

WÄRTSILÄ

SHAPING THE DECARBONISATION OF MARINE AND ENERGY

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MARCH 2022



MARKET FUNDAMENTALS

MARINE will move with unprecedented speed towards decarbonisation

Policies & regulations

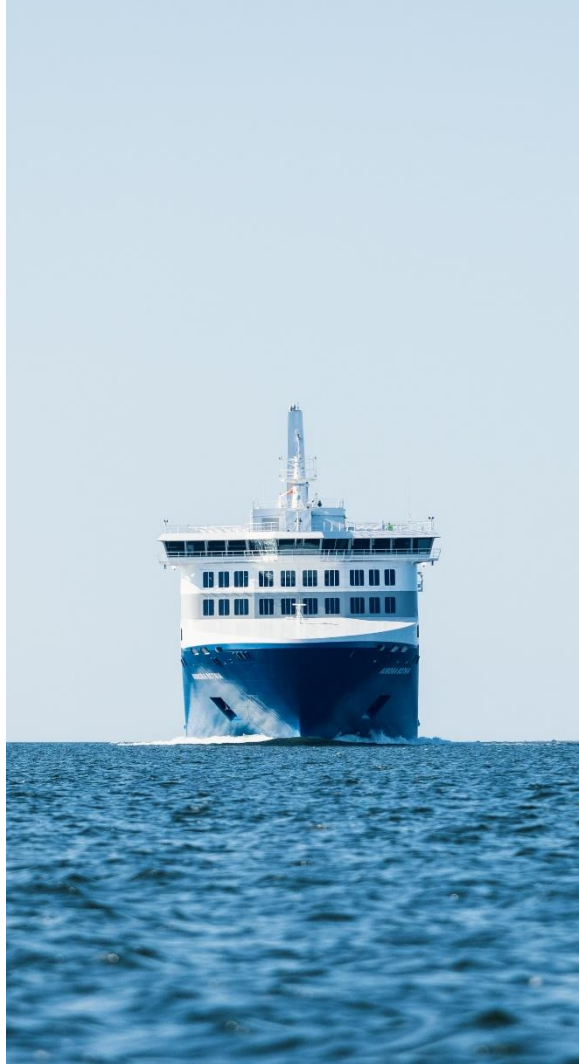
- IMO target
- Access to capital
- Cost of carbon
- Demand for green sea transport

Technology

- Carbon neutral and zero carbon fuels
- Carbon fuels for many years, still
- Abatement technologies
- Battery systems, hybrids & energy saving devices
- Fuel efficiency & flexibility

Connectivity & data

- Vessels as data pools
- Optimisation solutions
- Performance-based agreements
- Cyber security
- Autonomous operations



ENERGY is moving towards a 100% renewables future

Policies & regulations

- EU: Carbon neutral by 2050
- USA: carbon free electricity production by 2035, net zero emissions by 2050
- China: Carbon neutral by 2060

Technology

- Wind and solar growing rapidly
- Intermittent sources requiring balancing power
- Sustainable fuels for thermal balancing
- Digitalisation
- Cyber security

Growing ENERGY demand

- By 2050, electricity generation expected to grow by 3X, renewables by 8X ¹⁾
- By 2030, balancing power market to grow by 10X ²⁾
- Gradual replacement of coal
- Power systems increasingly complex



1) IEA World Energy Outlook 2021 (Net Zero Emissions Scenario)
2) Bloomberg New Energy Outlook 2020, Wärtsilä estimates

The Wärtsilä Way sets the scene for profitable growth

THE WÄRTSILÄ WAY



Purpose

Enabling sustainable societies through innovation in technology and services



Target position

Shaping the decarbonisation of Marine and Energy

- New financial targets
- “Set for 30” – new decarbonisation targets



Strategic priorities

Roadmap to improve performance and reach Target Position



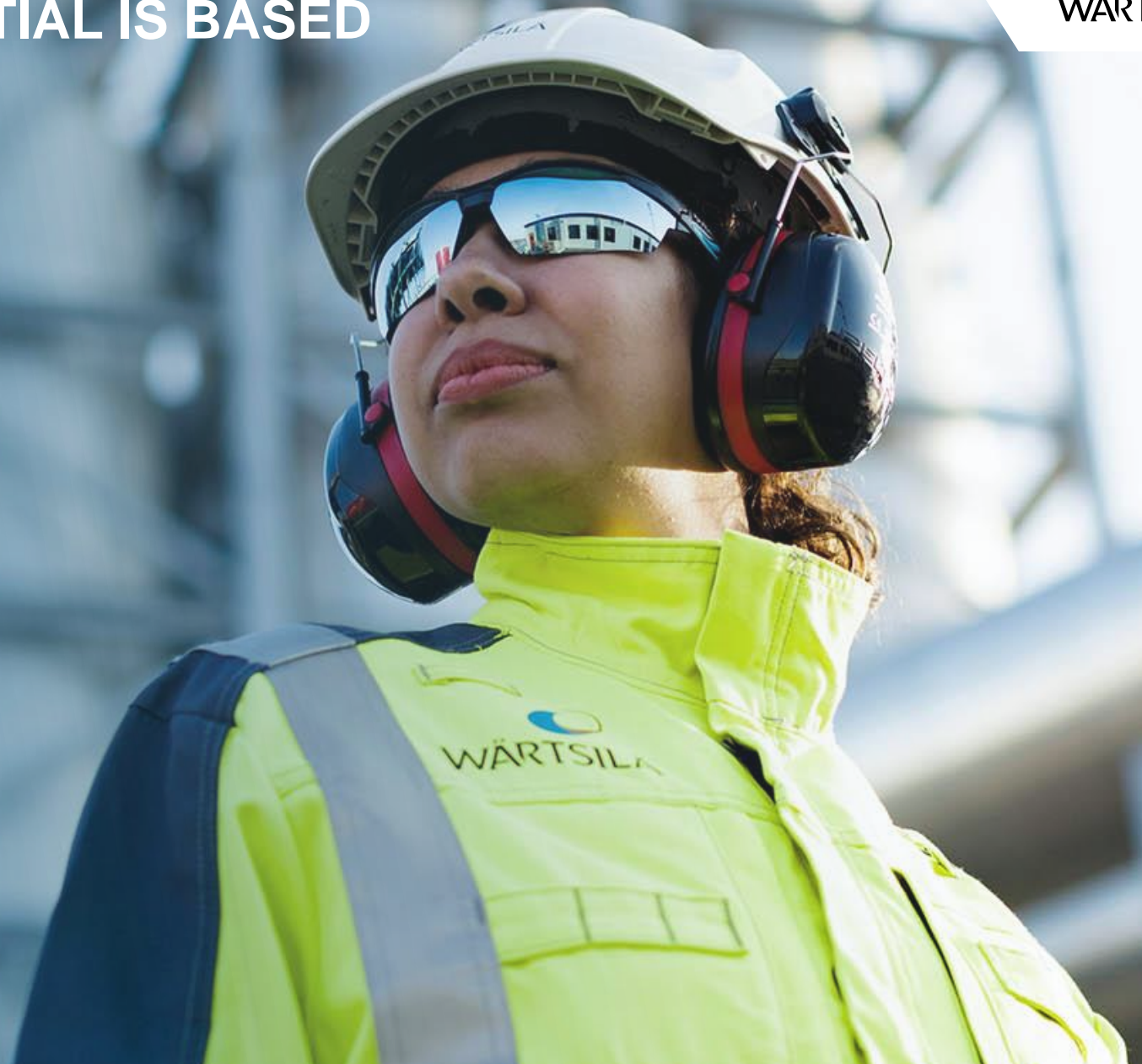
Values

Customer Success, Passion, Performance

OUR VALUE CREATION POTENTIAL IS BASED ON TWO STRATEGIC THEMES

1 TRANSFORM
Decarbonisation creates
new business opportunities

2 PERFORM
Leverage market
recovery and growth



TRANSFORM

Decarbonisation creates new business opportunities

- Maritime is going through an unprecedented rate of change, which is accelerated by regulations and the demand for green transport.
- Also, the energy sector is undergoing a massive transformation as decarbonisation and renewables are fundamentally going to change the way energy is generated.
- We are set for performance and have significant value creation potential to drive this transformation as a technology leader.



1 Major test programme launched, 100% ammonia concept in 2023, 100% hydrogen in 2025



2 Extensive service network, positioned for growth both in transactional services and performance-based agreements



3 First Wärtsilä GridSolv Quantum delivered in the USA



4 First real-life digital port call with Wärtsilä Navi-Port



5 Wärtsilä selected to supply world's largest bioLNG production plant



6 Hitting methanol milestone with first newbuild engine order



7 Ensuring optimal performance and minimal carbon footprint for world's most environmentally friendly ferry

PERFORM

We are ready to leverage market recovery and growth

#1-3 in global markets

FINANCIAL TARGETS:

- 5% annual organic growth
- 12% operating margin

"SET FOR 30"

DECARBONISATION TARGETS:

- carbon neutral in our own operations by 2030
- a product portfolio ready for zero carbon fuels by 2030



Clear financial targets and strong commitment to realise them



Robust capital allocation principles and active portfolio management



Notable opportunity in retrofits and conversions



Extensive service network, positioned for growth both in transactional services and performance-based agreements

Focus on:

- High performing teams
- Performance excellence and robust execution
- Continuous improvement
- Cost structure – actions taken whenever and wherever necessary

New financial targets reflect growth opportunities and increased profitability

New targets

Net sales	5% annual organic growth
Profitability	12% operating margin
Capital structure	Gearing below 0.50
Dividend	At least 50% of earnings



Good growth opportunities in services, energy, and marine new build recovery. Our installed base provides a strong foundation for services growth

Starting point:
Net sales 4,401 MEUR
(LTM Q3/2021)

Key drivers

Storage

- Fast growing demand for energy storage and power system optimisation solutions



Services

- Increased share of wallet from existing customers
- Deeper penetration of installed base
- Decarbonisation retrofits
- New business models



Thermal balancing

- Increased demand due to coal shut-downs
- Thermal balancing power complementing energy storage



Marine new build market recovery

- Cruise & Ferry and Special Vessel segments in particular



**Target:
5% annual organic
growth**

Limited additional CAPEX needed to facilitate the growth

We will reach our profitability target while maintaining R&D investments at ~3% of net sales

Starting point:
Operating margin 5.9%
(LTM Q3/2021)

Key drivers

- Marine and Energy Services growth
- Thermal balancing power growth
- Storage growth
- Voyage turnaround and digital growth
- Pricing
- Continuous improvement
- Cost inflation



>0%



**Target:
12% operating margin**

Limited additional CAPEX needed to facilitate the growth

Ambitious decarbonisation targets for 2030

To provide a product portfolio which will be ready for zero carbon fuels

To become carbon neutral in our own operations

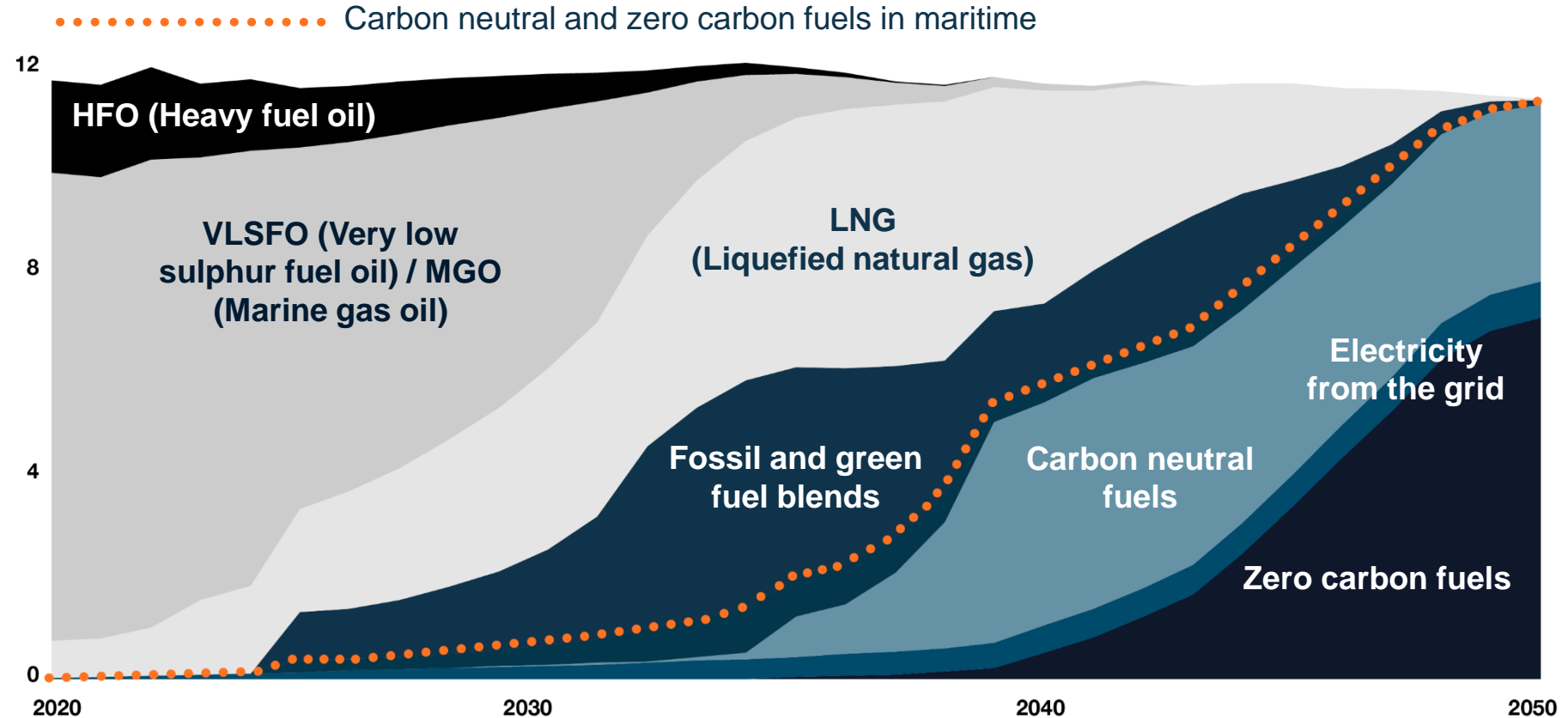
SUPPORTING DECARBONISATION IN MARINE

OWNERS WILL DECIDE ON TECHNOLOGY PARTNERS NOW:

- Vessel life is 25-30 years
- Critical decision criteria:
 - Multifuel capabilities for blending with green fuels
 - Conversion capabilities for future fuels

