



## Wärtsilä

## Shaping the decarbonisation of Marine and Energy

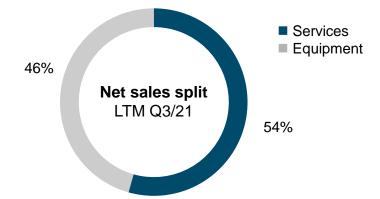
Roadshow presentation November 2021



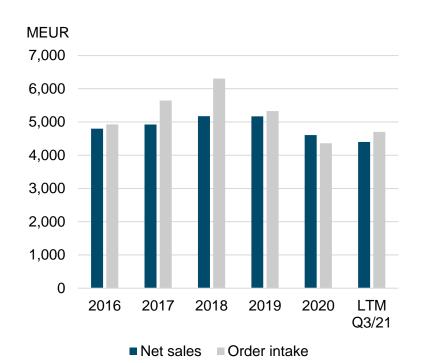


### Wärtsilä in brief

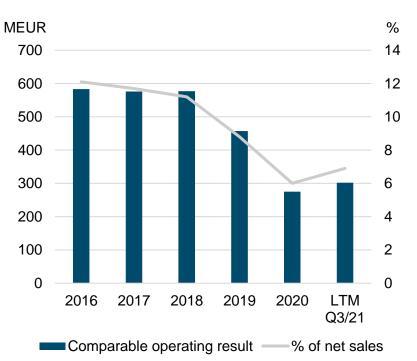
Wärtsilä is a global leader in innovative technologies and lifecycle solutions for the marine and energy markets. We emphasise innovation in sustainable technology and services to help our customers continuously improve environmental and economic performance. Our dedicated and passionate team of 17,500 professionals in 200 locations in more than 70 countries shape the decarbonisation transformation of our industries across the globe. In 2020, Wärtsilä's net sales totalled EUR 4.6 billion. Wärtsilä is listed on Nasdag Helsinki.



#### Net sales and order intake



### Comparable operating result





## As a technology leader in the decarbonisation transformation, Wärtsilä has significant value creation potential

### Decarbonisation will transform the world

- Electricity generation will grow by 3X, renewables by 8X
  - By 2030 balancing power market will grow by >10x

In Marine there will be an unprecedented rate of change in new build and existing fleet

Regulations and demand for green transport will accelerate the speed of change

Leading Future fuels technologies - Flexibility - Efficiency	<b>Leading</b> Performance-based agreements
Leading position in - Thermal balancing - Energy storage	Leading position in Power system optimisation
<ul> <li>Pioneer and partner for</li> <li>Hybrids &amp; Full electric</li> <li>Fuel cells</li> <li>Energy saving devices</li> </ul>	Pioneer in Marine carbon capture

Pioneer and leading partner for decarbonisation

- Well-positioned to leverage market recovery and growth
- Robust execution

Set for performance

- Well-aligned strategy -The Wärtsilä Way
- Focus on performance culture
- Clear capital allocation & portfolio management
- Committed to targets
  - 5% annual organic growth
  - 12% operating margin
- Ambitious sustainability targets for 2030
  - A product portfolio ready for zero carbon fuels
  - Carbon neutral in own operations



## Our world



## Marine will move with an unprecedented speed towards decarbonisation

Shipping generates approx. 2% of GHG emissions <sup>1)</sup>

<b>Regulations &amp; Markets</b>	Technology	<b>Connectivity and Data</b>	
<ul> <li>IMO target: 50% lower GHG in shipping by 2050</li> <li>Cost of compliance: IMO design requirements, EEXI &amp; CII</li> <li>Access to capital: EU taxonomy, Poseidon principles and ESG</li> </ul>	<ul> <li>Focus on carbon neutral and zero carbon fuels. Carbon fuels still used for many years</li> <li>Increase in hybrid and battery systems</li> <li>Development of energy saving devices</li> </ul>	<ul> <li>Vessels as data pools - system complexity increasing</li> <li>Optimisation solutions taking an holistic view of the entire transport system</li> <li>Performance-based agreements with focus on</li> </ul>	
<ul> <li>Cost of carbon: carbon certificates e.g. EU Fit for 55, IMO carbon levy and local green policies</li> </ul>	<ul> <li>Next steps in abatement technologies e.g. carbon capture and storage</li> <li>Focus on fuel efficiency</li> </ul>	<ul> <li>uptime, reliability and fuel efficiency</li> <li>Cyber security growing in importance</li> </ul>	
<ul> <li>Green sea transport demand driven by companies' green customer commitments and investors' push for sustainability targets</li> <li>1) Source: Climate Watch, total 49.4 GtCO2e</li> </ul>	<ul> <li>Focus on fuel flexibility and upgrades</li> </ul>	<ul> <li>Different degrees of autonomous operations</li> </ul>	

