffic
- CfD and regulation
- Low-carbon hydrogen also plays a role
- Production and consumption close to each other



(Source: EU's hydrogen strategy 2020 & AFRY)

**Making  
a zero-emission  
society a reality  
in a sustainable way.**



# Sustainability

# Sustainability is part of our strategy

- Taking care of people, profitable business growth and promoting the energy transition are material sustainability themes that guide our operations
- Our sustainability work is founded on sustainable business operations, personnel's wellbeing and safety, and environmental responsibility
- The UN Sustainable Development Goals (SDGs) provide the framework for our sustainability work. In our operations we are committed to five UN SDGs

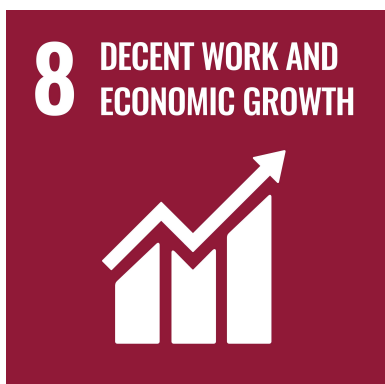


# Our business strongly contributes to UN's Sustainable Development Goals<sup>1)</sup>



**28.0%**

of our revenue  
contributes to  
goal 7



**33.0%**

of our revenue  
contributes to  
goal 8



**52.1%**

of our revenue  
contributes to  
goal 9



**28.1%**

of our revenue  
contributes to  
goal 11



**7.4%**

of our revenue  
contributes to  
goal 13

<sup>1)</sup> The UN SDG alignment analysis was conducted by the technology company Upright Project in January 2022



# Our business creates value for the society

- The EU taxonomy includes six environmental objectives, two of which (climate change mitigation and adaptation) were reported for 2021
- **39% (93.6 MEUR) of our revenue was EU taxonomy-eligible** in terms of climate change mitigation and adaptation in 2021
- Our business areas are well positioned to promote sustainable development in different sectors
- In February 2022, the European Commission presented that certain gas and nuclear activities would also be included in the EU taxonomy
- 5G technology could also be included in the EU taxonomy in the future

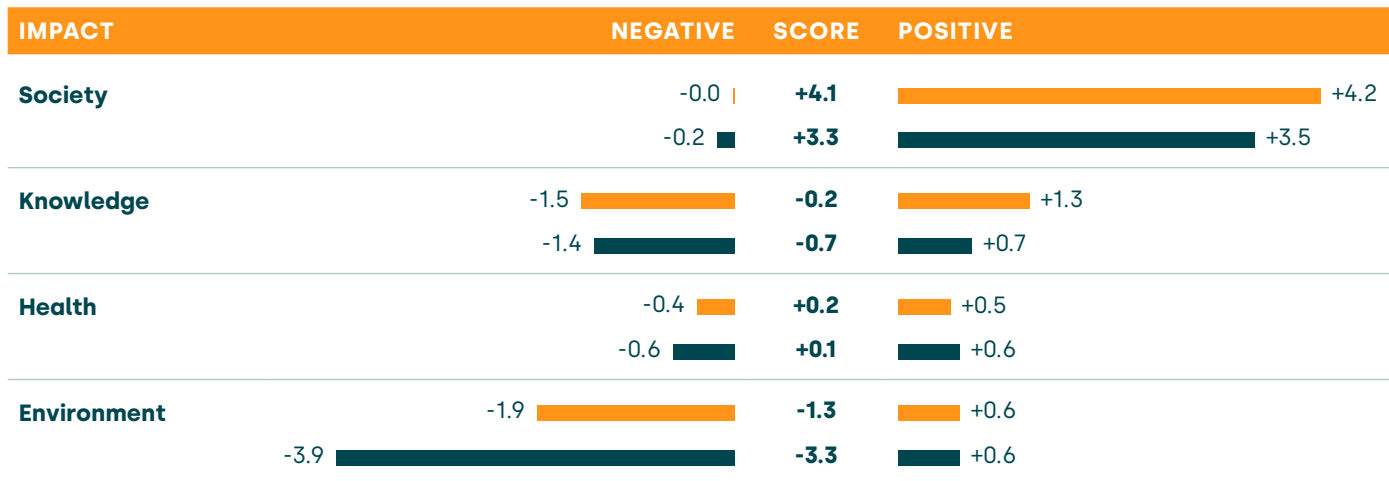
# We are transparent about our impact

- On 26 April, Upright launched the world's first open-access platform for companies' impact data and targets in a comparable format for stakeholders such as investors
- We want to be transparent about both the positive and negative impacts of our operations - Enersense participated in the platform launch as one of the first companies
- Our profile can be reviewed on the Upright Platform:  
<https://uprightplatform.com/company/9bbb5894-5a25-4e3f-8657-27b0cb00694f/Enersense>

# Our operations have a significant positive impact<sup>1)</sup>

## Net impact ratio

■ Enersense +41% ■ Nasdaq Helsinki -11%



1) The net impact analysis was conducted by the technology company Upright Project in January 2022

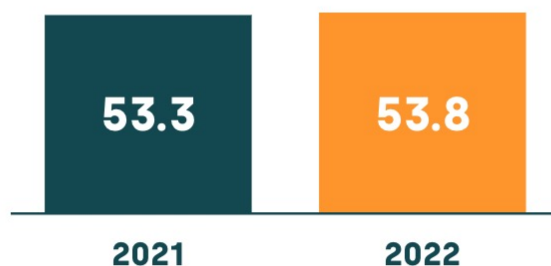
- Enersense's **net impact ratio** in **2021** was **+41%**, whereas the average result of the Nasdaq Helsinki reference group was **-11%**
- Enersense's result is **among the top 28%** of all globally modelled companies
- Our positive impact stems especially from our services related to **society's critical infrastructure**
- **The environmental burden** caused by our operations is smaller than that of the reference group on average



**Making  
a zero-emission  
society a reality  
by profitable business.**

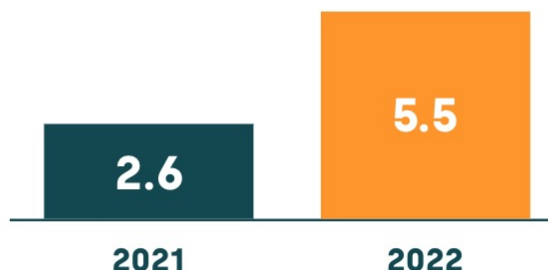
# Investment in renewable energy improved profitability in Q1/2022