MOVE FROM A SINGLE-FUEL INDUSTRY TO A MULTI-FUEL ONE

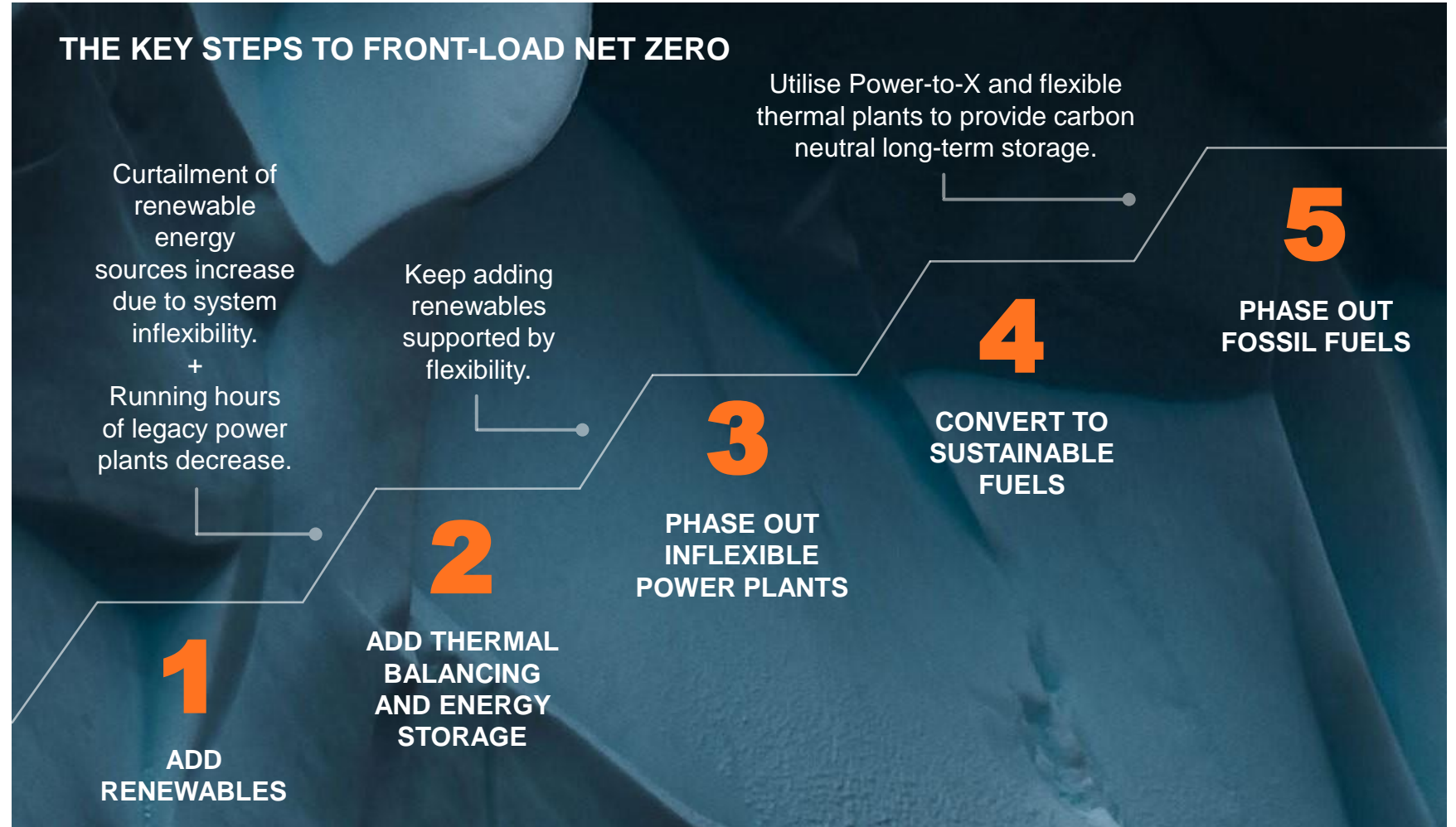
Distribution of fuel types for Decarbonisation 2050 (1.5°C scenario), exajoule



Source: DNV Maritime Forecast 2050 model, Wärtsilä internal estimates

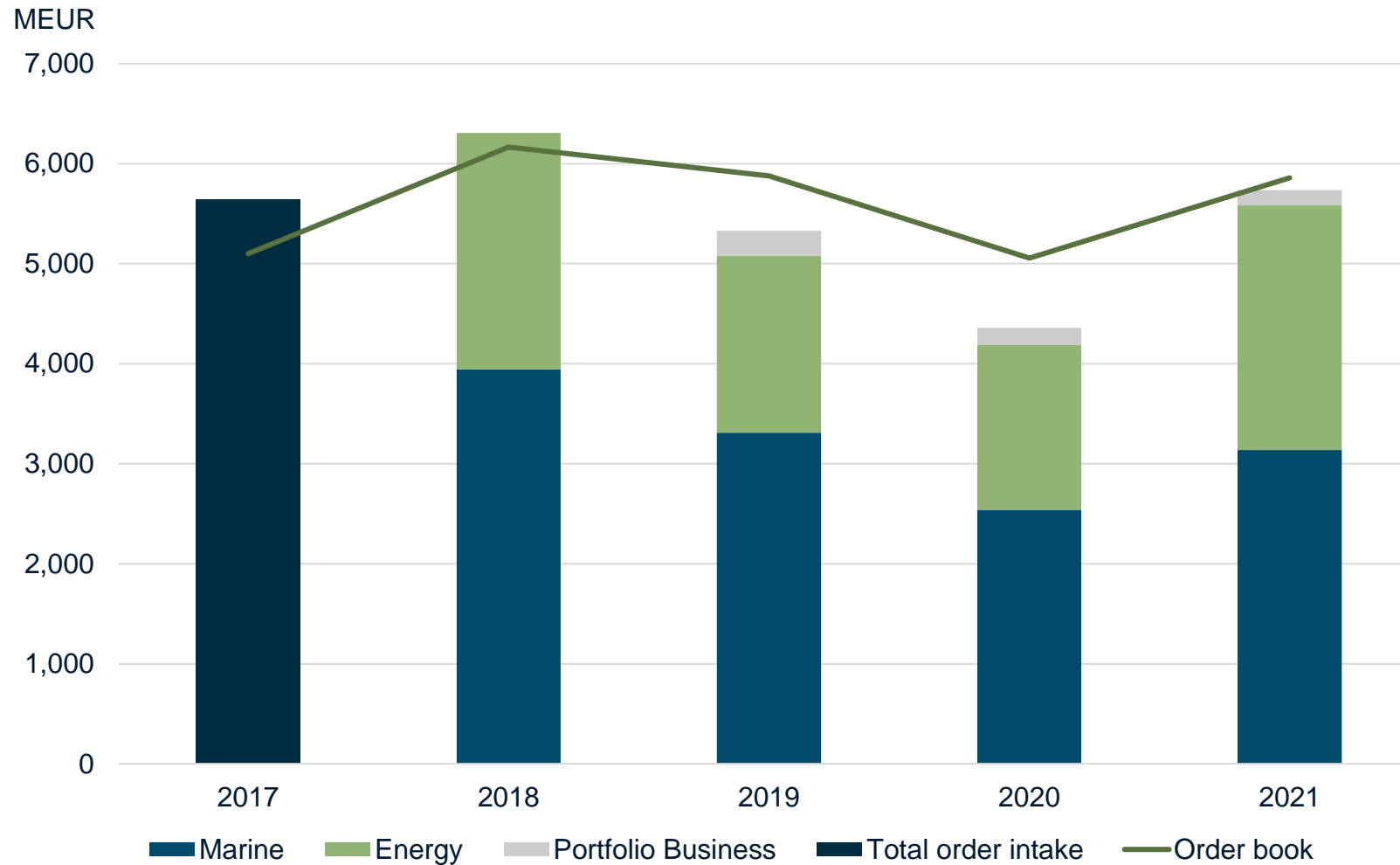
SUPPORTING DECARBONISATION IN ENERGY

- Wind and solar are intermittent power sources
- Flexible balancing power needed to stabilize the power system: balancing power market expected to grow by 10X ¹⁾
- Reciprocating engines ideally suited to provide balancing power
 - Energy efficient
 - Fast ramp up/ramp down
 - Fuel flexible
- Today running on gas, tomorrow on green fuels



1) by 2030. Source: Bloomberg New Energy Outlook 2020, Wärtsilä estimates

ORDER INTAKE AND ORDER BOOK IMPROVED IN 2021



Increasing adoption of intermittent renewable energy is accelerating the need for flexible balancing power

Omaha PPD 156 MW - USA



Wärtsilä's technology with fast-starting internal combustion engines will be used to **balance the power generation** to the grid and **ensure system stability**

AGL 250 MWh - Australia



The battery energy storage system will support both thermal and renewable generating assets, and help Australia to **decarbonise** and transition towards **100% renewable energy future**

BTG 150 MW - Brazil



Wärtsilä gas power plants feature **high efficiency** at any load, and can reach **full output power within minutes**, an essential benefit in systems integrating higher levels of renewable energy

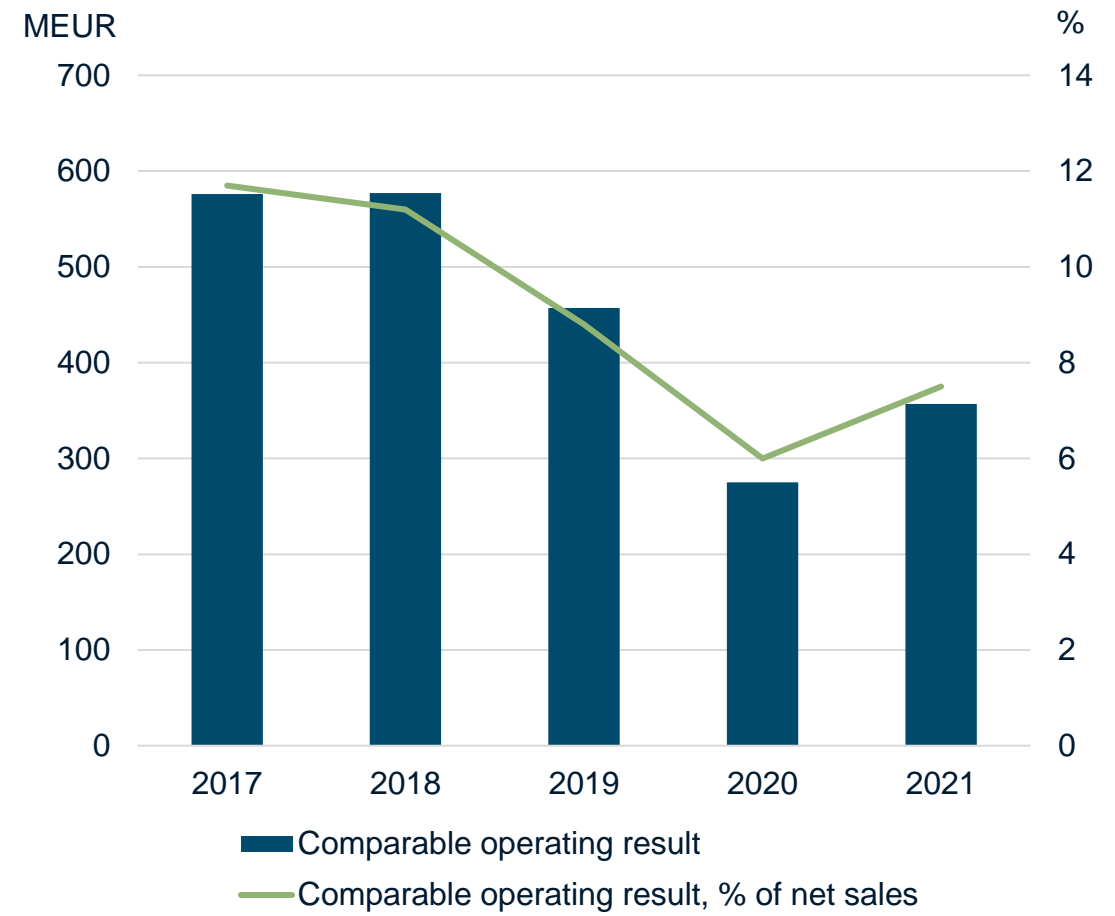
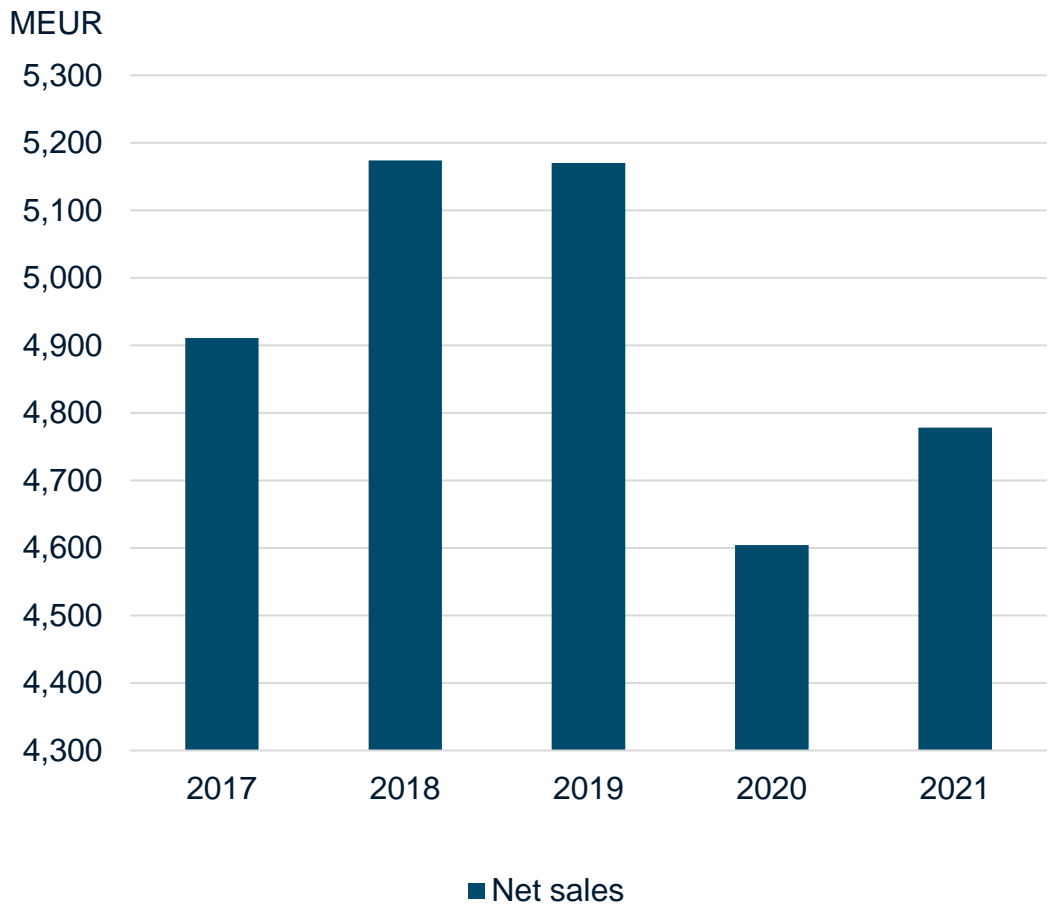
CFE 600 MW - Mexico



The two plants will operate continuously during summer months, **meeting the high electricity demand** in the region, while being used to provide **grid balancing service** for the remainder of the year