1) Source: Climate Watch, total 49.4 GtCO2e



## **Energy is moving towards a 100% renewable future**

Electricity and heat generate approx. 30% of GHG emissions <sup>1)</sup>

### **Growing electricity demand**

#### **Policies & Regulations**

- Electricity generation is expected to grow by 3X, renewables by 8X<sup>2)</sup>
- Gradual replacement of coal and other fossil fuelled energy generation
- Power systems becoming increasingly complex with different generation assets

- EU: Carbon neutral by **2050**
- USA: carbon free electricity production by 2035, net zero emissions by 2050
- China: Carbon neutral by 2060
- Country climate pledges likely to become more progressive

### **Technology disruption**

- Wind and solar growing rapidly for baseload generation
- Intermittent sources requiring balancing power
- Green fuels for thermal balancing
- Digitalisation will create opportunities for optimising energy costs
- Cyber security growing in importance

1) Source: Climate Watch, total 49.4 GtCO2e 2) IEA World Energy Outlook 2021 (Net Zero Emissions Scenario), until 2050 with electrification of transport, buildings and industrial sectors

6 © Wärtsilä



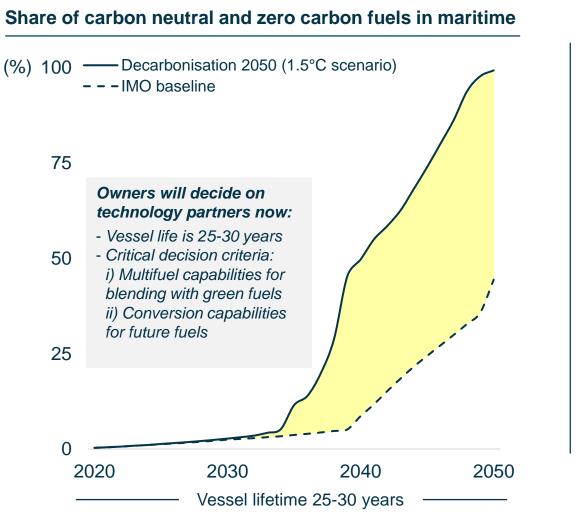
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Transform – Decarbonisation creates new business opportunities

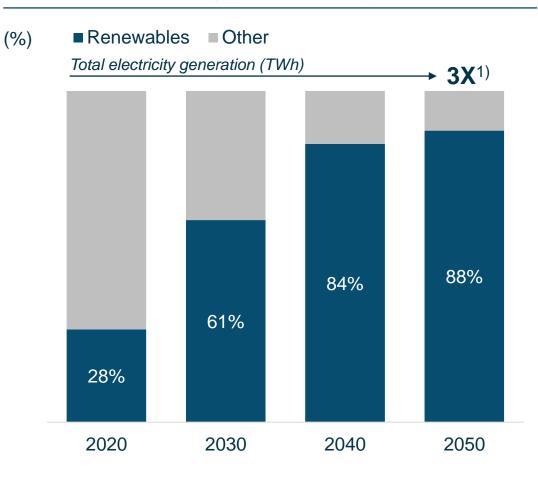
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## Decarbonisation of Marine and Energy is accelerating. Large regional variances in speed of change



#### Share of renewables in global electricity generation



Source: DNV Maritime Forecast 2050 model, Wärtsilä Internal estimates 1) Total electricity generation (TWh) from 2020 to 2050, IEA World Energy Outlook 2021 (Net Zero Emissions Scenario)



## There is no silver bullet – entering an era with numerous technologies and fuels

### Future technologies ...

- Fuels:
  - Biofuels
    Methanol
    Ammonia
    Hydrogen
    Carbon free <sup>1</sup>)
- Fossil fuels will be around for a long time. Gradual conversion from fossil to green fuels
- Transition accelerated by blending green and carbon fuels
- Growth in performance-based agreements leveraging digital solutions

### ... In Marine

- Battery technologies:
  - Hybrids / plug-in hybrids
  - Full electric

#### Energy saving technologies:

- Air lubrication
- Flettner rotors
- Solar PV
- Hydrodynamic devices

### Optimisation solutions:

- Route optimisation
- Predictive maintenance
- Vessel analytics

#### Autonomous solutions:

- Situational awareness and safety

### ... In Energy

- Rapid growth in intermittent renewables drives growth in balancing power
- Energy storage will grow significantly
- Thermal balancing growing reciprocating ICEs have leading flexibility and energy efficiency
- Thermal balancing and energy storage are complementary
- Power system optimisation operating different generation assets