January–March  
Revenue  
MEUR



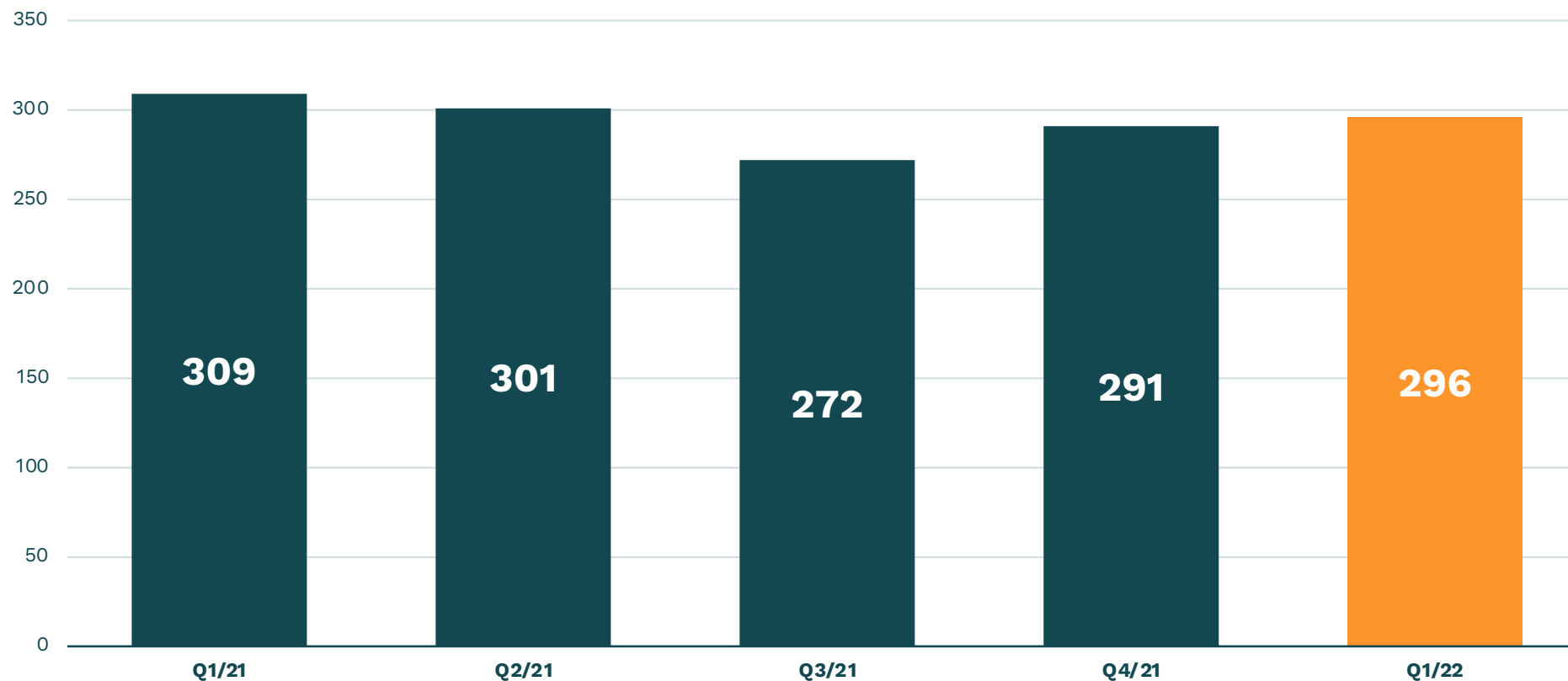
GROWTH 0.9% ↗

January–March  
Adjusted EBITDA  
MEUR



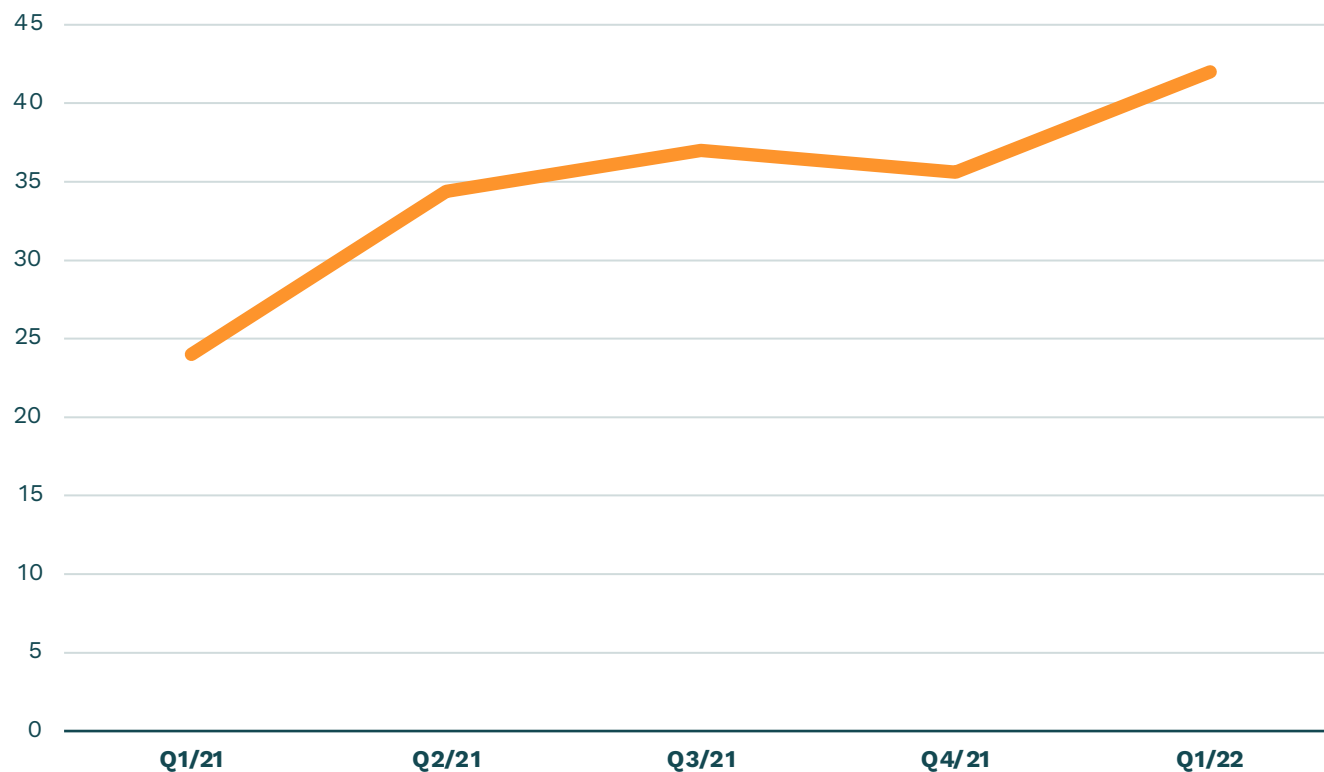
GROWTH 113.6% ↗

# Orderbook has been steadily on the 300 MEUR level





# Strengthened balance sheet, equity ratio at 42%



# Cash flow Q1 2022

- In Q1 Enersense had one larger item in trade payables and other liabilities

EUR thousand	1-3/2022	1-3/2021
<b>Cash flow from operating activities</b>		
<b>Profit (loss) for the period</b>	<b>1,203</b>	<b>-1,331</b>
Adjustments:		
Depreciation, amortisation and impairment	2,183	2,300
Gains and losses on the sale of subsidiaries	—	—
Gains and losses on the sale of associated companies	—	—
Gains and losses on the sale of property, plant and equipment	-2	-117
Share of profits (losses) of associates	4	-7
Interest income and other financial income and expenses	1,210	671
Income tax	814	41
Other adjustments	-1,889	316
<b>Total adjustments</b>	<b>2,320</b>	<b>3,204</b>
Changes in working capital		
Change in trade and other receivables	207	-6,544
Change in trade payables and other liabilities	-6,905	-3,385
Change in inventories	-343	487
Change in provision	—	-67
Interest received	4	30
Interest paid	-260	-453
Other financial items	-953	-347
Income tax	—	-108
<b>Net cash flow from operating activities</b>	<b>-4,727</b>	<b>-8,512</b>

# Guidance 2022

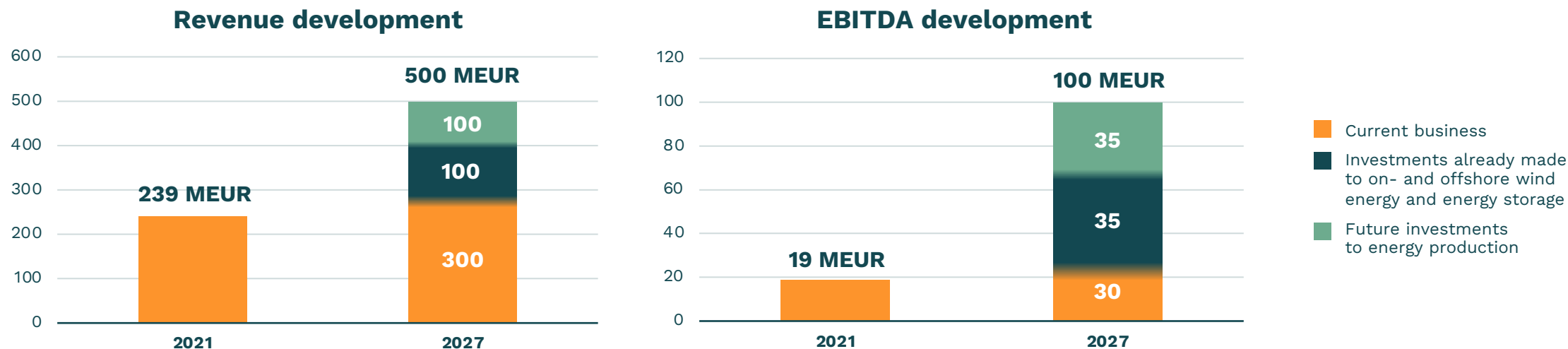
- **Revenue 245–265 MEUR**
- **Adjusted EBITDA 15–20 MEUR**
- The company reiterates its financial guidance, according to which its revenue is expected to be EUR 245–265 million in 2022, and its adjusted EBITDA is expected to be EUR 15–20 million. Compared with the previous year, the result for 2022 will be burdened by investments in a new ERP system. Investments in offshore wind power, a growing sector, will also affect the result.
- Due to an exceptional situation, the company estimates that the second quarter of 2022 will be the weakest quarter of the year in terms of profitability. In the first quarter, the Russian attack on Ukraine and its impacts have caused delays in projects scheduled to start in the spring.



A photograph of a wind farm in a rolling green field under a blue sky with wispy clouds. Several white wind turbines are visible, with their blades blurred from motion. The text 'Enersense long term targets' is overlaid in white.

# Enersense long term targets

# Key indicators 2021–2027



- Onshore wind power development and offshore wind are estimated to generate 100 MEUR revenue and 35 MEUR EBITDA
- The current 3000 MW onshore wind power project portfolio enables Enersense to start developing its own energy production. Enersense's energy production target by 2027 is 600–700 MW of which 600 MW is wind power and 100 MW solar energy
- Enersense has indentified already 200 MW of potential wind power projects to be developed for own energy production. Additionally, Enersense has indentified 20 MW solar energy for own energy production
- Enersense will be active in M&A market in current business to reach economies of scale

# Own energy production requires capital

- The targeted 600–700 MW energy production requires 700–800 MEUR investment
- Depending on the financing structure the share of own capital will be around 40% → 300 MEUR
- During the next few years Enersense will actively seek and develop financing structures for the capital need
- Enersense will be looking for several potential financings such as:
  - Direct share issues
  - Project specific investors
  - Possible new share structures (e.g preferred shares)
  - YieldCo structure
  - Profit sharing with lenders
  - Joint ventures
- In the preliminary discussions there has been a large interest in green financing
- Enersense has a strong position since it has an enhanced wind power development portfolio and profound knowledge in building and operating wind farms as well as energy storages





# Making a zero-emission society a reality in Power Segment

Capital Markets Day 3 May 2022

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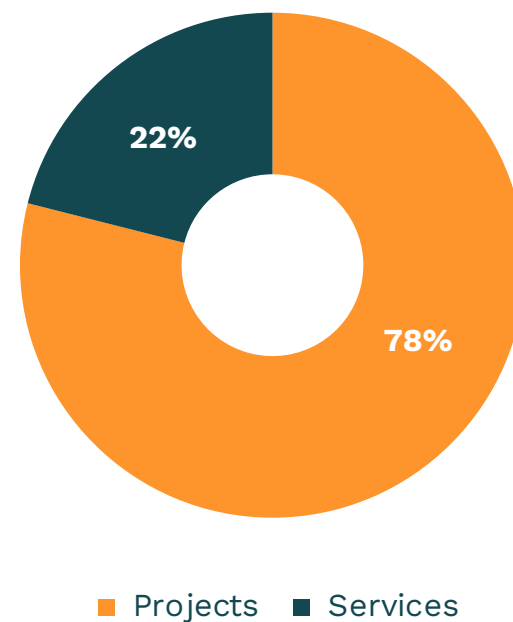
Juha Silvola