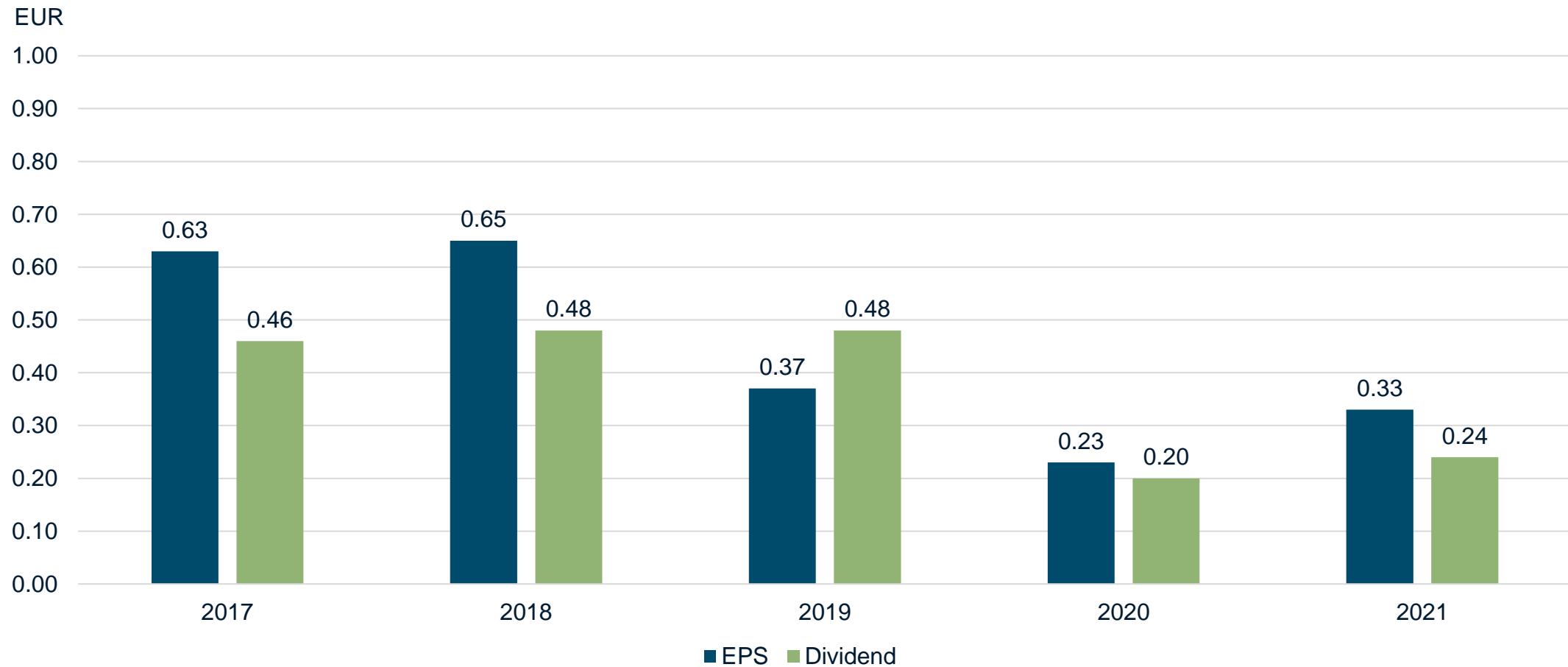
NET SALES AND COMPARABLE OPERATING RESULT INCREASED IN 2021



STRONG CASH FLOW AND BALANCE SHEET

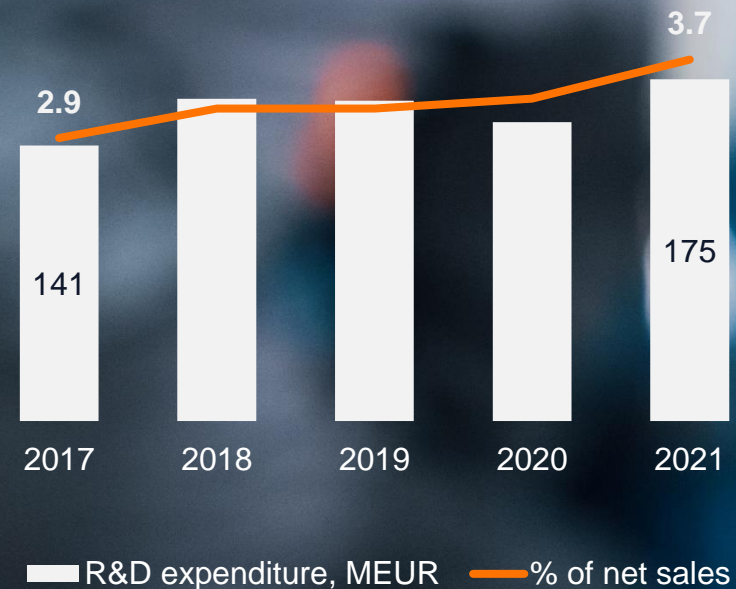
MEUR	1-12/2021	1-12/2020
Cash flow from operating activities	731	681
Working capital	-100	257
Net interest-bearing debt	4	394
Gearing	0.00	0.18
Solvency, %	38.6	38.1
Basic earnings/share, EUR	0.33	0.23

EARNINGS AND DIVIDEND PER SHARE





WE CONTINUE INVESTING IN INNOVATION TO ENSURE A BROAD, INDUSTRY-LEADING SOLUTION OFFERING



SIGNIFICANT VALUE CREATION POTENTIAL

PURPOSE



ENABLING SUSTAINABLE SOCIETIES THROUGH INNOVATION IN TECHNOLOGY AND SERVICES



COMMITTED TO TARGETS

FINANCIAL TARGETS

- 5% annual organic growth
- 12% operating margin

"SET FOR 30" – DECARBONISATION

- A product portfolio ready for zero carbon fuels
- Carbon neutral in own operations

ENERGY

Intermittent sources of energy require balancing solutions. By 2030, the balancing power market is expected to grow >10X.

MARINE

An unprecedented rate of change driven by regulations and demand for green transport. 50% GHG reduction in shipping by 2050



TARGET POSITION

SHAPING THE DECARBONISATION OF MARINE & ENERGY



LEADING OFFERING TO SUPPORT OUR CUSTOMERS IN DECARBONISATION

FUEL FLEXIBLE ENGINES ENABLING DECARBONISATION

BATTERY, ENERGY SAVING, AND EMISSION ABATEMENT TECHNOLOGIES

THERMAL BALANCING AND ENERGY STORAGE

ENERGY EFFICIENCY & POWER SYSTEM OPTIMISATION

THE WIDEST SERVICE NETWORK IN THE INDUSTRY

DIGITAL SOLUTIONS ENABLING OPTIMISED OPERATIONS AND SERVICE



THANK YOU!



FINANCIAL DEVELOPMENT IN Q4 2021



MOVING IN THE RIGHT DIRECTION IN 2021: ORDERS, NET SALES, OPERATING RESULT, AND CASH FLOW ALL IMPROVED

- Order intake increased by 32%, growth in all businesses
- Good progress in services:
 - Order intake increased by 17%
 - Net sales increased by 11%
- Profitability improved
- Strong cash flow
- Covid-19 continued to have a negative impact on Wärtsilä's business
- New ambitious financial and decarbonisation targets announced

POSITIVE DEVELOPMENT IN ALL KEY FIGURES

MEUR	10-12/2021	10-12/2020	CHANGE	1-12/2021	1-12/2020	CHANGE
Order intake	2,150	1,118	92%	5,735	4,359	32%
of which services	753	626	20%	2,656	2,267	17%
Order book				5,859	5,057	16%
of which current year deliveries				3,763	3,298	14%
Net sales	1,597	1,220	31%	4,778	4,604	4%
of which services	761	654	16%	2,499	2,255	11%
Book-to-bill	1.35	0.92		1.20	0.95	
Operating result	144	90	59%	314	234	34%
% of net sales	9.0	7.4		6.6	5.1	
Comparable operating result	158	103	53%	357	275	30%
% of net sales	9.9	8.4		7.5	6.0	

FOURTH QUARTER HIGHLIGHTS

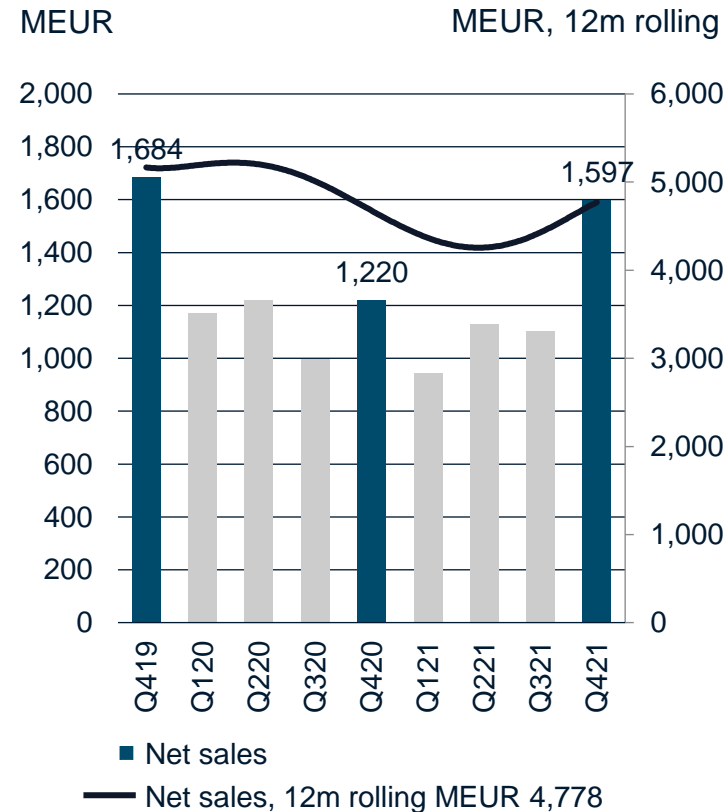
Net sales EUR 1,597 million

- 16% increase in service sales

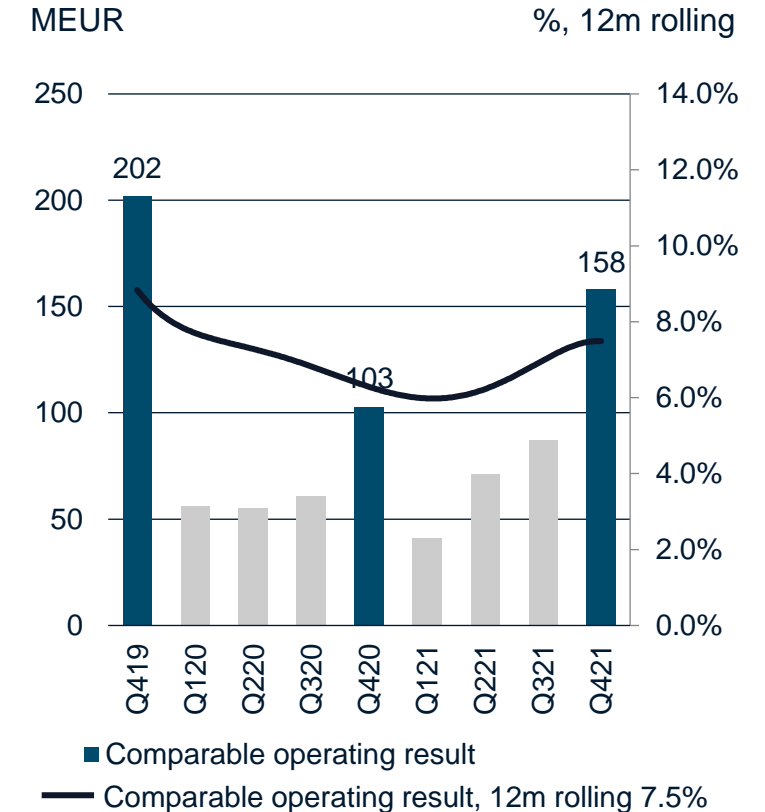
Comparable operating result EUR 158 million

- 53% growth
- More favourable sales mix between equipment and services

Net sales



Comparable operating result

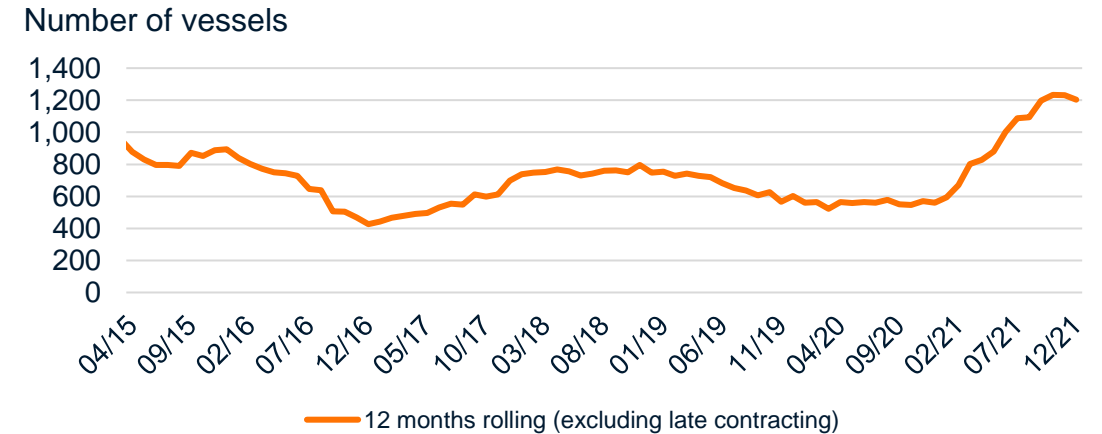


MARINE MARKET DEVELOPMENT

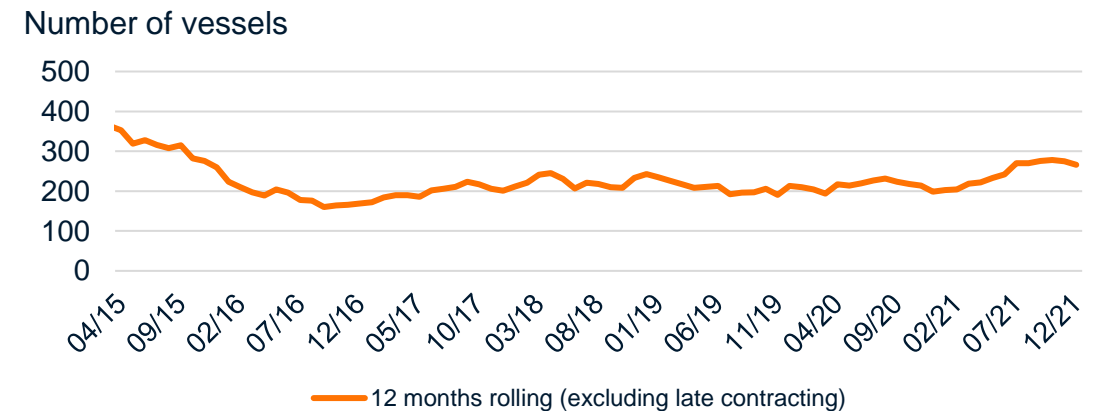
MIXED ACTIVITY LEVELS ACROSS SEGMENTS IN 2021

- The number of vessels ordered in the review period increased to 1,855 (815 in the corresponding period in 2020, excluding late reporting of contracts).
- In 2021, record level vessel contracting was seen in containerships, newbuild activity in gas carriers and bulkers exceeded pre-Covid era. Cruise newbuild activity was limited.
- The transition to cleaner fuels has already started, with 384 orders placed globally for alternative fuel capable vessels.
- At the end of December, around 70% of the cruise fleet capacity was active, up from around 50% at the end of September, and around 20% at the end of June.

Total vessel contracting



Specialised vessels



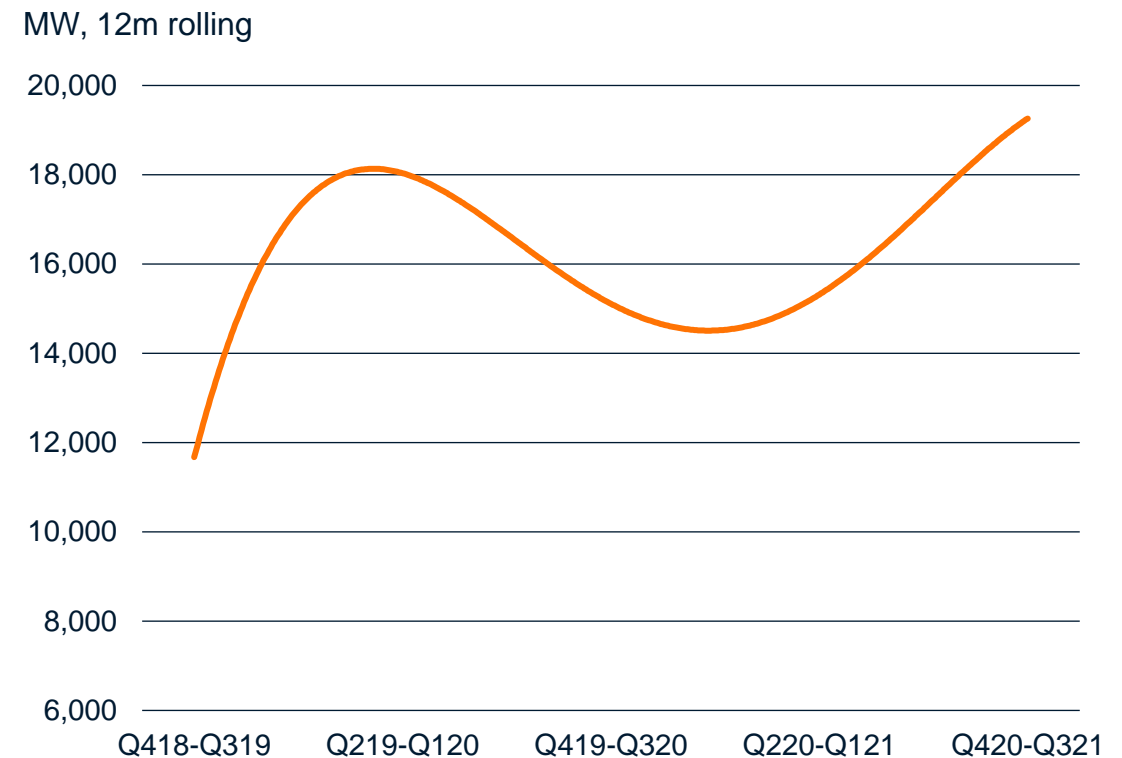
Source: Clarksons Research, 12m rolling contracting as per 5 of January 2022 (+100 gt, excluding late reporting of contracts)
Specialised vessels include LNG carriers, LPG carriers, cruise & ferry, offshore, and special vessels.