1) When generated with green electricity



## Wärtsilä is very well-positioned for the decarbonisation transformation

### Leader in

### Carbon neutral & zero carbon fuels

- Available today: biofuels, methanol, up to 25% hydrogen blends
- 2023: ammonia concept
- 2025: 100% hydrogen concept

### Energy efficient fossil fuels

### Power system optimisation

- Energy storage
- Thermal balancing power

### **Pioneer in**

- Marine electric drivetrain
- Marine carbon capture
- Marine optimisation and autonomous solutions
- Partnering for complementary technologies
  - Fuel cells
  - Air lubrication
  - Flettner rotors





Leading the decarbonisation journey with a strong commitment to R&D and through partnering for a broad solution offering

Proactive dialogue on customers' specific technology roadmap

Competence & experience to engage in a credible customer dialogue on "all" technologies

Solution offering for "most" technologies

Leveraging leadership in core technologies and partnering for complementary technologies

### Key takeaways

- Working with many of the new technologies for decades
- Conversion to new fuels requires only a limited number of new engine parts
- Large technology synergies between Marine and Energy
- Transformation manageable with a stable R&D allocation of ~3% of net sales



# Perform – Leverage market recovery and growth



Wartsilä well-positioned as #1-3 in global markets – focus on organic growth driven by decarbonisation and services. Complement with potential partnerships and bolt-on acquisitions

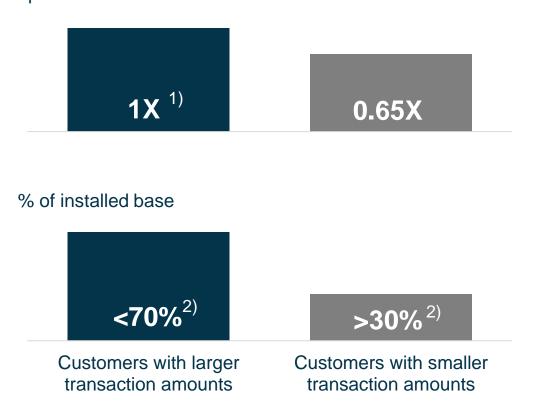
	Marine Power	Voyage (60-70% hardware)	Marine Systems	Energy	Non-core businesses
Topline growth potential					Continue active portfolio management
Key focus	<ul> <li>Services</li> <li>Fuel flexibility &amp; efficiency</li> <li>Hybrids, full electric, energy saving devices</li> </ul>	<ul> <li>Business turnaround and profitability</li> <li>Marine optimisation solutions</li> </ul>	<ul> <li>Exhaust gas cleaning</li> <li>Carbon capture</li> <li>Shaft line solutions</li> </ul>	<ul> <li>Services</li> <li>Power system optimisation</li> <li>Thermal balancing</li> <li>Energy storage</li> </ul>	based on: - Market attractiveness - Value creation
Current addressable market EUR	+5bn	+1bn	+2bn	+10bn	- Strategic fit
Share of Group Q321 LTM revenue <sup>1)</sup>	~40%	~6%	~14%	~38%	6 Divestments in 2020-2021

#### 1) Excluding Portfolio Businesses



Growing Marine Power's transactional services business. Leveraging our installed base and capturing the needs of customers with smaller transaction amounts

### Categorisation per customer type Spend ratio EUR/kW

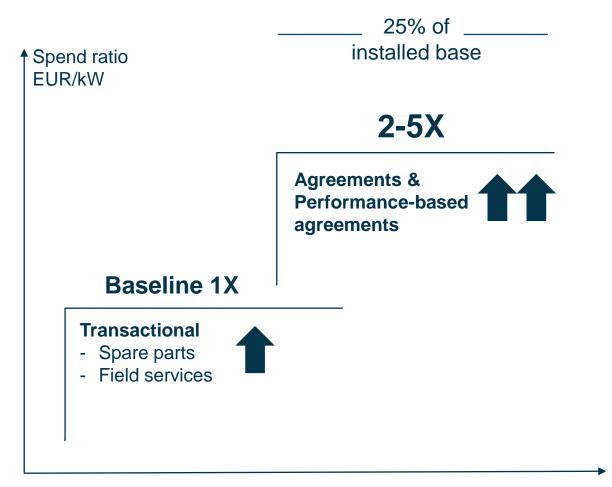


### **Enablers for growth**

- Leveraging digital solutions
  - Customer intelligence
  - Automated lead management
- Redefining our offering
- Effective global logistics