# Power business

## Key numbers 2021

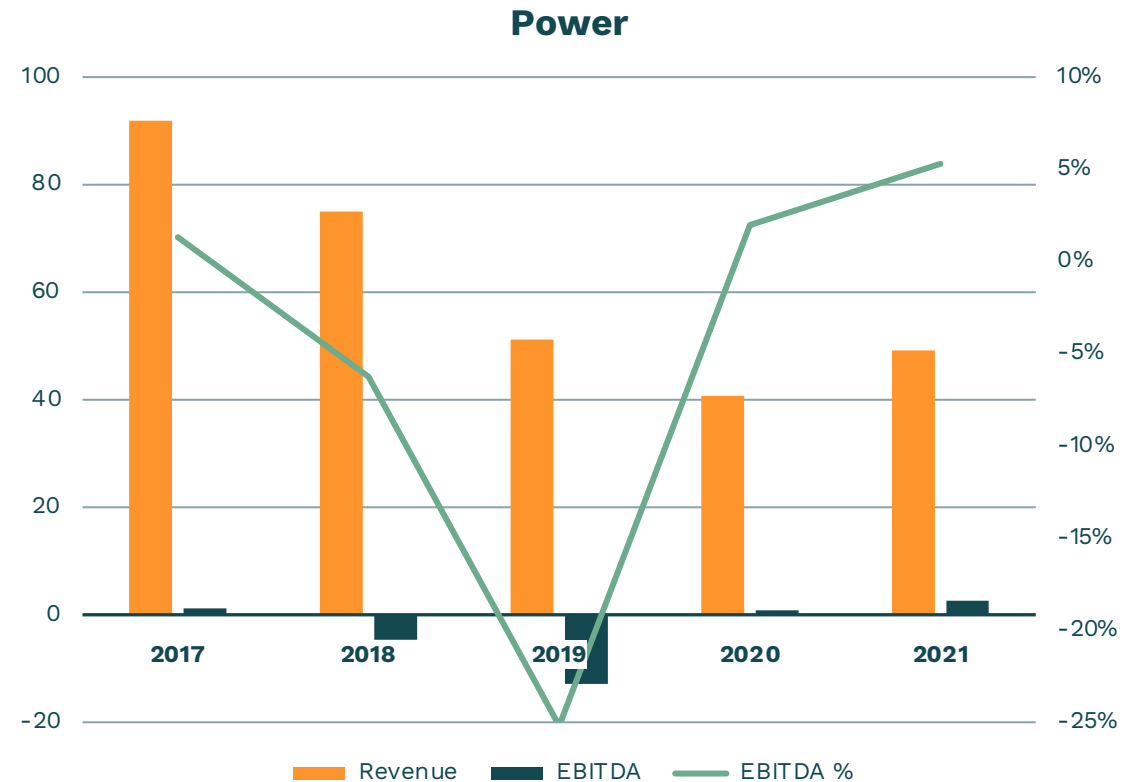
- Revenue **49.1** MEUR
- The average number of personnel **156**
- EBITDA **2.4** MEUR
- Order backlog **52.0** MEUR
- NPS **43**

(Source: Financial Statements Bulletin 2021)



# Successful turnaround

- Liquidity and project profitability issues 2018–2019
- Successful profitability improvement program implemented 2019–2021
  - New organisation, accountability
  - Closing non-profitable business
  - Empower → Enersense
  - Legacy projects completion





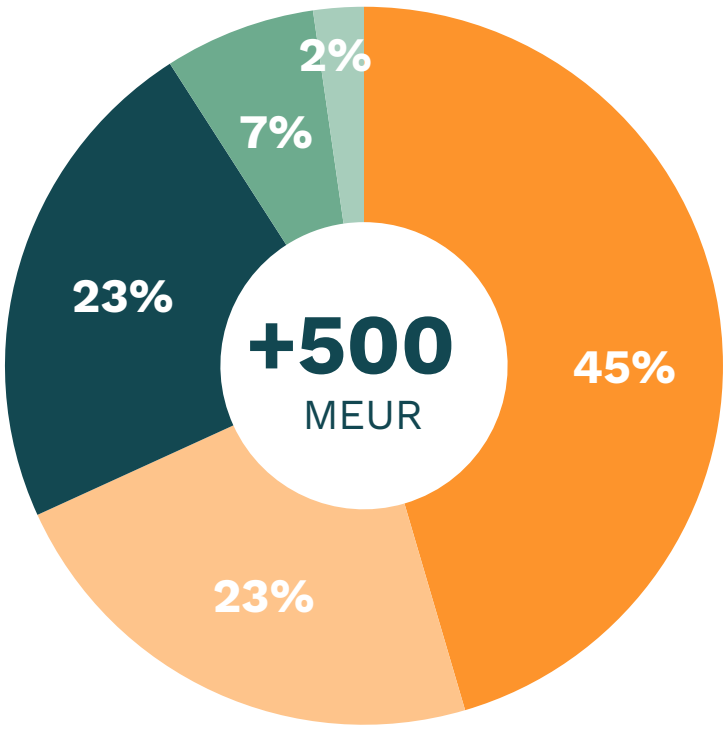
# Business lines

				
<b>High voltage lines</b>	<b>Substations</b>	<b>Wind power</b>	<b>Electric vehicle charging</b>	<b>High voltage services</b>
Over 1,800 km high voltage lines in Finland and Sweden	80 pcs of 110–400 kV substations	More than 1,200 MW onshore wind power BoP construction	Over 500 EV charging stations installed  Annual growth of 20–30% in installations	40% market share for HV grid and substations maintenance in Finland

- Power business is **all** about supporting energy transition, with experience

# Relevant market

- Total construction & service market +500 MEUR 2022
- Market growth due to increased investments into renewables and transmission network



**Market size  
based on  
Enersense  
management  
estimation**

■ Wind power ■ High voltage lines ■ Substations ■ Services ■ EV

# Our strengths

- We have a purpose – driven and committed teams to build a sustainable future
- We are on the same journey with our customers
- We enjoy working together – strong, talented professionals in each team
- Extensive service portfolio

## Services for the entire life cycle of our customers' assets





# Customers

TSO	DSO'S	WIND AND OTHER RENEWABLES	EV BUSINESS (INSTALLATION & MAINTENANCE)
<b>FINGRID</b>	 <b>ELENIA</b>  	   	  



# **CASE: HV substations – Customer Fingrid**

- Project: Kärppiö, new 400 kV substation
  - Scope: Turnkey delivery
  - Time schedule: 12/2020–09/2022
  - Contract value: 14.0 MEUR
- 
- Project: Arkkukallio, new 400 kV substation
  - Scope: Turnkey delivery
  - Time schedule: 11/2021–12/2023
  - Contract value: 14.0 MEUR



# **CASE: Fingrid HV substation and OHL maintenance**

- Enersense is currently a significant service provider to Fingrid in maintenance of their HV substations and HV network
- 3-year contracts include both scheduled and corrective maintenance works, including small repairs
- Fingrid maintenance contracts are important to Enersense, as they enable staff resourcing around Finland and enable same type of services to be provided to other customers







## **CASE: Wind Power – Customer Pohjoistuuli**

- Enersense's scope has been a turnkey supplier (BoP) in their 3 wind farm projects, including design and construction of foundations, roads and hardstands, wind farm internal grid and substation
  - Tyrinselkä phase 1: 4 WTG construction completed 2014–2016 in Huittinen
  - Tyrinselkä phase 2: 4 WTG expansion into phase 1 completed 2019–2020 in Huittinen/Ypäjä
  - Soidinmäki 7 WTG construction 2021–2022 in Saarijärvi, under construction
- Enersense has also long-term O&M contracts for all of these wind parks



## CASE: Wind O&M

- Enersense is a market leader in providing wind farm network maintenance and a substation remote control operator
- We have +25 wind farms under our maintenance works, most of them also include remote control services
- Our customers in wind O&M services are e.g., OX2, Ilmatar, Taaleri, Gigawatti, Exilion Tuuli, Pohjoistuuli





## **CASE: EV charging – Recharge Finland**

- Recharge is a leading charge point operator in the Nordic region
- We are currently their biggest partner in installation and commissioning of new EV charging stations countrywide
- The first EV High Speed Charging station in Finland to Lohja ABC was installed and commissioned by Enersense
- The biggest single EV charging station in Turku Finland (output max 450 kW)



# CASE: EV charging – Unified Chargers

- Unified Chargers is a manufacturer of EV fast charging stations
- With Unified Chargers we have a versatile co-operation, including both installations for housing companies as well as public charging stations
- We have been in the role of turnkey supplier using their technology, as well as installation partner to their turnkey deliveries



A photograph of several white wind turbines in a field, with their blades blurred from motion against a clear blue sky. The turbines are arranged in a line, receding into the distance.

# **New businesses in Power**

# Accelerating wind power business

- Target to develop and own wind power plants and produce green energy
- Acquired Megatuuli Oy, wind power developer 02/2022, total 3,000 MW portfolio
- 200 MW own production in pipeline
- Target to build 600 MW by 2027





An aerial photograph showing rows of blue solar panels installed on a green grassy field. The panels are arranged in a grid pattern, and the grass is visible between the rows. The image is partially obscured by a white curved shape on the right side.