ENERGY MARKET SITUATION IMPROVING

GOOD ACTIVITY IN THE ENERGY STORAGE MARKET

- The energy markets were recovering throughout the year 2021, despite the Covid-19 pandemic and the resulting weakening of the investment environment
- While the market situation is improving, customers still continue to postpone investments due to the pandemic
- Activity in the energy storage markets has continued at a good level
- Wärtsilä's market share in gas and liquid fuel power plants decreased to 5%

Market for gas and liquid fuel power plants <500 MW

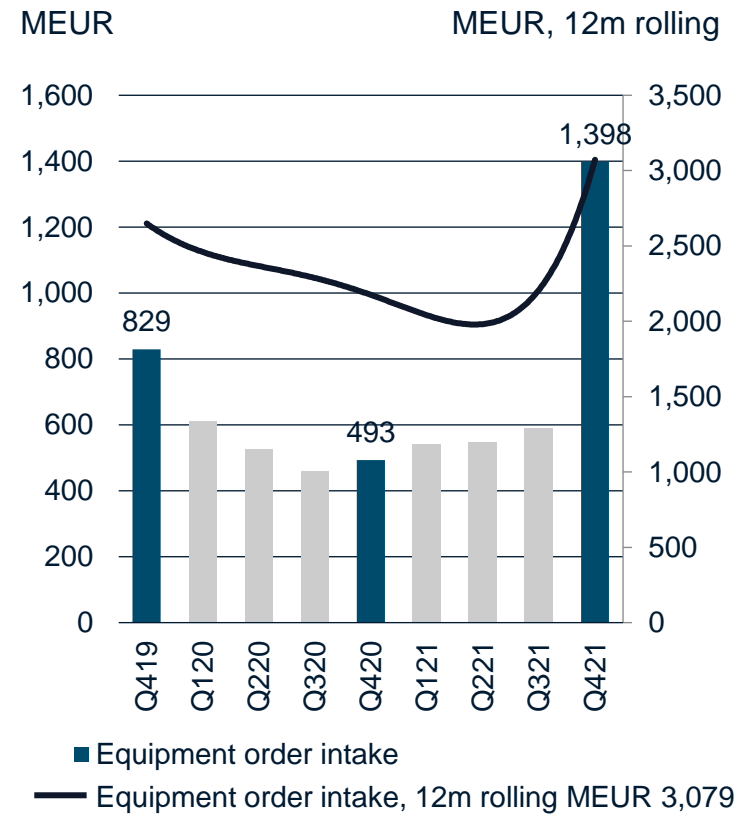


The total market, including also power plants with prime movers above 500 MW, increased by 6% to 46.0 GW during the twelve-month period ending in September 2021 (43.3 at the end of June). The market data includes all Wärtsilä power plants and other manufacturers' gas and liquid fuelled gas turbine based power plants with prime movers below 500 MW, as well as the estimated output of steam turbines for combined cycles. The data is gathered from the McCoy Power Report. The main gas turbine competitors are GE, Siemens, Mitsubishi, and Ansaldo. Other combustion engines are not included.

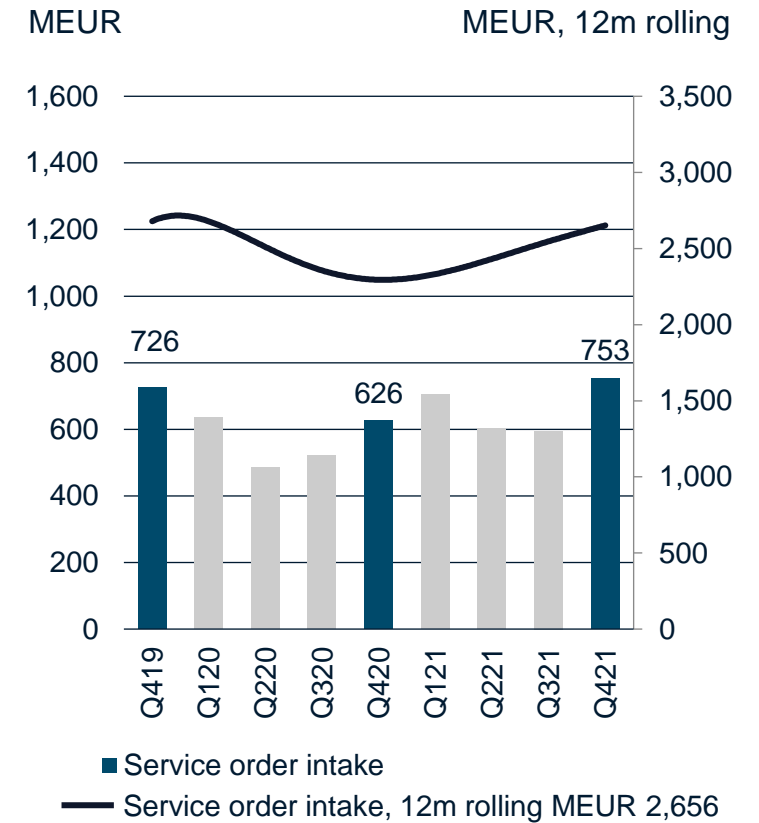
ORDER INTAKE INCREASED BY 92%

- Order intake increased across all businesses
- Equipment order intake increased by 184%, driven by energy orders
- Service order intake increased by 20%

Equipment



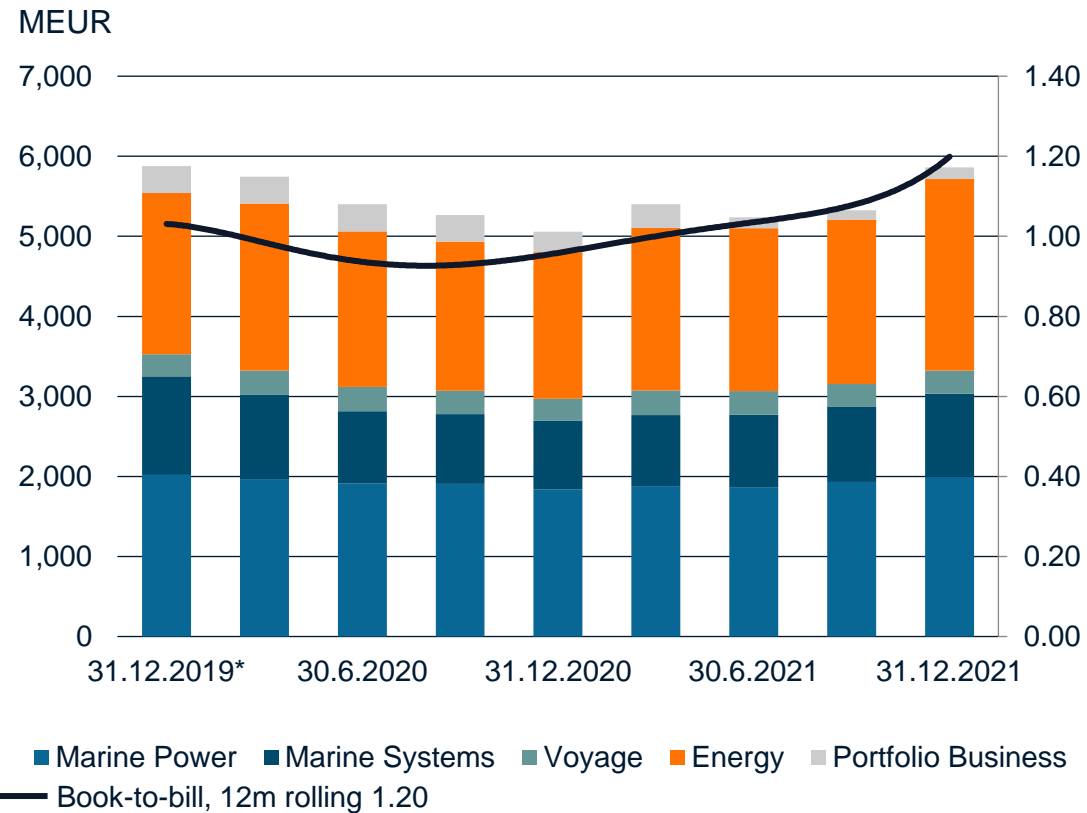
Services



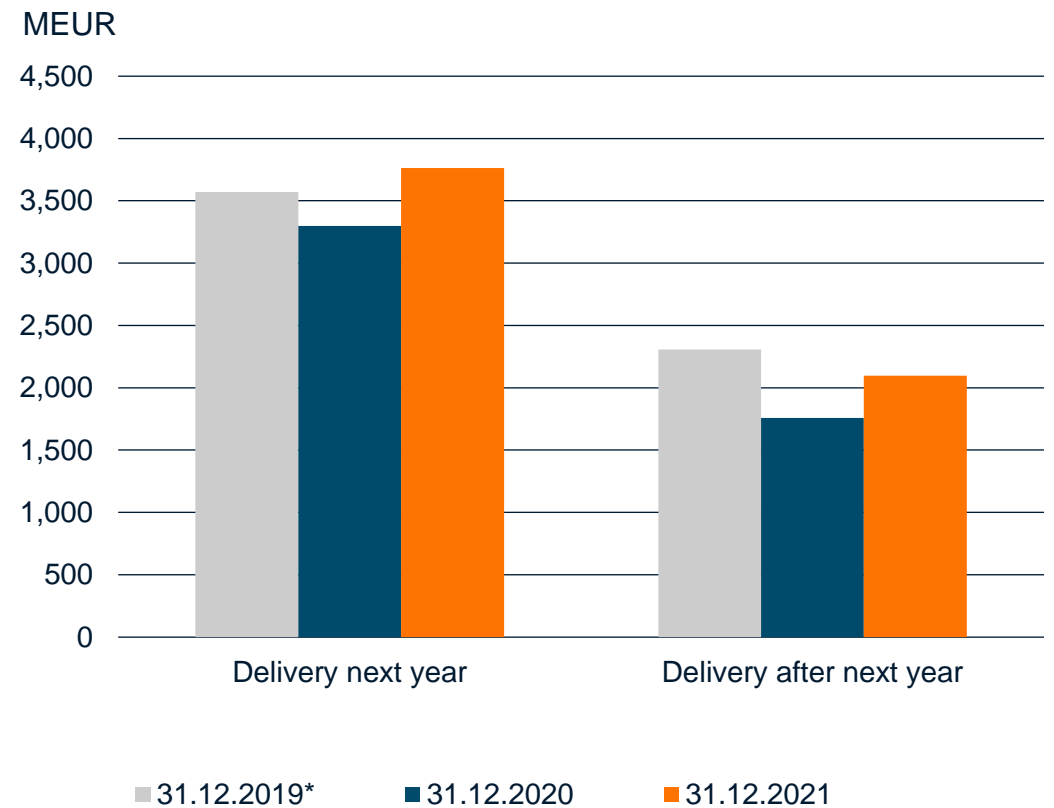
INCREASE IN ORDER BOOK

BOOK-TO-BILL CONTINUED TO IMPROVE

Order book by business



Order book delivery schedule

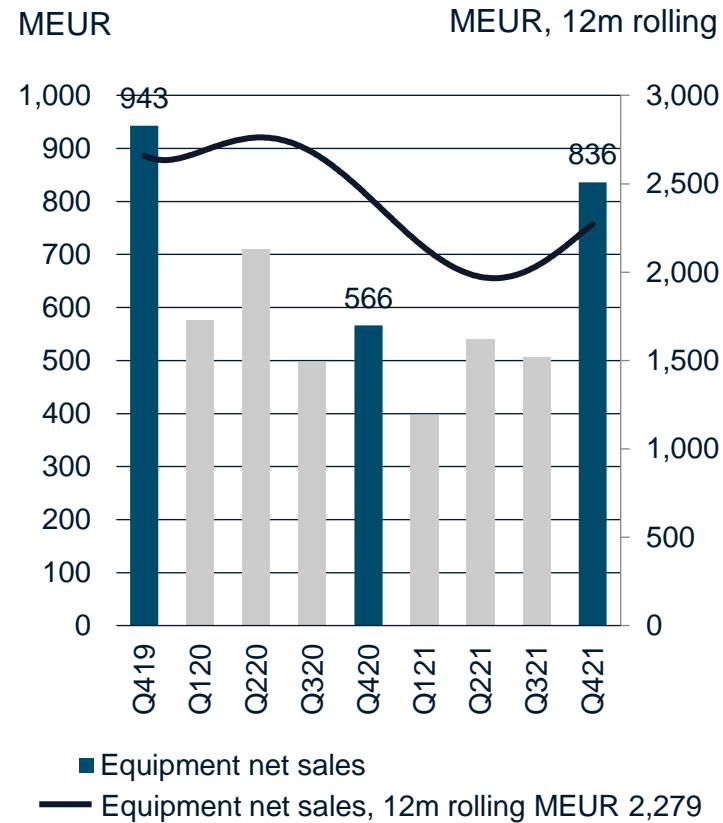


* As published in the Interim report January-March 2020, order book figures for 2019 have been restated due to stricter requirements for booking new orders.