## Performance-based agreements have significant growth potential, both in Marine and Energy



### **Enablers for growth**

- Optimised asset performance for our customers
- Leveraging connectivity, big data, machine learning and extensive service network
- Successful experience from several projects in Marine and Energy

#### Moving up the service value ladder





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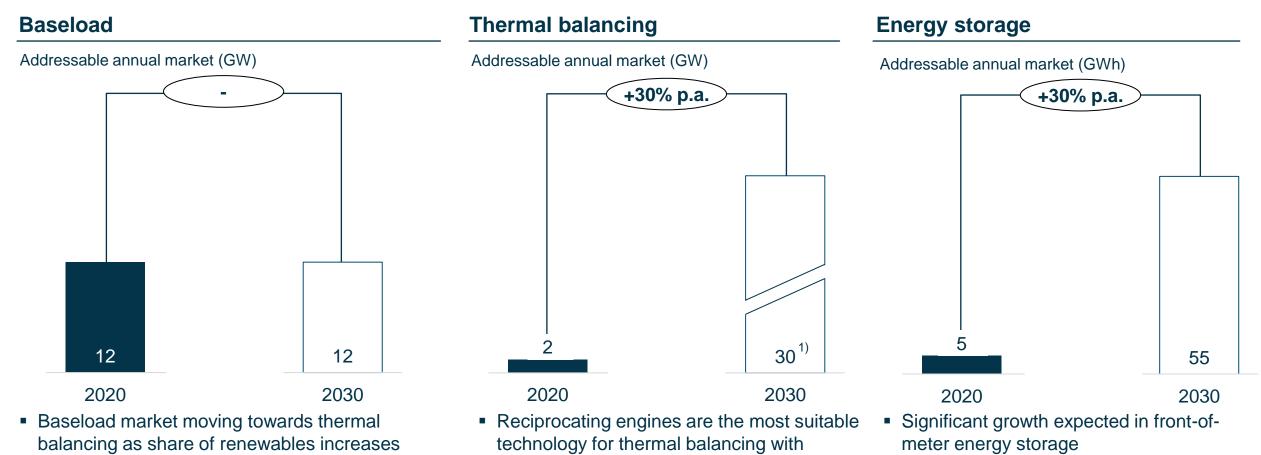
## Green transition is expected to provide a notable opportunity for retrofits and conversions



1) depends on fuel availability 2) estimated total market size over 5-10 years



## Demand for electricity will grow by 3X with renewables being the way forward, thus accelerating the demand for balancing power



leading capabilities in guick ramping,

flexibility, and energy efficiency

 Complementary to thermal balancing due to long- and short-term balancing needs

## Wärtsilä's energy storage business is growing rapidly and is expected to become profitable within a few years

Power system optimisation for the lowest energy cost, highest uptime and reliability







Power system optimisation offering

- Complete balancing power offering
- Strong capabilities in optimising different generation assets
- Leading software platform, GEMS, to scale and optimise performance

#### Strong execution skills

- Sector proven partner with strong energy track record
- Competitive supply chain



### Energy storage key facts

### Global #1-3

2021 order intake > EUR 700m

>6X growth from 2020 <sup>1)</sup>

~70% long term service agreements

Proven power system optimisation

1) Order intake



## **Perform – Robust execution**



### The Wärtsilä Way sets the scene for profitable growth



## Strategic priorities to improve performance and reach Target Position

Excel in creating customer value We continuously evolve our understanding of a

We continuously evolve our understanding of and responsiveness to our customers to make them successful.



#### Develop high performing teams that make a difference

We attract high performing people and excite diverse teams that excel in continuous learning and collaboration. Our leaders provide direction and support, empowering people to act.



### Drive decarbonisation in Marine and Energy

We accelerate decarbonisation in Marine and Energy through innovation, focused investments and selective partnerships, while also decarbonising our own operations. We provide optimisation solutions and are a thought leader in our industries.



#### **Capture growth in services**

We excel in transactional and retrofit business. We move up the service value ladder by growing in performance-based agreements.



#### Continuously improve our end-to-end value chain

We continuously improve our end-to-end business to meet customer expectations on quality, lead time and delivery accuracy, while reducing complexity and improving competitiveness. We leverage digitalisation throughout our value chain.