# New investments in solar power

- Target to develop and own solar power plants and produce green energy
- Solar power development unit launched
- First investment planning ongoing for 20 MWp plant to Mäntyluoto, Pori
- Target to +100 MWp solar by 2027



# Summary

- Continue to improve after solid turnaround
- Transformation to a renewable energy producer
- Capturing market growth with strong and committed team







# Making a zero-emission society a reality in Smart Industry Segment

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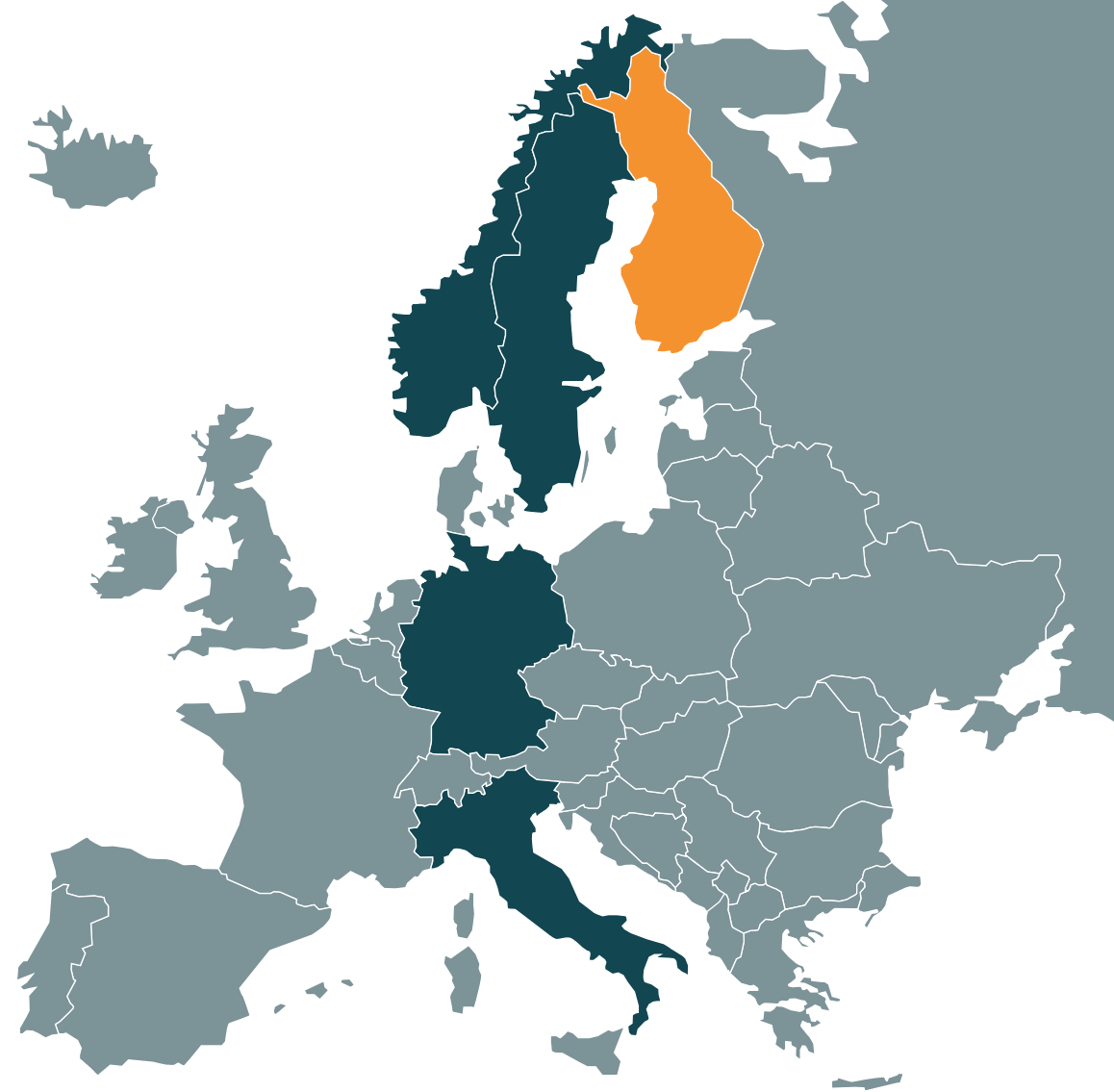
Jaakko Leivo



# Smart Industry in a nutshell 2021

- Revenue **85.5** MEUR
- Personnel **770** own + 500 in network
- EBITDA **15.4** MEUR
- Order backlog **56.0** MEUR
- Main customer segments: Chemical, Energy, Forest, ICT, Marine, Offshore, Steel, Hydrogen

(Source: Financial Statements Bulletin 2021)



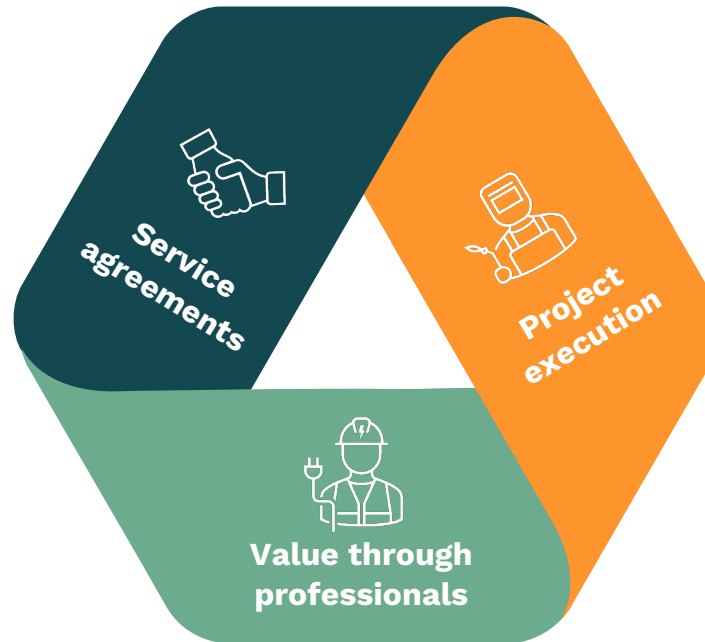
# Business lines

SMART SERVICES			SMART OPERATIONS			
						
<b>Smart O&amp;M</b>	<b>Smart Workshops</b>	<b>Smart Compliance</b>	<b>Smart Works</b>	<b>Smart Offshore</b>	<b>Smart Mechanical &amp; Electrical Sol.</b>	<b>Smart Professionals</b>
Trusted partner in outsourced services	Bringing value to customers' life cycle chain	Securing businesses' compliance	Partner in demanding projects	Enabling the energy transition	Experts in shutdowns for demanding needs	Providing experts to customers' needs

# Our business in brief

## Service agreements

Smart Industry has long partnership agreements with multiple customers varying from equipment maintenance to full responsibility of daily operations and maintenance at hydro power plants.



## Demanding projects

Smart Industry has a long history in demanding projects such as:

- Ship building projects
- Offshore oil & gas projects
- Offshore wind power foundations
- Power plant generator renovations
- Nuclear power plant projects
- Fabrication of floating pontoon structures
- Pressure vessels, more than 150 pcs of pressure containing equipment

## Professionals

Smart Industry is a trusted service provider and partner for demanding resource needs. We have provided experts to our customers' sites all over the world as well as to local outages and shutdowns.

Our services include making compliance checks of the companies working at the site.



# Our strenghts



## Versatility

We provide value adding services in multiple industry segments in Finland and abroad

***Activities in 5 countries***



## Flexibility

Our encompassing service portfolio ranges from hourly based to fully outsourced maintenance services

***7 business lines***



## Customer centric

The customer is at the heart of our operations.

We aim for long-term partnerships

***NPS 2021 30***










## Personnel

Personnel is at the core of our business

***770 employees***

# Adapting our services to meet strategic targets

						
<b>SMR<sup>*)</sup></b>	<b>Offshore wind</b>	<b>Hydrogen</b>	<b>Energy storage</b>	<b>Hydro power</b>	<b>Bioenergy</b>	<b>Nuclear power</b>
Demanding foundations as EPCI <sup>**)</sup> contracts	Foundations as EPCI <sup>**)</sup> contracts	Foundations as EPCI <sup>**)</sup> contracts	Storage systems	Operating and maintenance services, modernisations and outages	Operating and maintenance services and projects	Operating and maintenance services, contracting, professionals

<sup>\*)</sup> Small modular reactor    <sup>\*\*)</sup> Engineering, Procurement, Construction & Installation

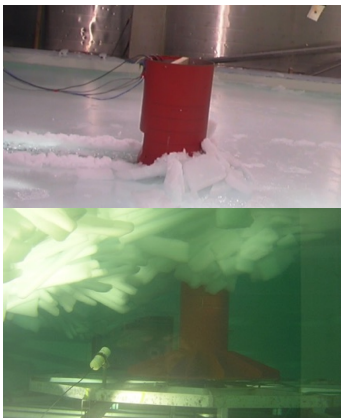
# Enersense Offshore

- Located by the Baltic Sea in Pori, Finland
- Experience and know-how obtained in executing offshore oil and gas projects has created a solid foundation for developing renewable energy solutions
- Expert in project management, engineering and construction services
- Target annual revenue of 75–100 MEUR during the following 5 years





# Our decade of offshore wind success



**2008–2009**  
**Hywind Demo**  
EPC delivery of world's first floating foundation for offshore wind

**2009–2010**  
**Tahkoluoto Pilot**  
EPCI delivery of world's first offshore foundation operating in frozen sea

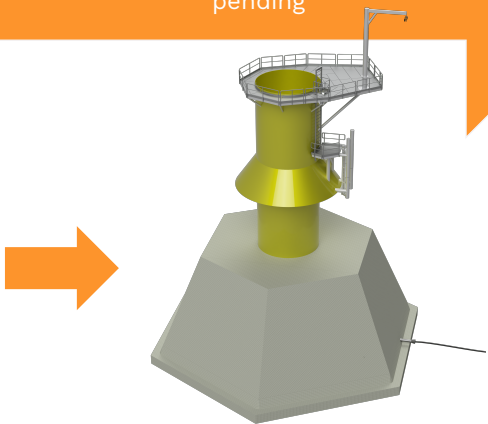
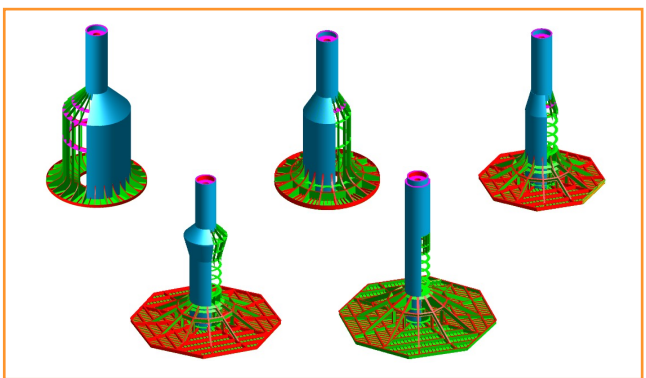
**2011–2013**  
Tender projects for offshore wind. Decision to invest in technology development