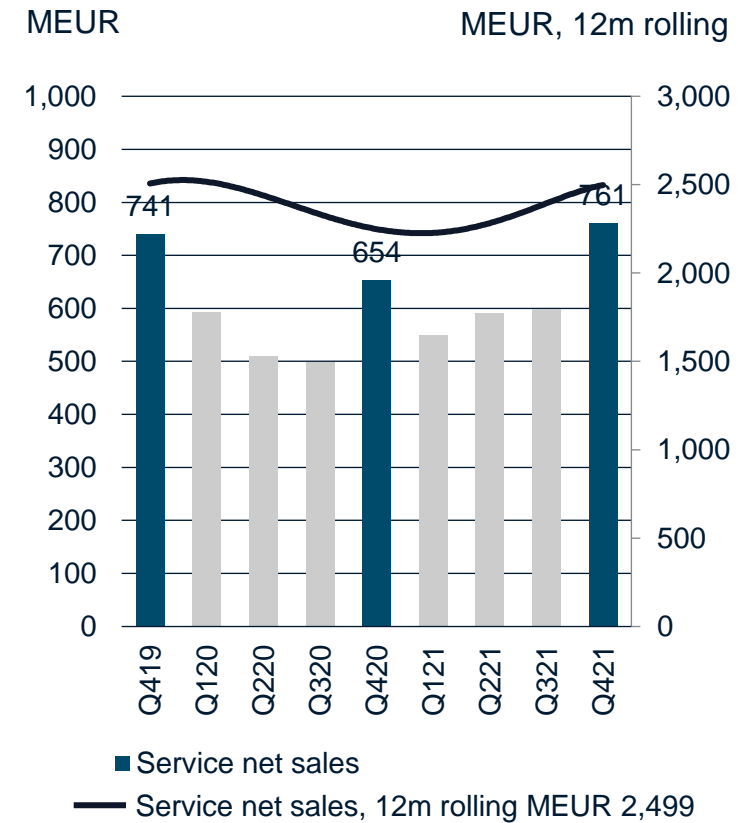
NET SALES INCREASED BY 31%

- Equipment net sales increased by 48%
- Service net sales increased by 16%

Equipment

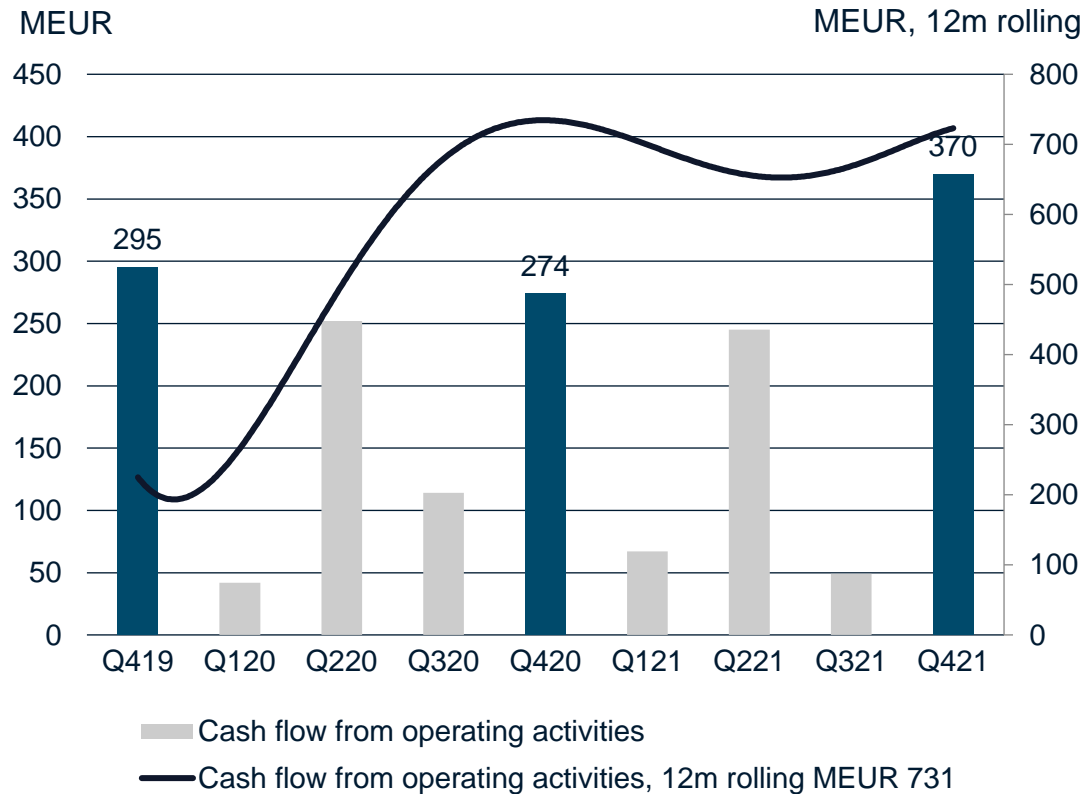


Services

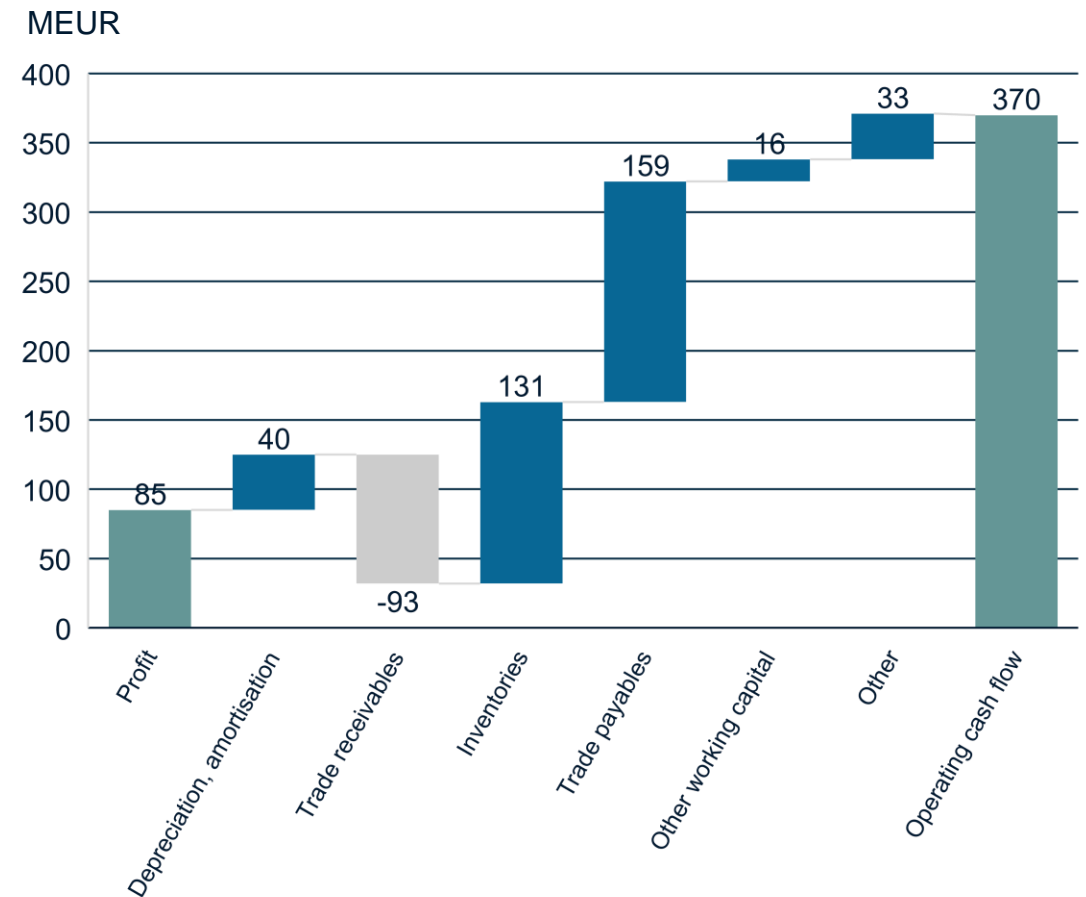


CASH FLOW FROM OPERATING ACTIVITIES INCREASED

Cash flow from operating activities



Fourth quarter development



TECHNOLOGY AND PARTNERSHIP HIGHLIGHTS

ENABLING INDUSTRY DECARBONISATION

2-stroke future fuels conversion platform

- The retrofit conversion will initially enable operation with currently available LNG fuel, which can then be further developed in order to allow for the adoption of alternative green fuels or fuel blends

New IQ Series exhaust gas treatment system

- Innovative design allows the same exhaust gas cleaning results to be achieved with a smaller footprint

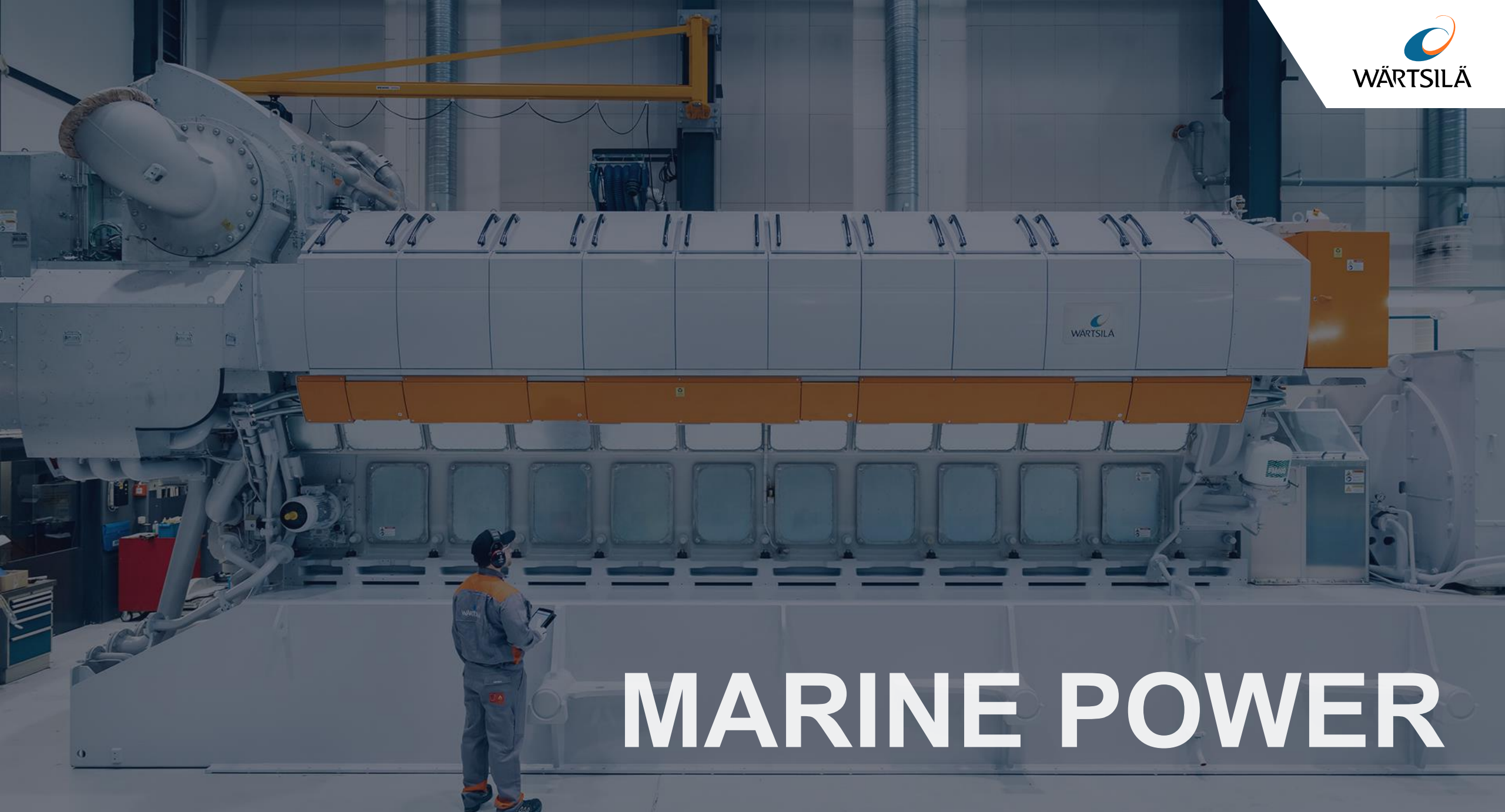
Conversion to ammonia-fuelled engine

- Cooperation agreement with Eidesvik Offshore ASA aims to convert an offshore supply vessel (OSV) to operate with an ammonia-fuelled combustion engine

Smart port innovation and digitalisation

- Wärtsilä Voyage signed a landmark Memorandum of Understanding (MoU) with the Maritime and Port Authority of Singapore (MPA) to further strengthen their collaboration



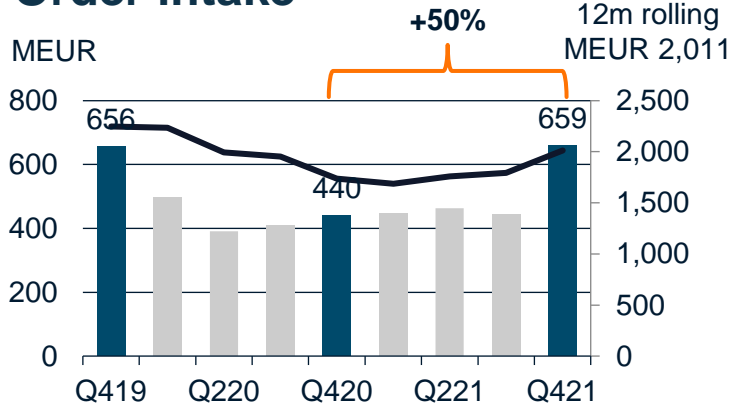


MARINE POWER

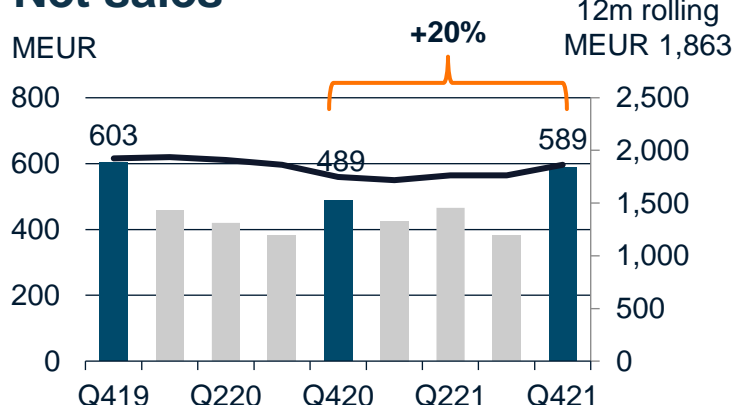
MARINE POWER: INCREASE IN ALL KEY FIGURES

COMPARABLE OPERATING RESULT INCREASED BY 67%

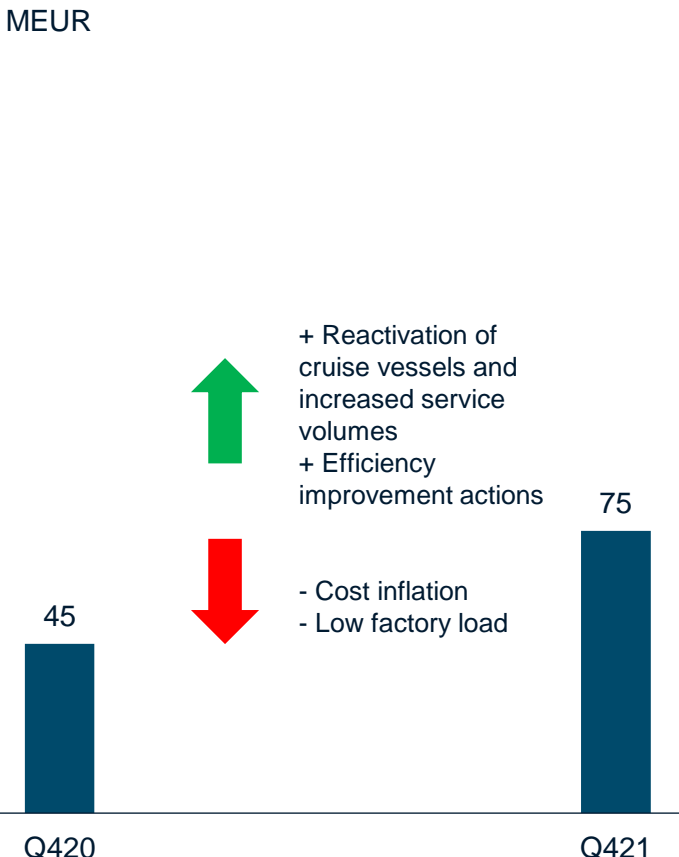
Order intake



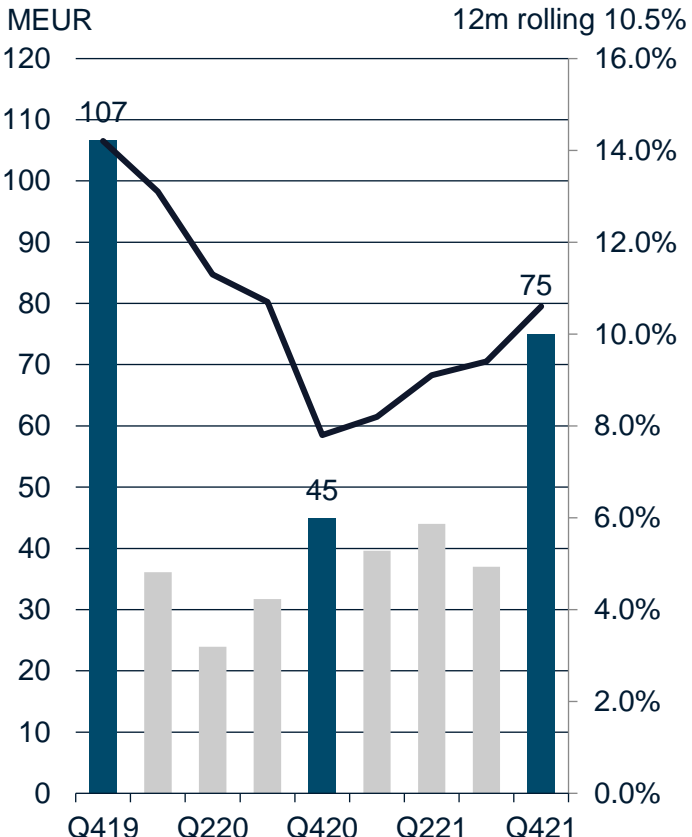
Net sales



Comparable operating result

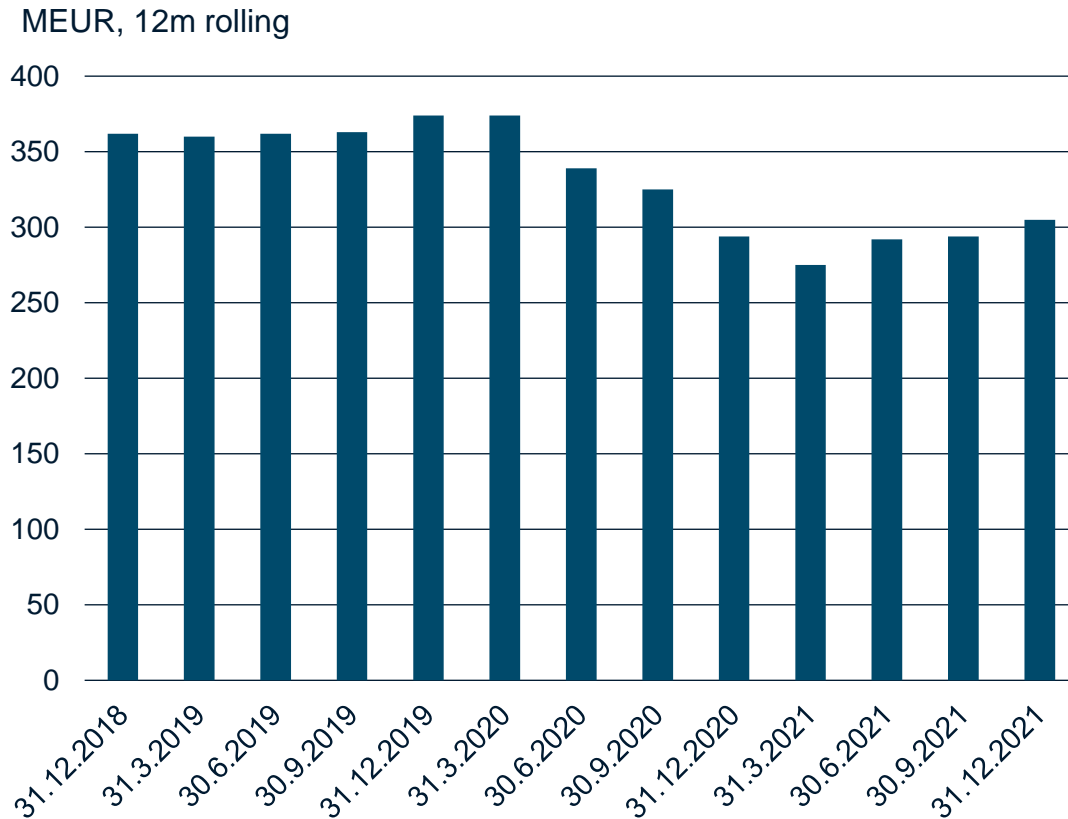


Comparable operating result



MARINE POWER SERVICE AGREEMENTS

NET SALES FROM INSTALLATIONS UNDER AGREEMENT INCREASING AFTER A COVID-19 RELATED DECLINE



Wärtsilä has signed a long-term Optimised Maintenance Agreement with Singapore based NYK Shipmanagement