 Improve performance in existing businesses

WARTS

- Generate profit and cash to fund
- Business and technology transformation
- Good shareholder returns
- Clear capital allocation principles and active portfolio management



Ambitious sustainability targets for 2030

To provide a product portfolio which will be ready for zero carbon fuels To become carbon neutral in our own operations



## Why invest in Wärtsilä



## Set to deliver long term shareholder value

We have clear financial targets and are committed to realising them Our balance sheet and financing structure supports strategy execution We have clear capital allocation principles

## New financial targets reflect growth opportunities and increased profitability

	New targets
Net sales	5% annual organic growth
Profitability	12% operating margin
Capital structure	Gearing <b>below 0.50</b>
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

## 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  $\begin{array}{c} \bullet \bullet \bullet \\ \bullet \end{array}$ 

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Target: 5% annual organic growth

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 $(\mathbf{+})$ 

**Starting point:** 

(LTM Q3/2021)

Net sales 4,401 MEUR



## We will reach our profitability target while maintaining R&D investments at $\sim$ 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

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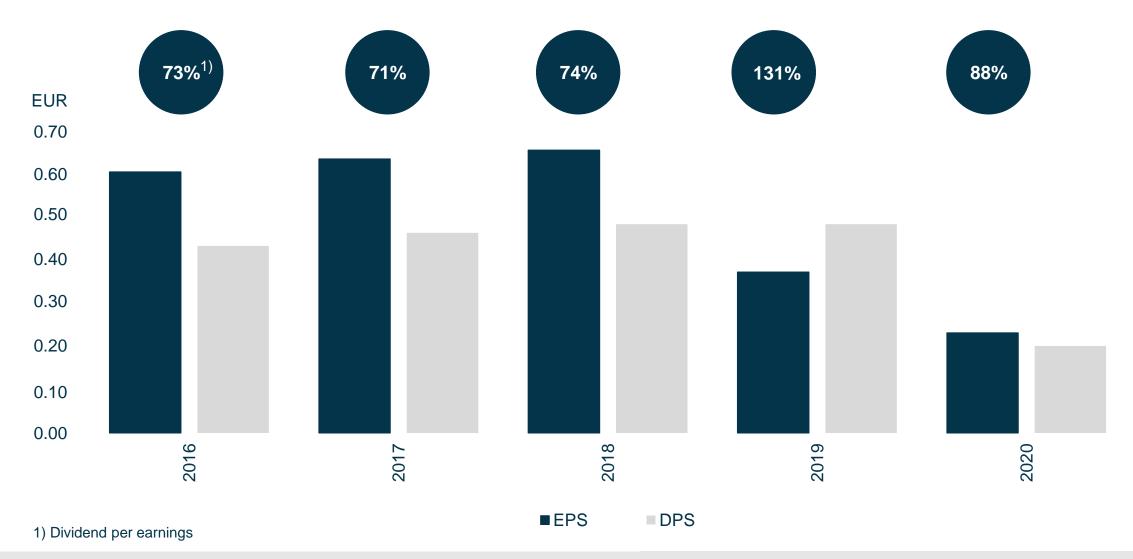
Target: 12% operating margin

Limited additional CAPEX needed to facilitate the growth



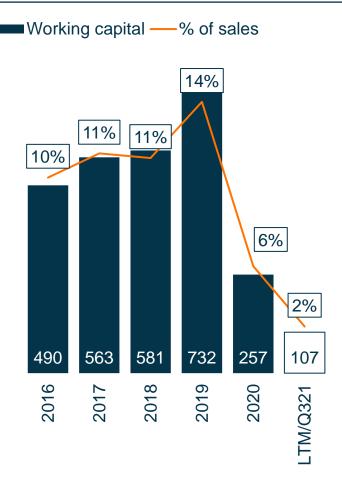
## **Committed to providing shareholder returns**

Target: dividend of at least 50% of earnings



## Strong cashflow driven by solid working capital efficiency programme. Working capital improved beyond volume fluctuations

Working capital (MEUR)



### Cash flow from operating activities -% of sales 15% 14% 13% 9% 9% 4% 430 470 232 681 613 635 2020 2016 2017 2018 2019 LTM/Q321