**2014 →**  
Launch of **Arctic Fixed Structure** research program (AFS) to develop calculation methods for ice loads

**2016–2017**  
**Tahkoluoto Offshore Windfarm**  
EPC delivery of foundations

**2018–2019**  
Completion of **AFS**. Implementation to product development

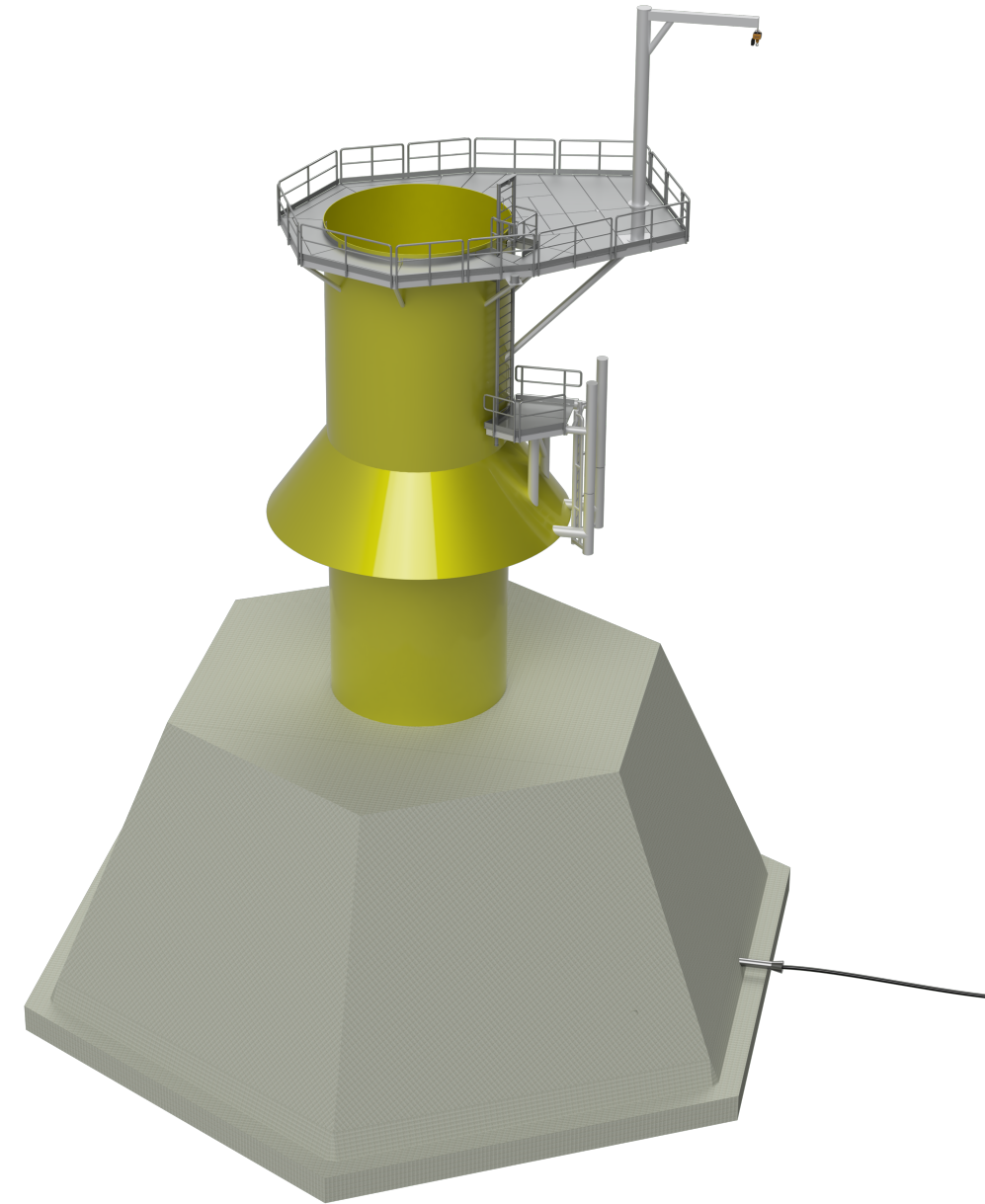
**2020**  
Own gravity-based foundation for arctic conditions – patent pending



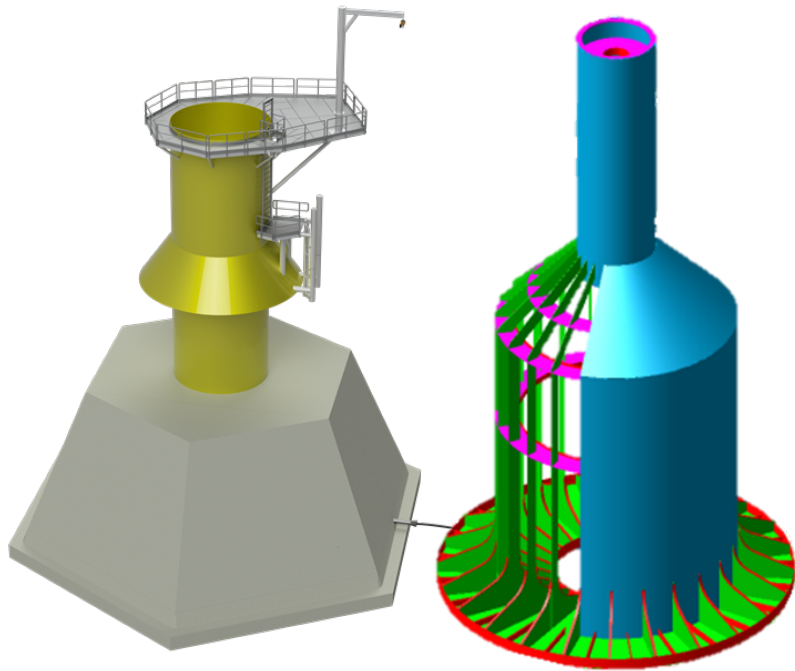
# “The Arctic Energy” by Enersense Offshore (ENO)

A self buoyant gravity-based foundation for harsh arctic environment combining the best features of steel and concrete – **Patent pending**

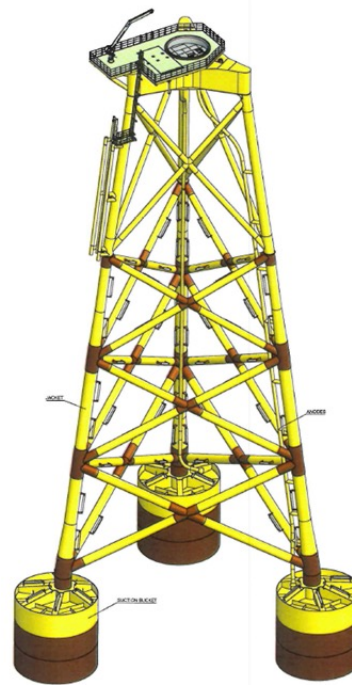
- Stable self buoyant design → Enables tower and turbine installation quayside by using land based crane
- The foundation or project specific assembly with tower and turbine can be towed to the installation site in a floating state even in shallow waters
- Cost-efficient installation by controlled submerging → No need for offshore lifts
- Full life-cycle design → Enables low cost decommissioning by re-floating and towing back to quay
- Scalable design for different turbines and water depths



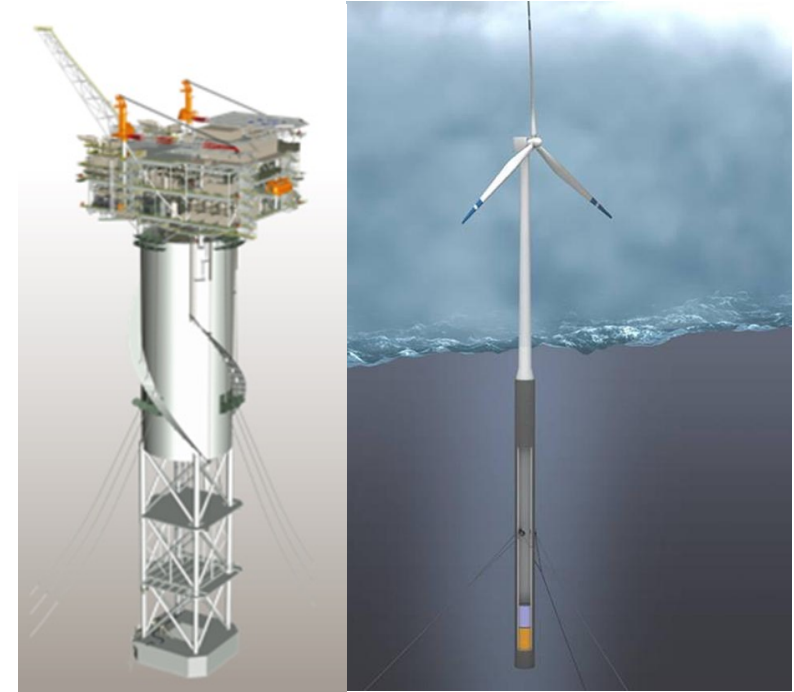
# Different foundation types of ENO fabrication