- The 13-year contract is designed to ensure maximum uptime and equipment reliability, with assured maintenance costs, for an LNG carrier vessel featuring three Wärtsilä 50DF dual-fuel engines
- The order includes Expert Insight, which enables dynamic, data-driven maintenance planning, optimising maintenance needs and monitoring equipment and systems in real-time through the use of artificial intelligence (AI) and advanced diagnostics



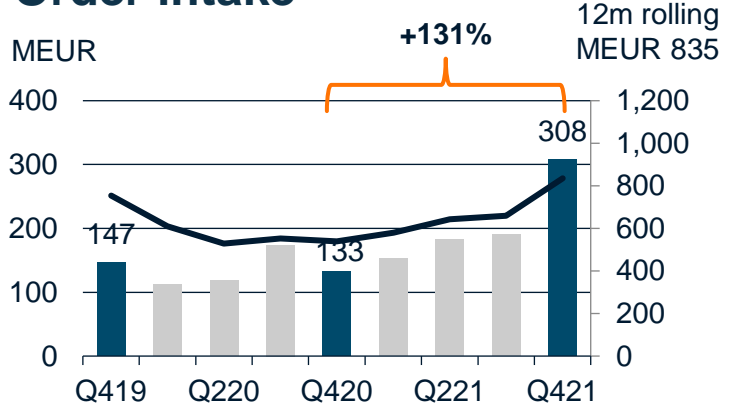
MARINE SYSTEMS



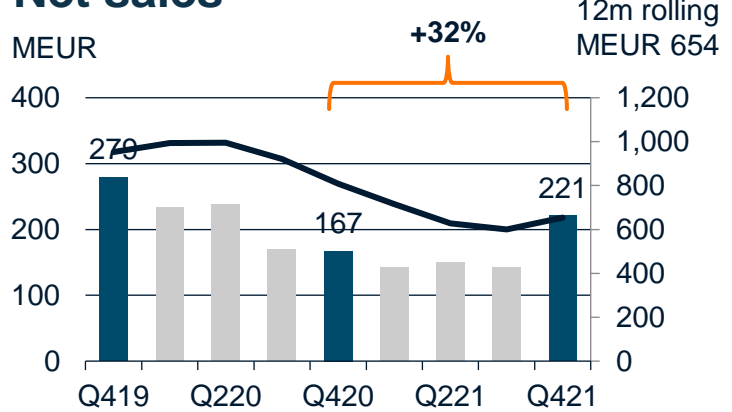
MARINE SYSTEMS: NET SALES AND ORDER INTAKE INCREASED

SERVICE ORDER INTAKE INCREASED BY 21%

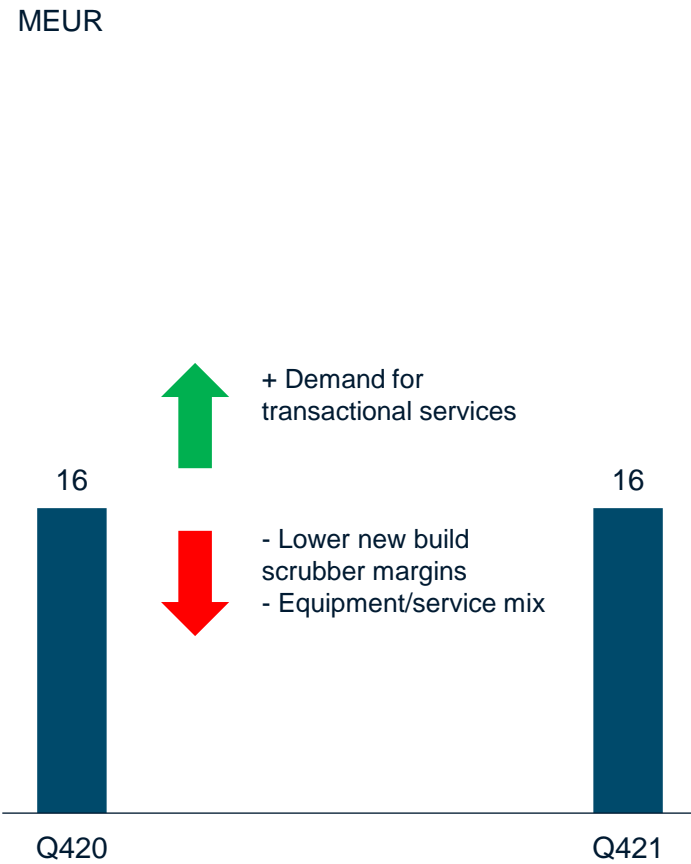
Order intake



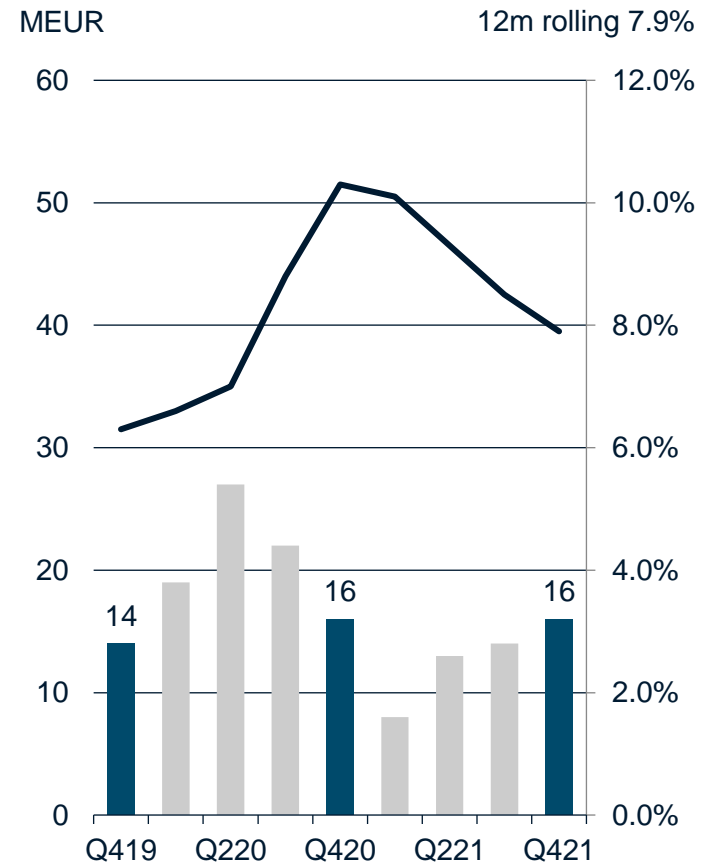
Net sales



Comparable operating result



Comparable operating result





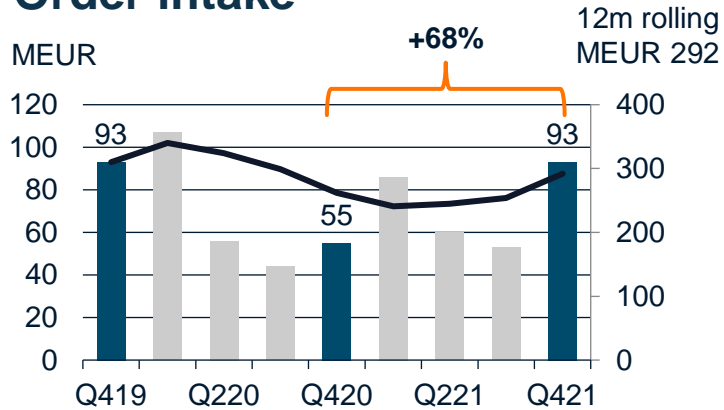
VOYAGE



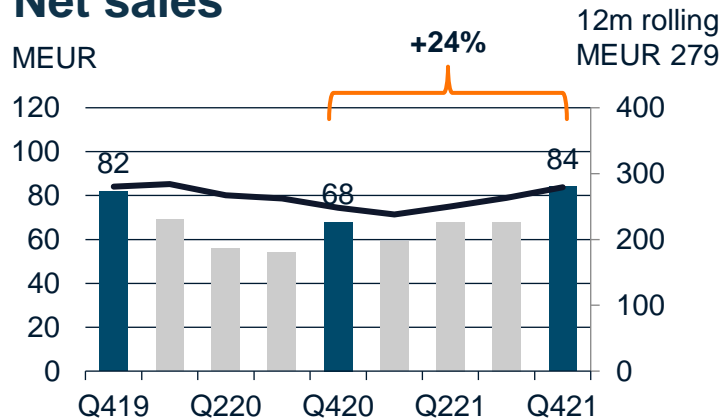
VOYAGE: INCREASE IN ALL KEY FIGURES

CLEAR IMPROVEMENT IN PROFITABILITY

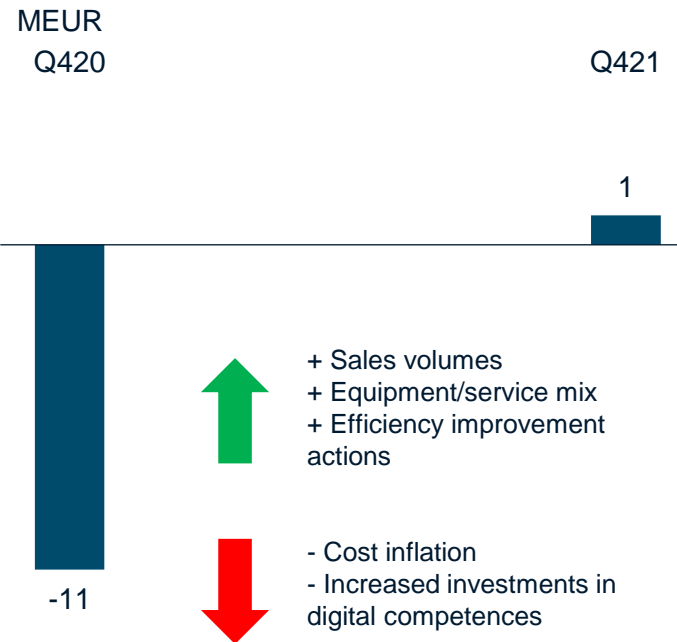
Order intake



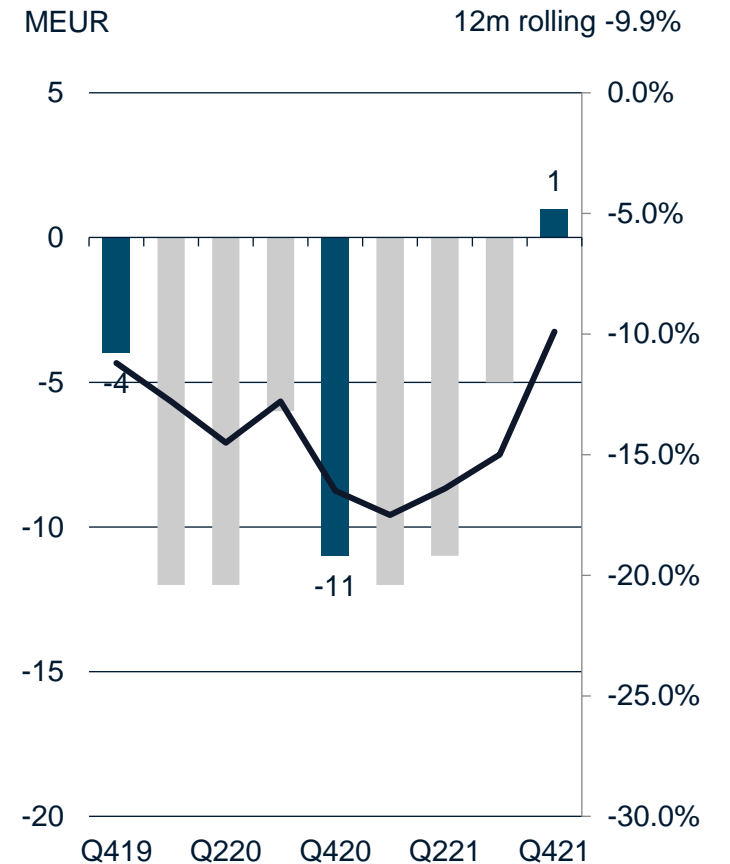
Net sales



Comparable operating result

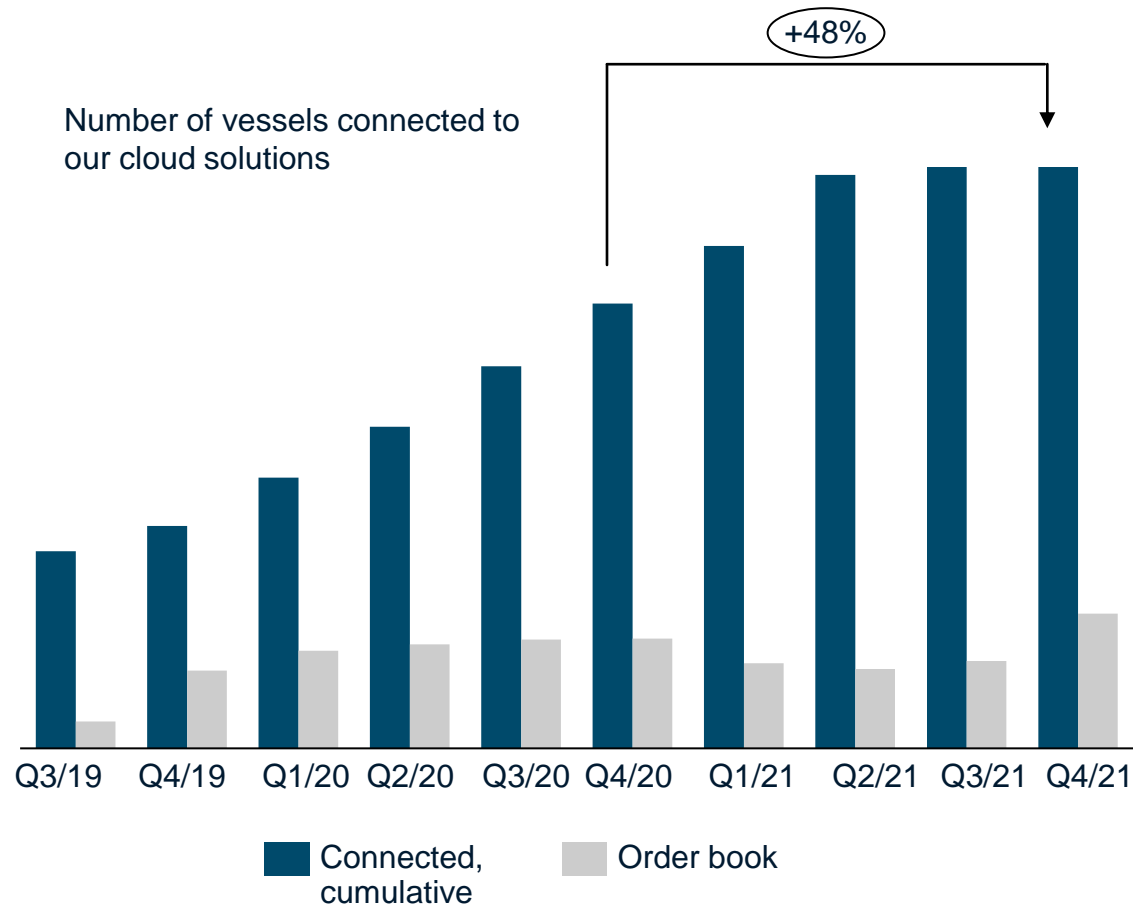


Comparable operating result



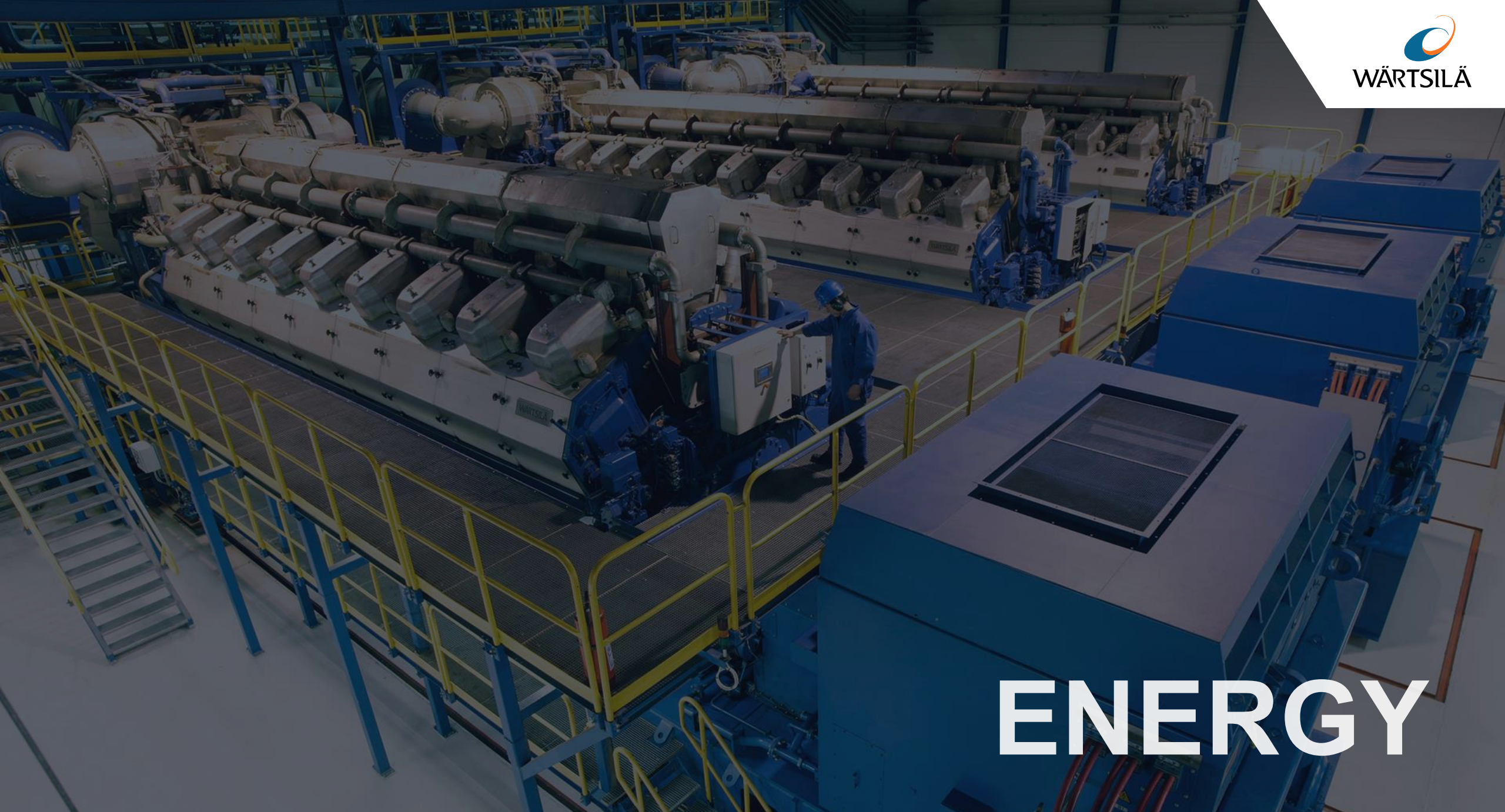
VOYAGE CLOUD SOLUTIONS

INCREASE OF 48% IN CONNECTED VESSELS



Wärtsilä to deliver the first-ever Cloud Simulation service in Africa at the Technical University of Mombasa

- The modern training technology will help the African seafarers to be trained remotely on STCW Training (Standards of Training, Certification and Watchkeeping for Seafarers) as well as on other training courses
- The sessions will always have up-to-date databases, tailored content, and training will be accessible on-demand from anywhere and with a wide range of devices
- Cloud Simulators are complementary to on-premises simulators and ensure top-notch remote training even for off-campus seafarers located in far-flung parts of Africa and anywhere in the world

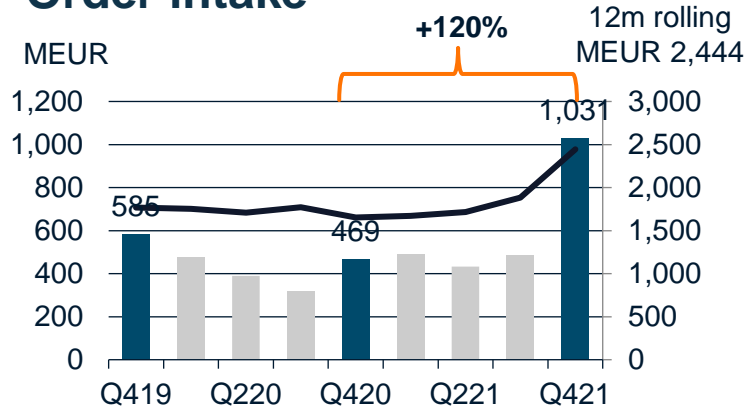


ENERGY