### Cash flow from operating activities (MEUR) Key drivers

- New approach to receivables collection
  - Broader organisational involvement

WARTS

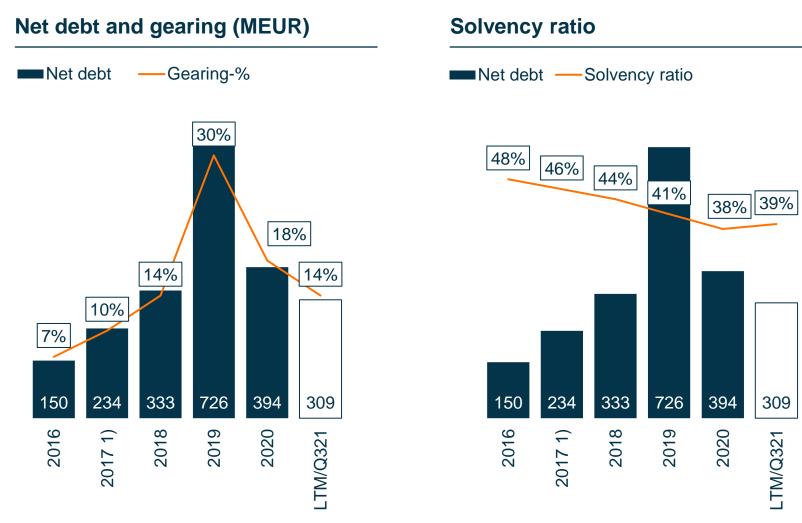
- Increased use of robotic process automation tools

#### Global inventory management

- Reduction of local stocks
- Global inventory transparency
- JIT stock for lifecycle agreements
- Maintaining good payment terms with suppliers despite lower volumes
- Expanding supply chain finance solutions to more suppliers

## Strength to make strategic investments and to support our capital allocation principles. Strong financial position and liquidity

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1) Figures in the comparison period 2017 have been restated due to the adoption of IFRS 15. The financial ratios include assets and liabilities pertaining to assets held for sale



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### Wärtsilä in sustainable development indices



S&P Europe 350 ESG Index



MIRISILS

## Financial development in Q3 2021





## ORDER INTAKE, NET SALES, AND PROFITABILITY INCREASED

- Order intake increased by 21%, growth in all businesses
- Good progress in services:
  - Order intake increased by 14%
  - Net sales increased by 20%
- Profitability improved
- Covid-19 continued to have a negative impact on Wärtsilä's business



## **BROAD-BASED POSITIVE DEVELOPMENT IN KEY FIGURES**

MEUR	7-9/2021	7-9/2020	CHANGE	1-9/2021	1-9/2020	CHANGE
Order intake	1,186	981	21%	3,584	3,240	11%
of which services	595	521	14%	1,903	1,641	16%
Order book				5,325	5,265	1%
of which current year deliveries				1,402	1,196	17%
Net sales	1,103	995	11%	3,181	3,385	-6%
of which services	598	499	20%	1,738	1,602	9%
Book-to-bill	1.07	0.99		1.13	0.96	
Operating result	75	43	77%	170	144	18%
% of net sales	6.8	4.3		5.3	4.3	
Comparable operating result	87	61	43%	199	172	16%
% of net sales	7.9	6.1		6.3	5.1	



### THIRD QUARTER HIGHLIGHTS

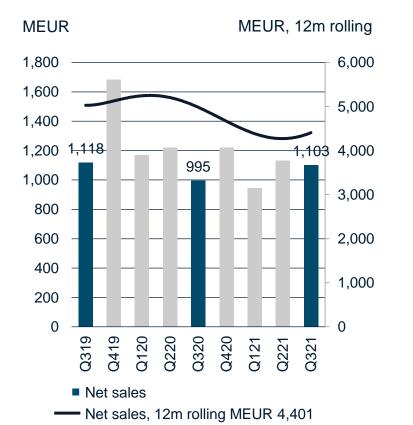
Net sales EUR 1,103 million

 20% increase in service sales

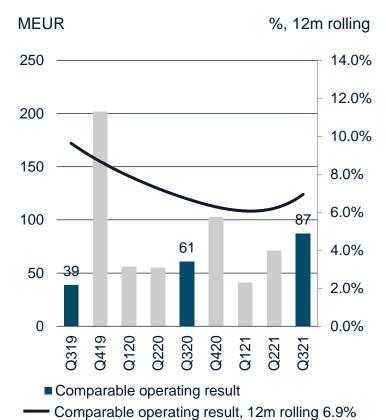
## Comparable operating result EUR 87 million

- 43% growth
- More favourable sales mix between equipment and services

### Net sales



### **Comparable operating result**

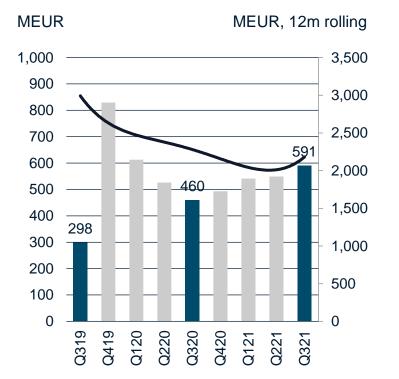




## ORDER INTAKE INCREASED BY 21%

- Order intake increased across all businesses
- Equipment order intake increased by 29%, supported by strong growth in energy storage orders
- Service order intake increased by 14%