**Gravity-Based Structures (GBS)**  
Steel, concrete or hybrid



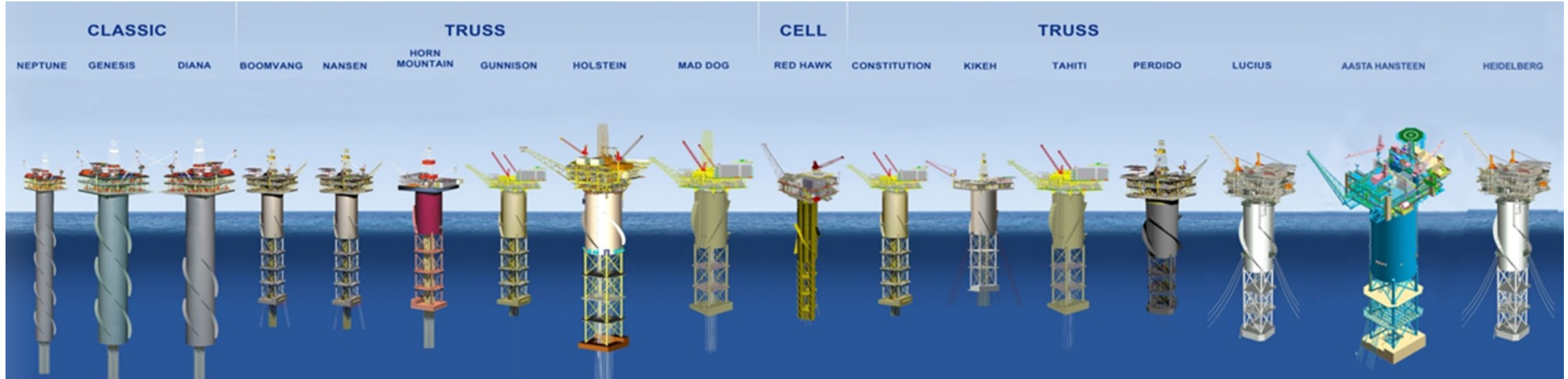
**Jackets**



**Floating Structures**



# Floating SPAR Platforms



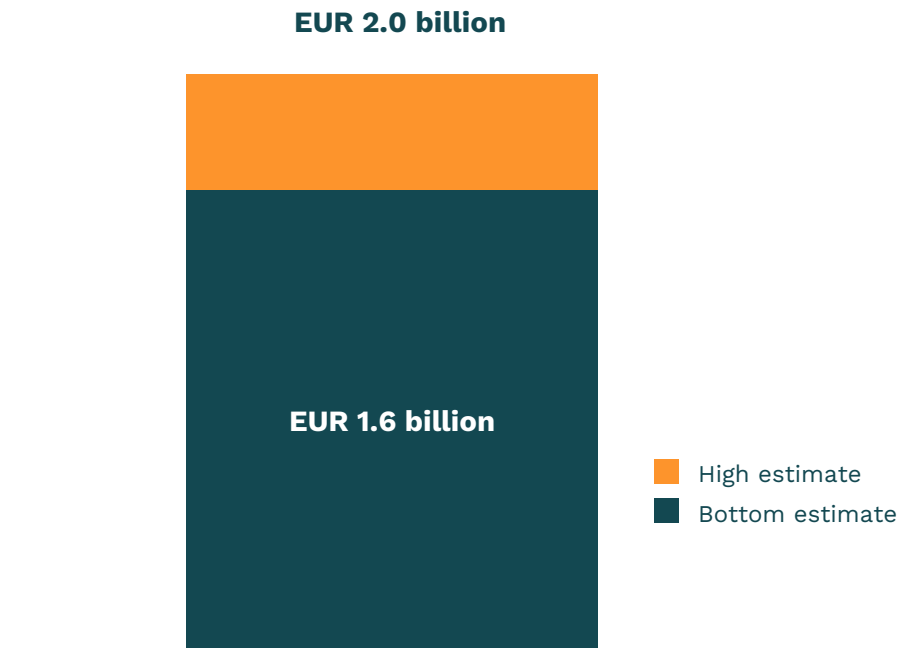
(Source: Technip)

- 14 SPAR floaters, out of the 21 worldwide, are manufactured at Pori yard
- Since 1994 Pori yard has been essential part of the design, development and execution of SPAR floaters
- SPAR floaters were fabricated for oil & gas industry, mainly to Gulf of Mexico, however SPAR concept can be utilised for the floating offshore wind as SPAR platforms were designed to carry heavy topsides and to withstand harsh environmental conditions
- Spar type concept was utilised for the foundation of the world's first floating offshore windturbine (Hywind)  
Foundation of Hywind demo turbine was fabricated at Pori yard

# Market outlook: Maintenance Markets

- The market size of the industrial maintenance services in Finland is at ~ EUR 2 billion
- The industrial maintenance market continues to be relatively stable going forward – Covid-19 had temporary negative impact on the market but it is expected to normalise
- The market is fragmented, Enersense is in the top 3 largest companies in the market

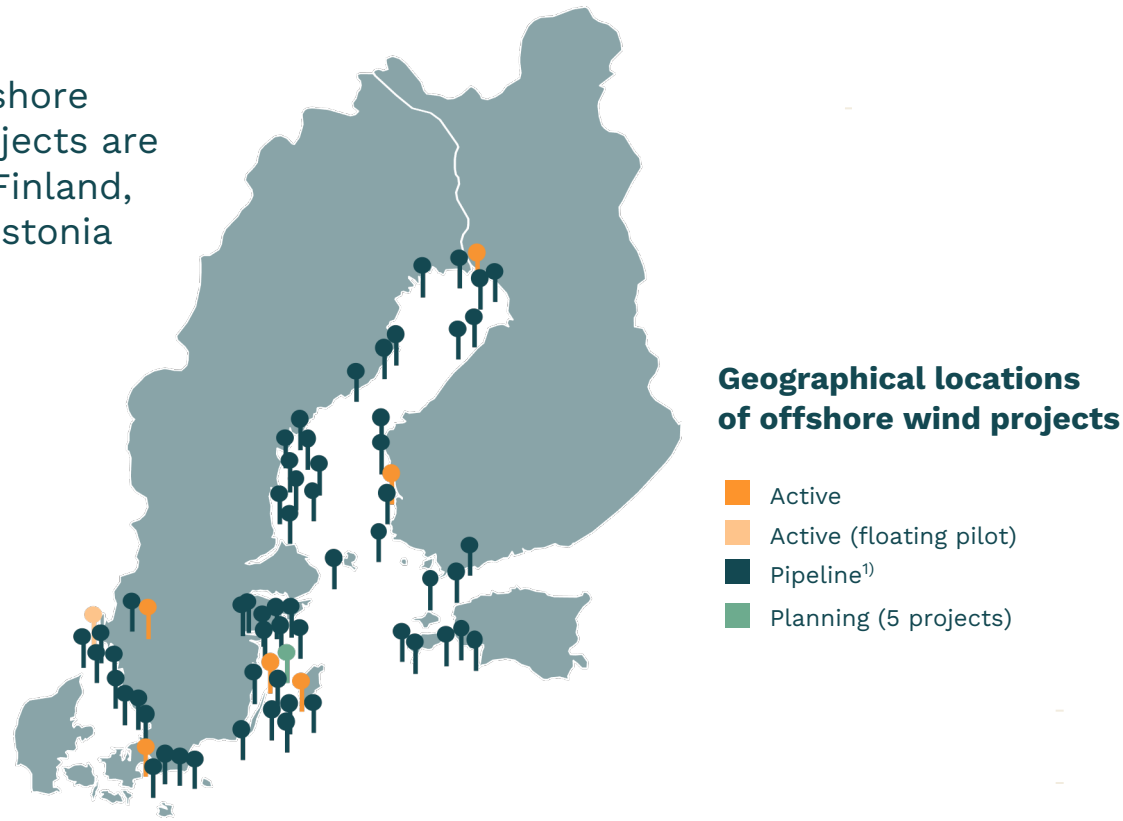
## Industrial maintenance market size estimate



(Sources: Synthesis of multiple databases, Finnish Competition and Consumer Authority, Orbis, Industry report.)

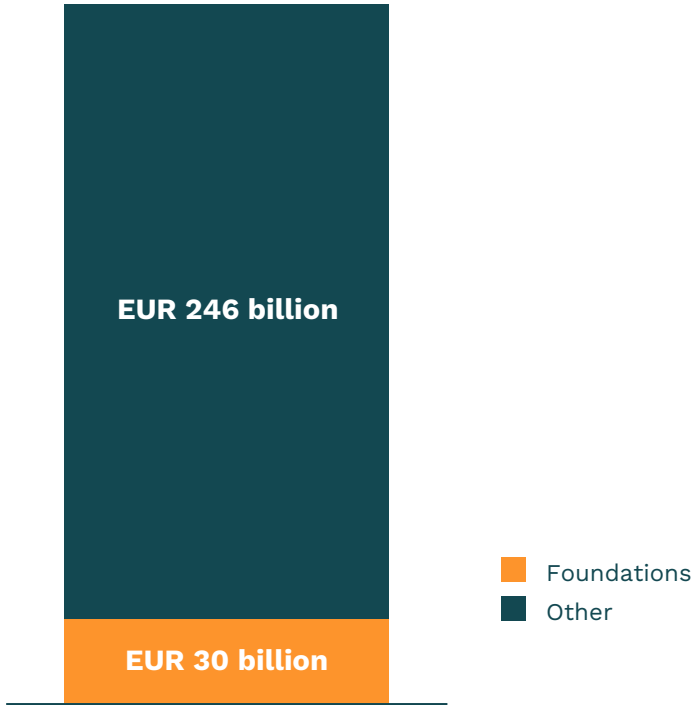
# The Baltic Sea is estimated to hold major potential for offshore wind

In total 81 offshore wind farm projects are in pipeline in Finland, Sweden and Estonia



**Note:** Project pipelines are estimated based on available information. Planned projects with turbine and total MW range are estimated based on an average number between min and max number of turbines and total MW.