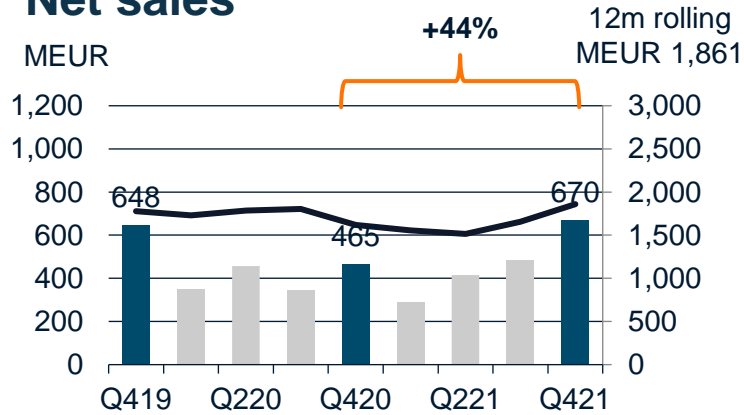
ENERGY: ORDER INTAKE, NET SALES AND COMPARABLE OPERATING RESULT INCREASED

LARGE SINGLE DEALS SUPPORTED ORDER INTAKE

Order intake

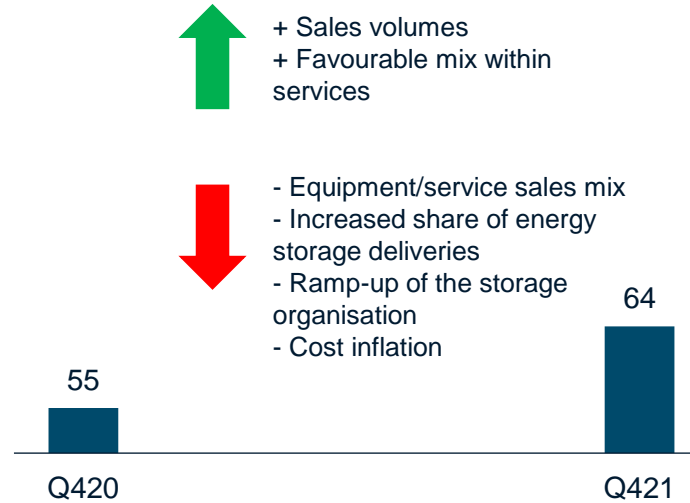


Net sales



Comparable operating result

MEUR



- + Sales volumes
- + Favourable mix within services

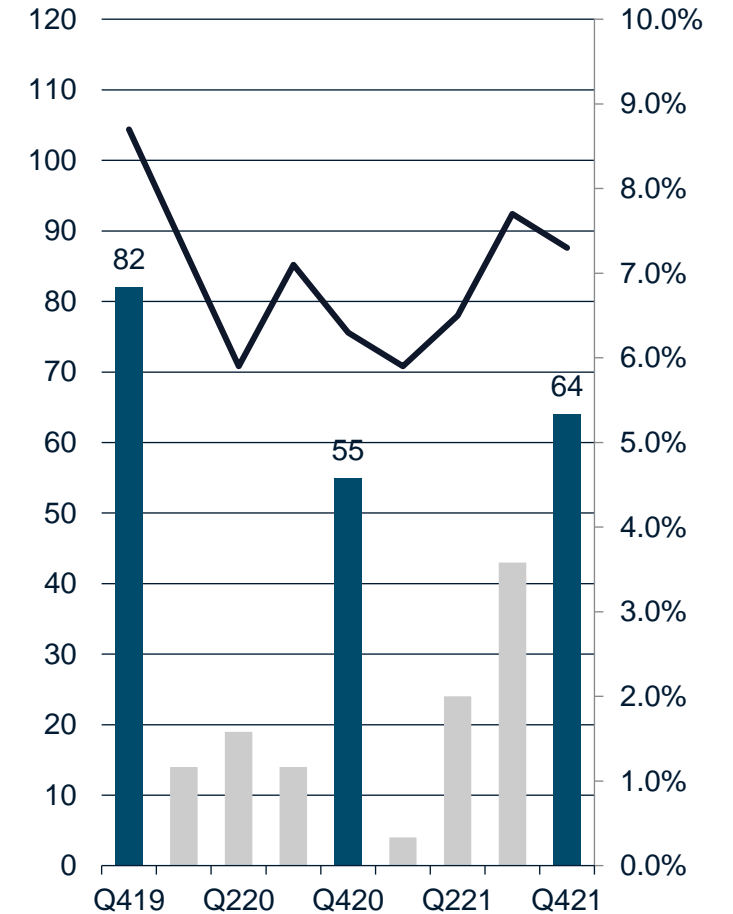


- Equipment/service sales mix
- Increased share of energy storage deliveries
- Ramp-up of the storage organisation
- Cost inflation

Comparable operating result

MEUR

12m rolling 7.3%



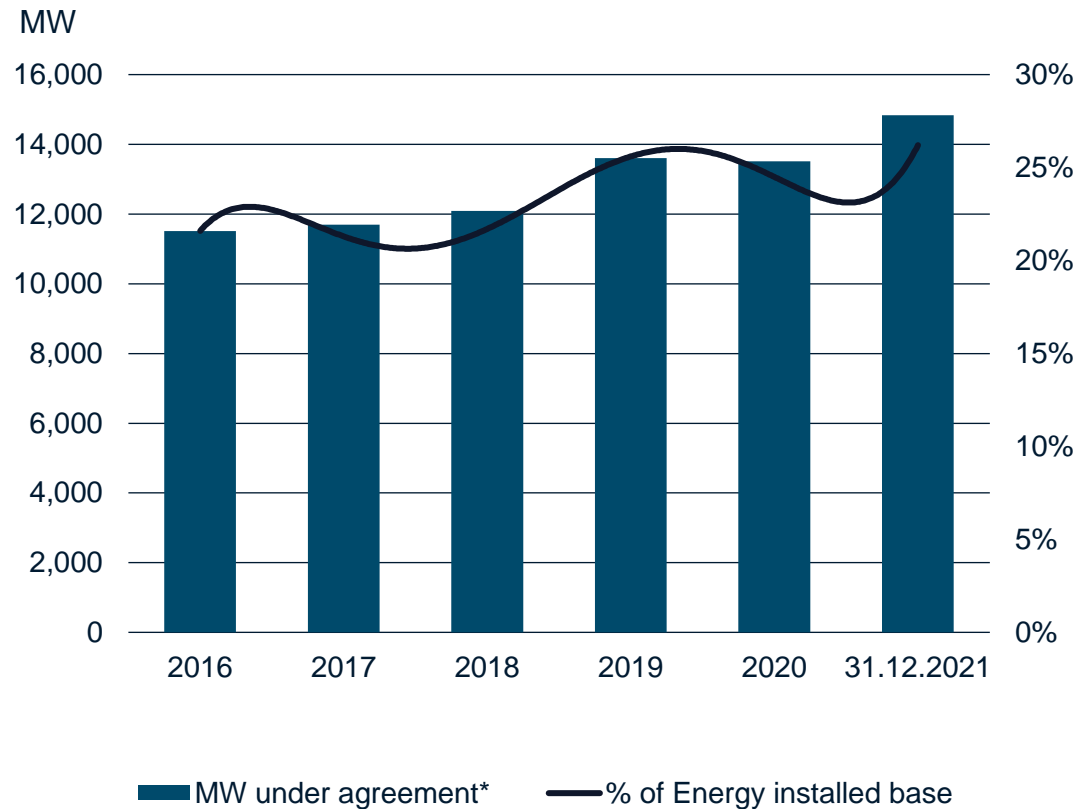


Wärtsilä awarded two major contracts with a combined value of approximately 480 MEUR for power plant deliveries to Mexico

- Wärtsilä will supply Mexico's state-owned electricity utility, Comisión Federal de Electricidad (CFE), with two large multi-fuel power plants having a combined output of 600 MW
- The projects will be delivered on a full engineering, procurement, and construction (EPC) basis, and they represent the largest generating capacity EPC contract ever awarded to Wärtsilä
- The projects comprise a 400 MW facility operating with 24 Wärtsilä 50DF dual-fuel engines, and a 200 MW generating unit featuring 22 Wärtsilä 34DF dual-fuel engines

ENERGY SERVICE AGREEMENTS

INSTALLED BASE COVERED BY LONG-TERM SERVICE AGREEMENTS INCREASING



The demand for remote support for power plants is constantly growing. Yet, we solve most cases during the same day:

- **96%** of support cases were solved remotely in 2021
- **91%** of support cases were solved during the same day
- Remote support solutions help reduce operating costs through optimisation of data and infrastructure, and they also help prevent problems before they even occur

* Includes agreements covering both installed assets and assets to be installed in the future

PROSPECTS

Wärtsilä expects the demand environment in the first quarter to be better than that of the corresponding period in the previous year. However, the prevailing market conditions make the outlook uncertain.