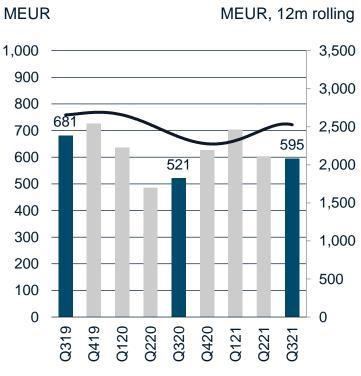
### Equipment



Equipment order intake

Equipment order intake, 12m rolling MEUR 2,174

### **Services**



Service order intake

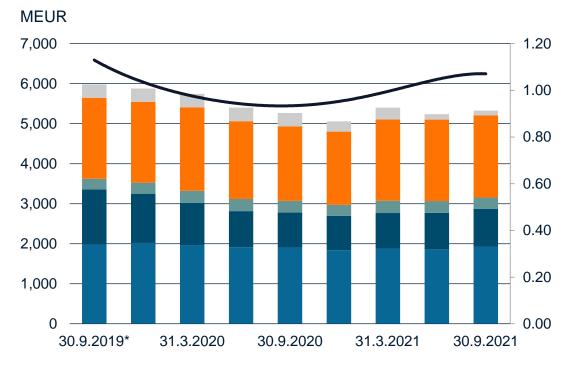
— Service order intake, 12m rolling MEUR 2,529



## SLIGHT INCREASE IN ORDER BOOK DESPITE DIVESTMENTS

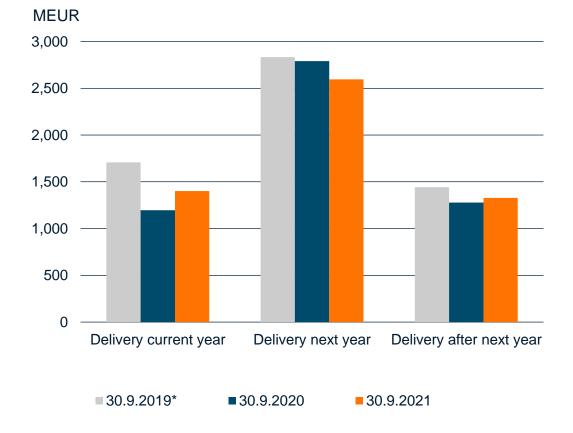
**BOOK-TO-BILL CONTINUED TO IMPROVE** 

### Order book by business



■ Marine Power ■ Marine Systems ■ Voyage ■ Energy ■ Portfolio Business — Book-to-bill, 12m rolling 1.07

### Order book delivery schedule



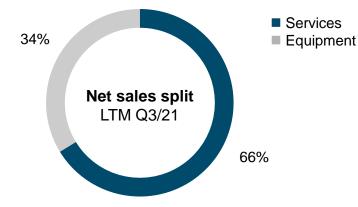
\* As published in the Interim report January-March 2020, order book figures for 2019 have been restated due to stricter requirements for booking new orders.



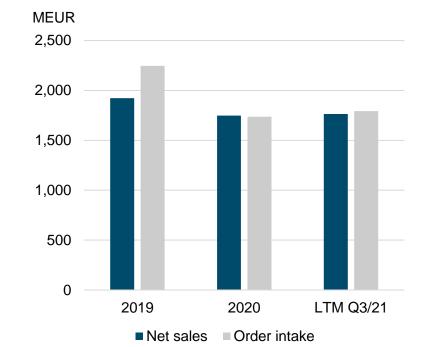


### Wärtsilä Marine Power

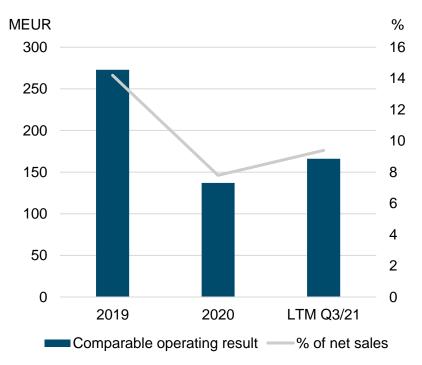
Wärtsilä Marine Power leads the industry in its journey towards a decarbonised and sustainable future. Our broad portfolio of engines, propulsion systems, hybrid technology, and integrated powertrain systems deliver the efficiency, reliability, safety, and environmental performance needed to support our customers. Our offering includes performance-based agreements, lifecycle solutions, and an unrivalled global network of maritime expertise.