## Estimated pipeline value



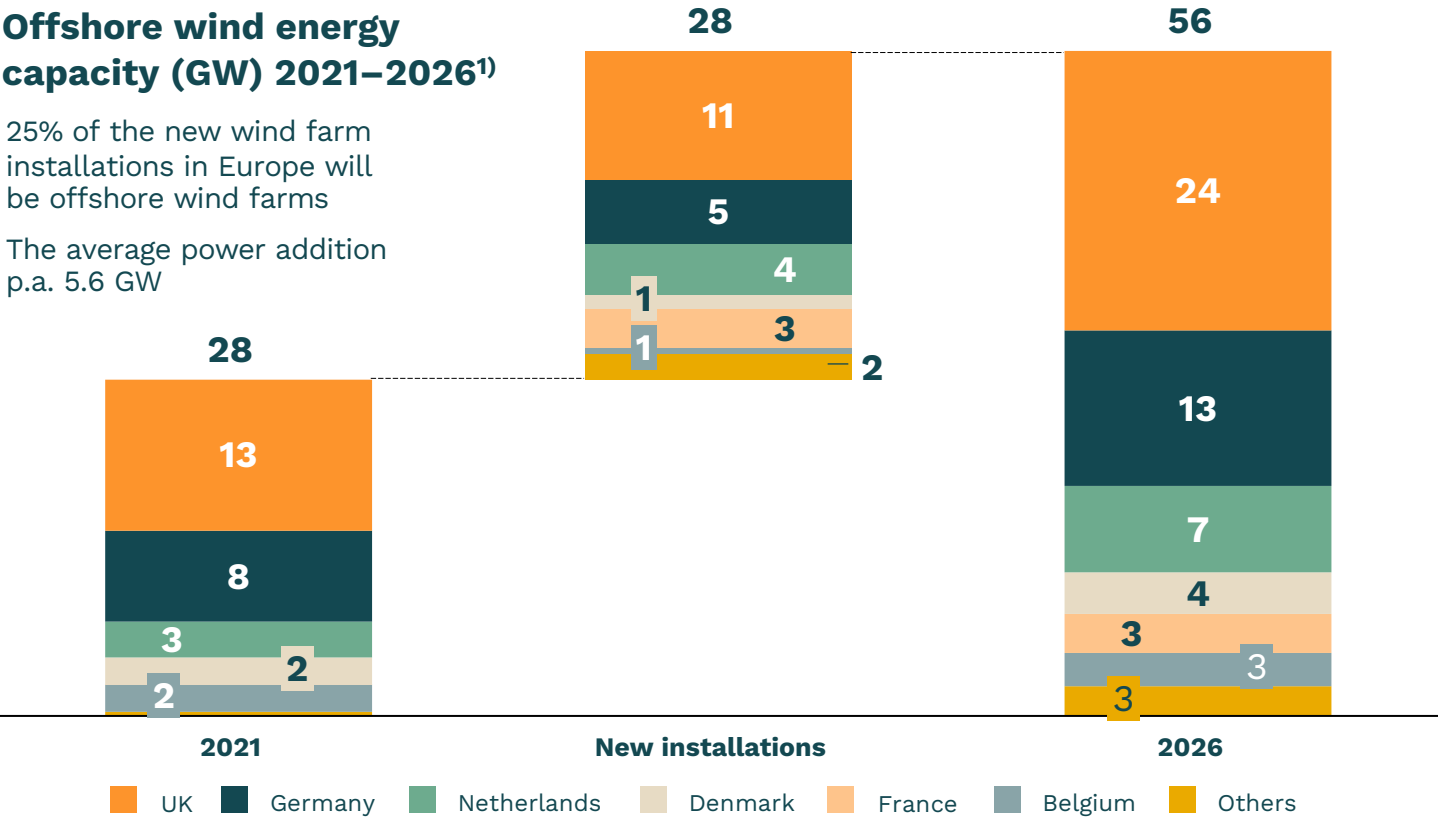


# Significant growth seen for offshore wind energy in Europe as capacity increases

## Offshore wind energy capacity (GW) 2021–2026<sup>1)</sup>

25% of the new wind farm installations in Europe will be offshore wind farms

The average power addition p.a. 5.6 GW



## Estimated value of capacity additions<sup>2)</sup>

The total value of 2022–2026 capacity installations:

~ EUR **104** billion

The value of foundations:

~ EUR **16** billion

**Note:** 1) WindEurope (2/2021) 2) Estimate based on investment value combined from various sources (Finnish Government, Rystad Energy, WindEurope)  
(Sources: Finnish Government, Rystad Energy, WindEurope)

# CASE: Green Hydrogen

## P2X Solutions Oy

- Enersense invests in green hydrogen production
  - Enersense has invested 13 million euros to P2X Solutions Oy
- P2X Solutions Oy will construct a 20 MW electrolyser plant
  - Part of the green hydrogen will be refined further by utilising Power-to-X technology
- Partnership between Enersense and P2X Solutions Oy
  - Enersense will have the status of the primary partner in the construction works of the plant, as well as in its maintenance and operation during the operational phase
  - Possibility to continue the partnership in other future projects of P2X Solutions Oy
- Enersense upgrades its service portfolio
  - Enersense will be a forerunner in construction, operation and maintenance of the first green hydrogen plant in Finland, which will give valuable firsthand green hydrogen expertise for Enersense and its customers in future projects.



# Summary

- Professional and development minded employees
- Versatile and flexible operating model
- The success of our customers is important to us
- The Service offering covers all the renewable energy projects
- With Enersense Offshore our target is to double our revenue by 2027





# Making a zero-emission society a reality in Connectivity Segment

Capital Markets Day 3.5.2022

Enersense International Plc

Juha Silvola





# Connectivity

- We are one of the leading players in the Finnish market and securing the critical infrastructure
- We help our customers provide mobile and fixed network services and ensure their operability
- We are involved in all phases of the lifecycles of data networks by designing, building and maintaining fixed and wireless data networks
  - Mobile network construction work
  - Fixed network construction work
  - Infrastructure and real estate network construction work

# Energy transition

- Digitalisation is key to efficient, flexible, and resilient energy infrastructure
- Digital networks are needed to reduce emissions and to reduce traveling

**“Digitalisation and electrification jointly create impetus for a low-carbon society – the two propel each other toward the future.”**

**-BUSINESS FINLAND** ([Publication](#))



A worker wearing a blue hard hat with a headlamp and safety glasses is seated in the driver's seat of a vehicle. They are wearing a high-visibility yellow jacket and are focused on a laptop screen mounted in front of them. The background shows a blurred view of a parking lot with several cars and trees with autumn foliage.

# Highly integrated processes with telecom operators

We play a crucial role in complicated  
customer specific delivery processes



# Connectivity by numbers

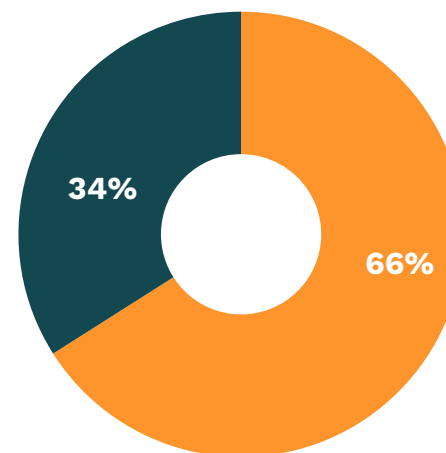
## Key numbers 2021

- Revenue **45.3** MEUR
- The average number of personnel **345**
- EBITDA **1.6** MEUR
- Order backlog **64.0** MEUR
- NPS **45**

(Source: Financial Statements Bulletin 2021)

## Capable & experienced

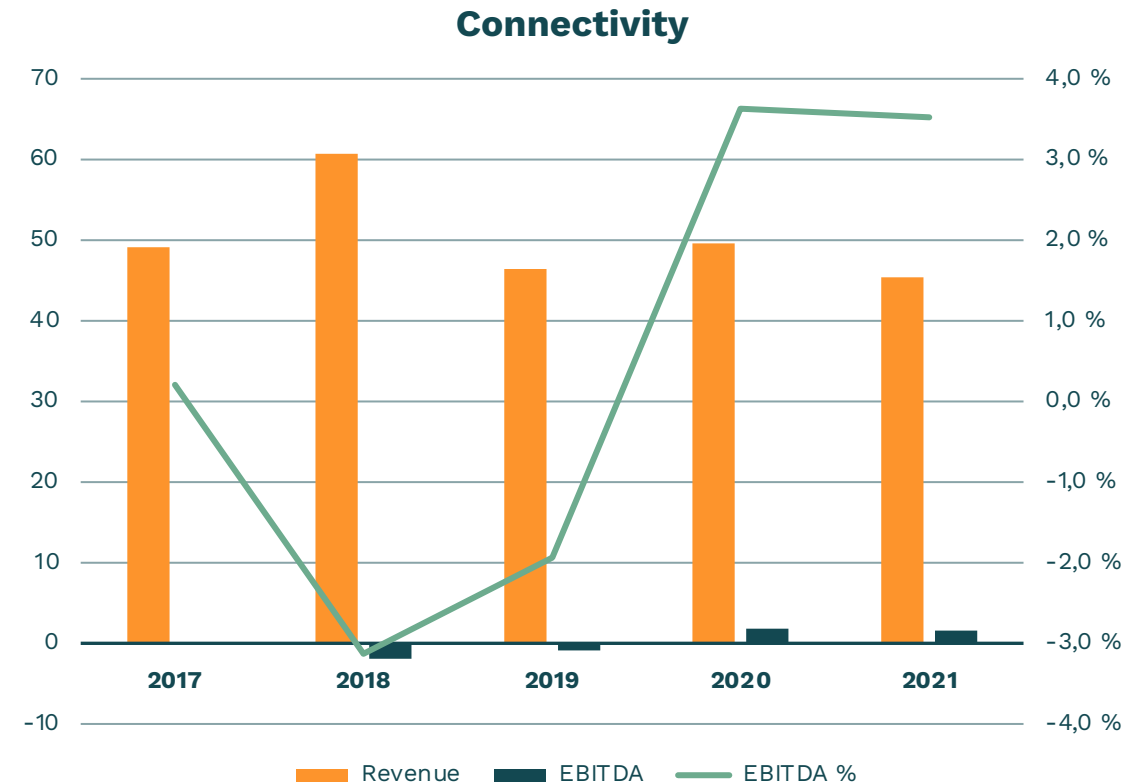
- 100k service tasks/year
- 6k different projects/year
  - Avg. 120 milestones/project