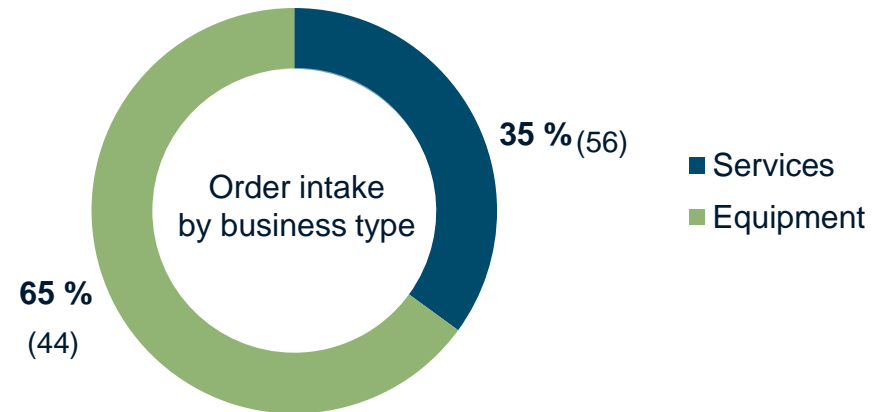
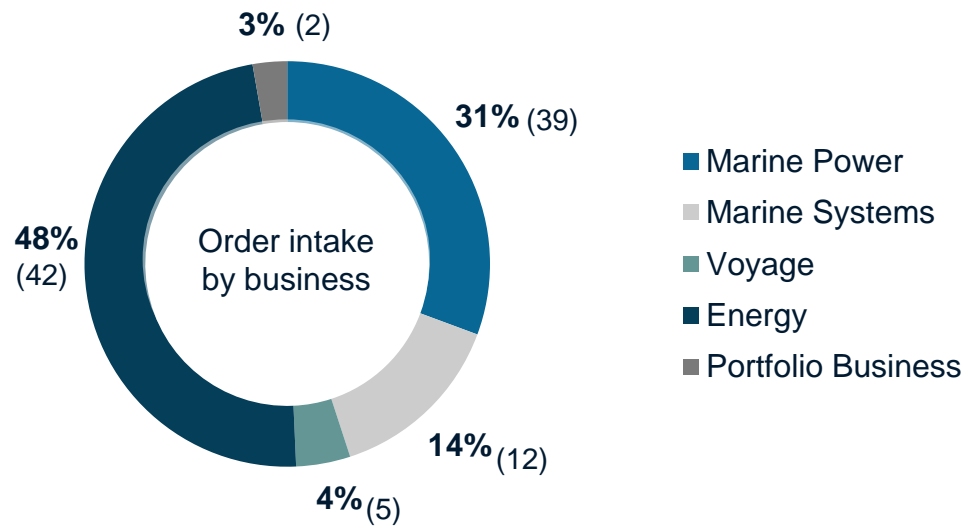




APPENDIX

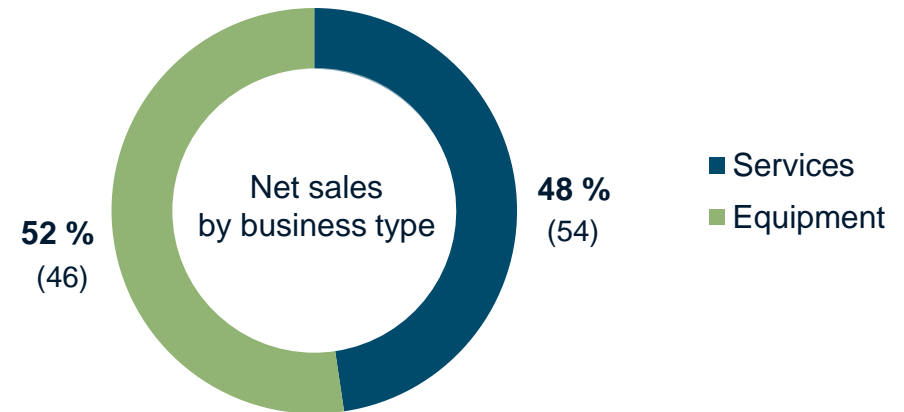
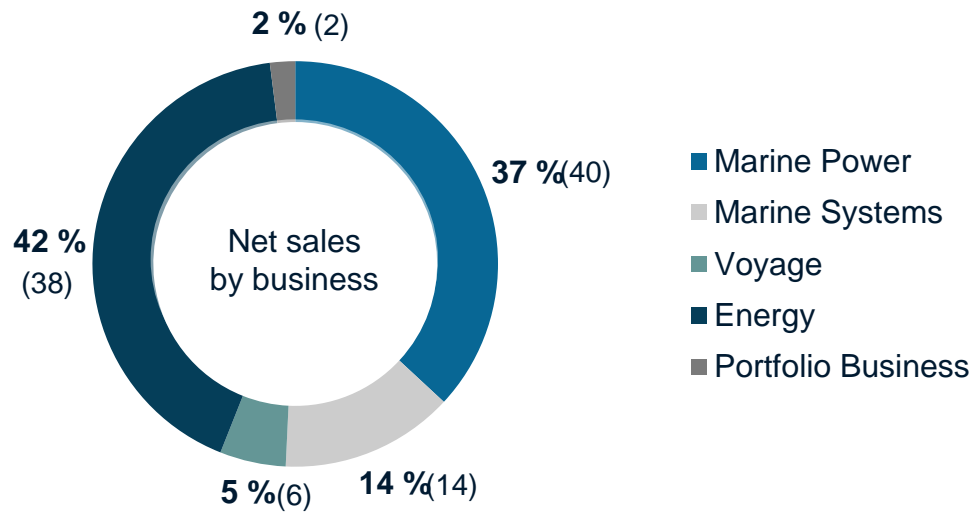
ORDER INTAKE

FOURTH QUARTER DEVELOPMENT



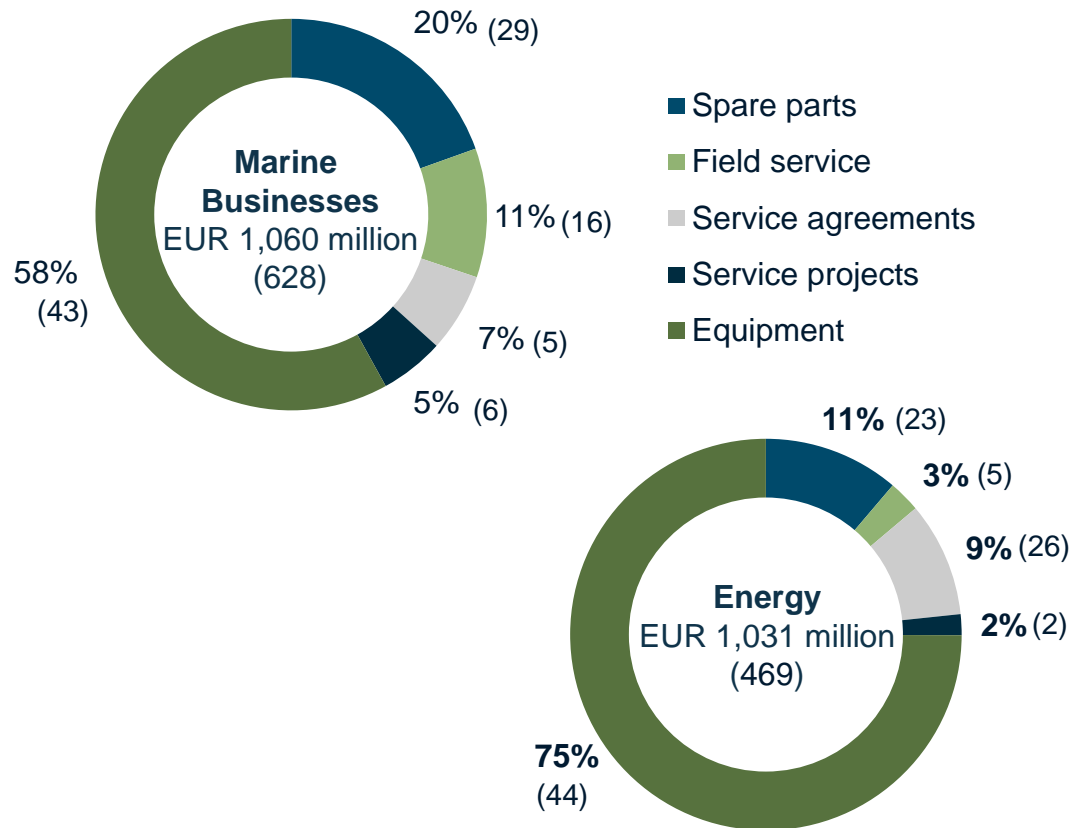
NET SALES

FOURTH QUARTER DEVELOPMENT

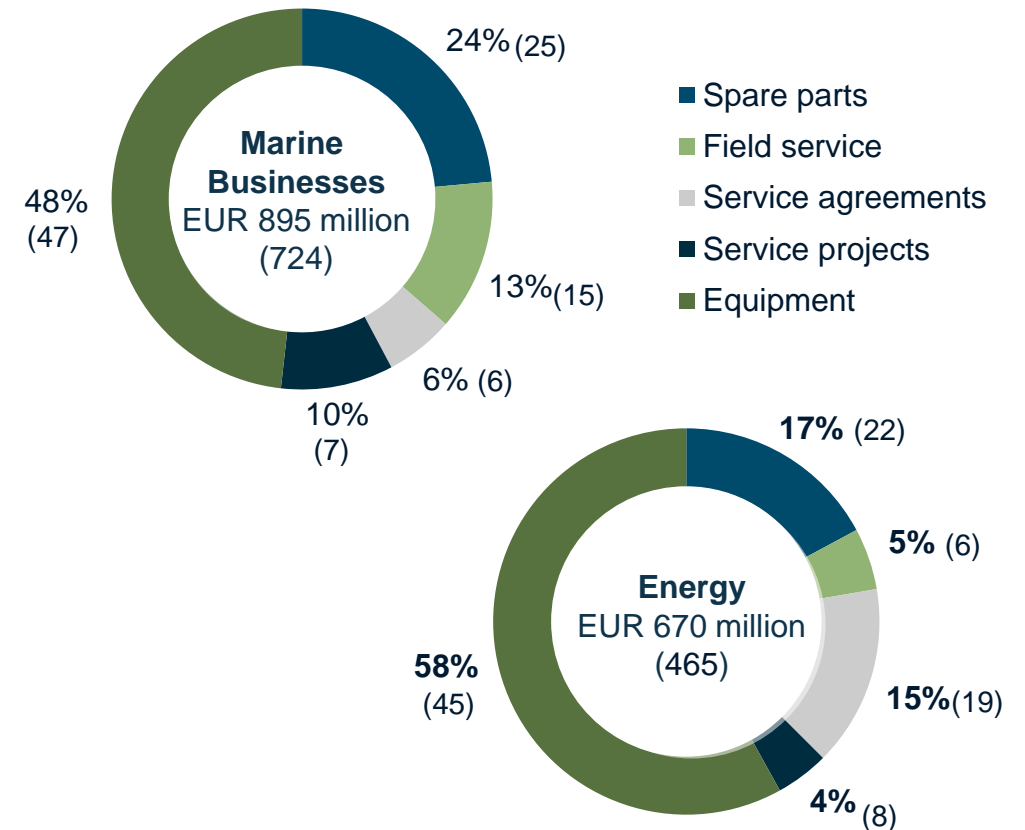


FOURTH QUARTER DEVELOPMENT BY BUSINESS TYPE

Order intake



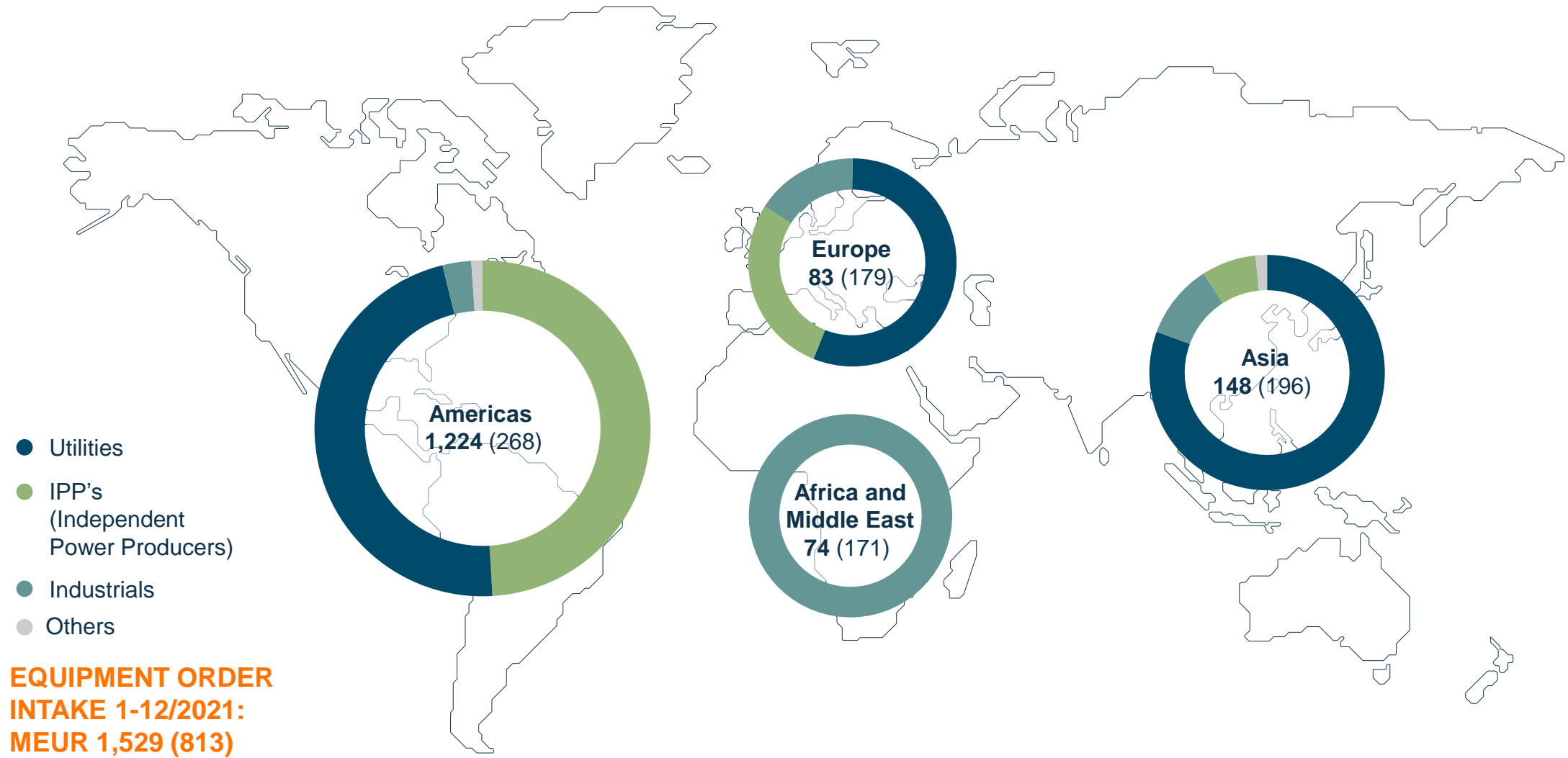
Net sales



JANUARY–DECEMBER ORDER INTAKE BY CUSTOMER SEGMENT

Marine Businesses	Gas carriers	Cruise & ferry	Offshore	Navy	Special vessels	Merchant	Other
Marine Power							
Equipment	5% (22)	27% (31)	3% (4)	16% (8)	21% (22)	28% (13)	0% (0)
Services	18% (16)	21% (14)	13% (15)	7% (11)	14% (16)	25% (26)	2% (2)
Marine Systems							
Equipment	35% (35)	3% (4)	1% (2)	33% (3)	2% (0)	18% (25)	6% (30)
Services	3% (2)	8% (11)	6% (4)	28% (32)	8% (11)	42% (36)	4% (3)
Voyage							
Equipment	1% (0)	22% (27)	7% (7)	15% (8)	5% (16)	28% (21)	22% (21)
Services	3% (4)	28% (26)	6% (9)	2% (3)	6% (6)	53% (54)	2% (-1)
Energy							
		Utilities	Independent Power Producers		Industrials		Other
Equipment		49% (35)	42% (48)		9% (16)		1% (0)
Services		33% (32)	31% (29)		27% (30)		10% (9)

ORDERS RECEIVED FOR ENERGY EQUIPMENT GLOBALLY



**EQUIPMENT ORDER
INTAKE 1-12/2021:
MEUR 1,529 (813)**



WÄRTSILÄ