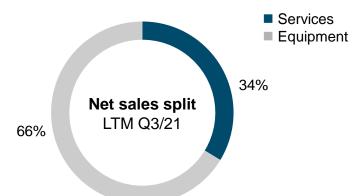
### **Comparable operating result**



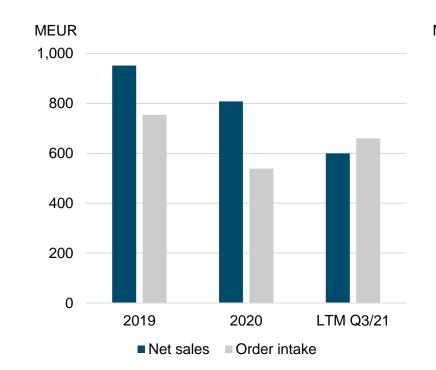


### Wärtsilä Marine Systems

We at Wärtsilä Marine Systems support our customers with high quality products and lifecycle services related to the gas value chain, exhaust treatment, shaft line, underwater repair and electrical integrations. We are committed to providing the latest and most efficient solutions, in line with Wärtsilä's vision for a safe and sustainable future for our customers, our communities, and our planet.







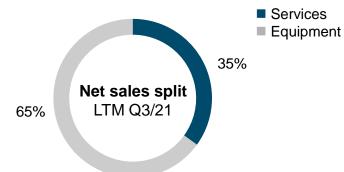
### **Comparable operating result**



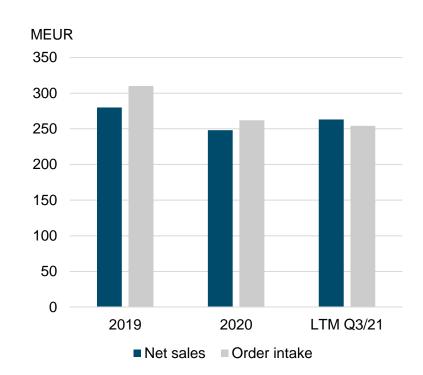


### Wärtsilä Voyage

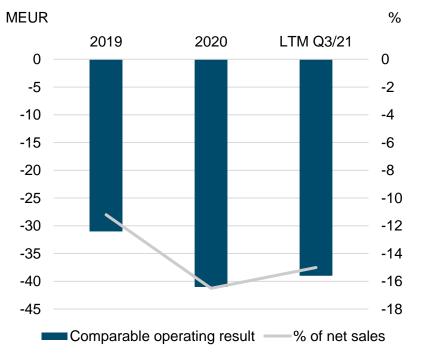
Wärtsilä Voyage transforms how vessels perform their journeys and how ports manage their operations by leveraging the latest digital technologies. Using data and Al-driven software, we deliver real-time insights into operations, performance, and energy use to enhance safety, efficiency, and reliability, while minimising emissions. Our solutions combine bridge infrastructure, cloud data services, decision support systems, and smart port solutions to enable shore-to-shore visibility. We are committed to building an end-to-end connected digital ecosystem for shipping where all vessels, ports, and logistics infrastructure beyond are technologically smart, and all operations are safe and sustainable.



#### Net sales and order intake



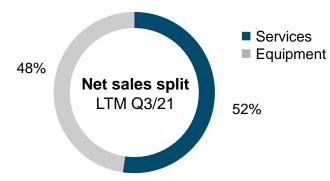
### **Comparable operating result**



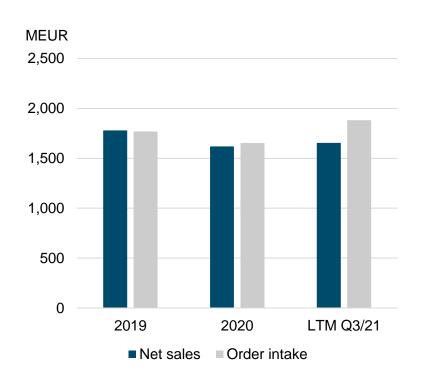


### Wärtsilä Energy

Wärtsilä Energy leads the transition towards a 100% renewable energy future. We help our customers in decarbonisation by developing market-leading technologies. These cover futurefuel enabled balancing power plants, hybrid solutions, energy storage and optimisation technology, including the GEMS energy management platform. Wärtsilä Energy's lifecycle services are designed to increase efficiency, promote reliability, and guarantee operational performance. Our track record comprises 74 GW of power plant capacity and more than 80 energy storage systems delivered to 180 countries around the world.



#### Net sales and order intake



### Comparable operating result