■ Projects ■ Services

# Profitability improvement program

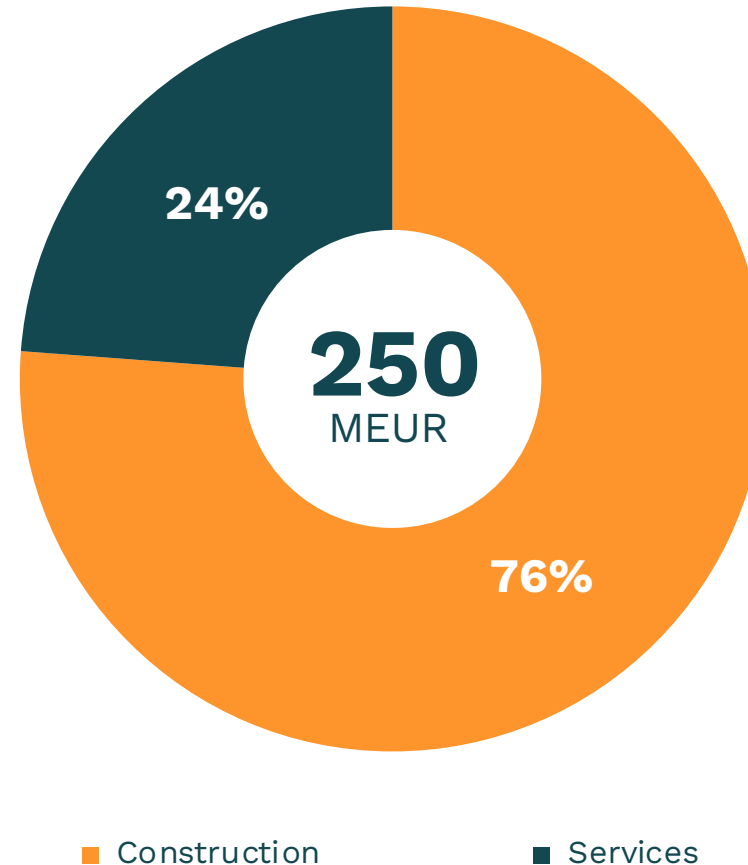
- Operational excellence through predictive, structured production and digitised processes
- Continuous improvement by lean way of working
- Cost awareness at all levels
- Drive revenue growth





# Relevant market

- Total data networks construction & service market is ~250 MEUR annually
- 5G and FTTx implementation drive modest growth
- Technology development continues (i.e 6G) and drive renewal



**Market size  
based on  
Enersense  
management  
estimation**











# Our strengths

- One of the largest data transmission network suppliers in the Finnish market
- High customer satisfaction
- Long framework agreements
- Driven, strong and committed teams help to build a sustainable future

## Services for the entire life cycle of our customers' assets



# Customers

MAJOR TELECOM OPERATORS	OTHER TELECOM OPERATORS	EQUIPMENT SUPPLIERS	INFRA / REAL ESTATE TELECOM CONSTRUCTION COMPANIES	SMALL CELL / INDOOR COVERAGE
  	 	 	  	

- Large telecom operators form the backbone of Enersense's customer base



# **CASE: Nokia 5G construction**

- Enersense signed a frame agreement with Nokia in 2021
- Nokia joined the group to trust Enersense as a mobile network construction partner → we will deliver 5G sites and other expert services during 2021–2023
- Our project management and field operations play a critical role in delivering the future 5G can offer for sustainable society







## **CASE: Telia mobile network modernisation**

- Telia and Enersense agreed on modernisation services in Telia's mobile network
- Along with 5G construction Telia modernises the whole mobile network → this means better quality and higher speed also in 4G network
- In one site up to 1,000kg new equipment is installed and old equipment is dismantled and recycled
- Enersense has an overall responsibility for planning, scheduling and deploying the rollout in geographical clusters



## **CASE: WLAN surveys and installations in the Nordics**

- In 2022 Enersense signed a contract to deliver WLAN site surveys and installations in the Nordics
- Due to the scope and quality requirements the same personnel will travel to all locations
- Enersense is flexible to operate in international projects according to customer needs



# Summary

- High traction customers
- Profitability improvement via operational efficiency
- Long service contracts, steady cash flow
- Order flow and growth via customers' technology investments



# Making a zero-emission society a reality in International Operations

Capital Markets Day 3 May 2022

Enersense International Plc

Margus Veensalu

# International Operations by numbers in 2021

- Revenue **59.0** MEUR
- The average number of personnel **579** person-years
- EBITDA **1.7** MEUR
- Order backlog **120.0** MEUR

(Source: Financial Statements Bulletin 2021)



# The Baltics as a strong backbone for further growth in Europe

The Baltic countries provide a strong backbone for our business to target the growth potential in the bigger European markets



- Enersense is the largest contractor and maintenance provider in high voltage transmission networks and wind power in the Baltics
- Construction and services for electrical substations, power lines, distribution networks, lighting networks, telecommunication networks and wind farms
- Enersense is seen as an experienced and skillful partner able to handle the most complex tasks
- Customers are public and private utilities
- More than 80% of sales is through public procurement

# Long-term growth potential in Central and Western Europe

Activities in Baltic countries provide a strong backbone for our business to target the growth potential in the bigger European markets



**Wind turbine service  
and power line  
contracts**



**Projects for industrial  
customers and  
power line contracts**



**Projects for  
industrial and  
nuclear customers**



**Our focus areas are  
nuclear power and  
offshore wind**

# Our core competences

- Experts and specialised workforce
- Experts on low to high voltage cable and overhead line installation and maintenance
- Experts on fiber optic installation and measuring, planning FO cables and their splicing
- Maintenance of wind farms and -turbines
- Our ambition is to be industry's most desirable employer and have high personnel satisfaction



# Power Lines

# Market overview electrical networks

- **Transformation in energy networks**
  - Increased share of renewable power will lead to an increased need for distribution networks, in particular, strong upside potential from wind and solar power
  - High demand for reliable power supply (e.g., underground cabling)
  - Regulation enhances utilities' capex programs, allowing a full pass-on to transmission and distribution tariffs
  - European electricity market integration drives interconnector investments

- **Desynchronisation**
  - Desynchronisation of Baltic Transmission network from the Russian system and connecting to the Central European frequency area; to be finished by 2025
- **Electrification of rail transport**
  - Rail Baltica is part of a wider development plan of the EU transport network; to be finished by 2030
  - Electrification of railroads and road transport is driven by the climate policy of the EU and technological trends in the market (electric cars)





# Power lines, typical agreements

- **Overhead line and substation projects**
  - Turnkey construction projects up to 50 MEUR
  - Grid maintenance services (annual contracts – typically 3 years)
  - Design and installation projects, customer works, fault repairs
- **Frame contracts, unit prices**
  - Typical case: 2 MEUR/year frame agreement per region, many small assignments, fixed unit prices, 3-year duration, no guaranteed workload, a large amount of the work is subcontracted



# Power lines, current biggest projects

- **Enersense's desynchronisation projects in Estonia**
  - Renovation of Baltic–Tartu (L300) 2020–2022
  - Renovation of the Viru–Tsirguliina (L353) line 2023–2025
- **Enersense's desynchronisation projects in Latvia**
  - Reconstruction of existing 330kV interconnections between Estonia and Latvia Valmiera (LV) Tartu (EE) and Valmiera (LV)–Tsirguliina (EE)
- **Enersense's desynchronisation projects in Lithuania**
  - A new section of approximately 62 km from the Jurbarkas–Bitėnai line to the Kruonis HPP–Sovetsk 330kV line
  - Klaipėda–Krobinia (Latvia) 330kV line

A close-up photograph of a person's hand plugging a black charging cable into the open charging port of a white electric car. In the background, a white charging station with a digital display is visible. The display shows a blue progress bar, the number '1:31', and a battery icon with '75%' below it. The scene is set outdoors with a building and trees in the background.

# Charging systems

# Charging systems, sample project

- Enersense is the partner for Toyota Baltic to build a network of electric car chargers into all Toyota and Lexus dealerships in Estonia, Latvia and Lithuania in 26 locations
- Scope of the works is:
  - site audit survey and analysis of the site
  - design and engineering documentation for the installation/construction works
  - construction/installation works



# Wind Power



# Wind power

- Growth in renewable energy is driven by the EU climate policy and growing competitiveness of renewable energy in the market
- To meet EU goals, installed wind capacity in the Baltics will increase >200% by 2030
- Our expertise is in design and construction of wind farms – access roads, foundations, substations, connections to the grid (subcontractor) + maintenance of turbines (key contractor)
- Enersense has a specialised wind turbine service provider in Estonia with a wide range of maintenance and repair services to both turbine manufacturers and wind farm developers
- Our partner in this business is the biggest renewable energy company in the Baltics – Enefit Green AS active also in development of other renewable energy projects
- Currently our engineers have knowledge and certification for maintaining WinWinD, GE, Vestas ja Nordex turbines
- Our services are provided in Estonia, Lithuania and Sweden

# Summary

- Wide selection of services, supporting the transformation into emission-free energy industry
- Market leaders in High Voltage power line construction in Baltic countries
- Well positioned to participate in all types of renewable energy projects
- Huge growth potential for all Enersense services in Western and Central Europe





**Making  
a zero-emission  
society a reality  
together.**



# Summary

- **Enersense is ready for future growth**
  - + Profitable ground business
  - + New business areas
  - + World class innovations
  - + Green energy ownership

# Q&A





# Thank you!

## IR and media contacts

**Jussi Holopainen**

*President and CEO*

+358 44 517 4543

[jussi.holopainen@enersense.com](mailto:jussi.holopainen@enersense.com)

**Tommi Manninen**

*SVP, Communications and Public Affairs*

+358 40 043 7515

[tommi.manninen@enersense.com](mailto:tommi.manninen@enersense.com)



**Making  
a zero-emission  
society a reality  
now.**