Wärtsilä

Shaping the decarbonisation of marine and energy

Roadshow presentation

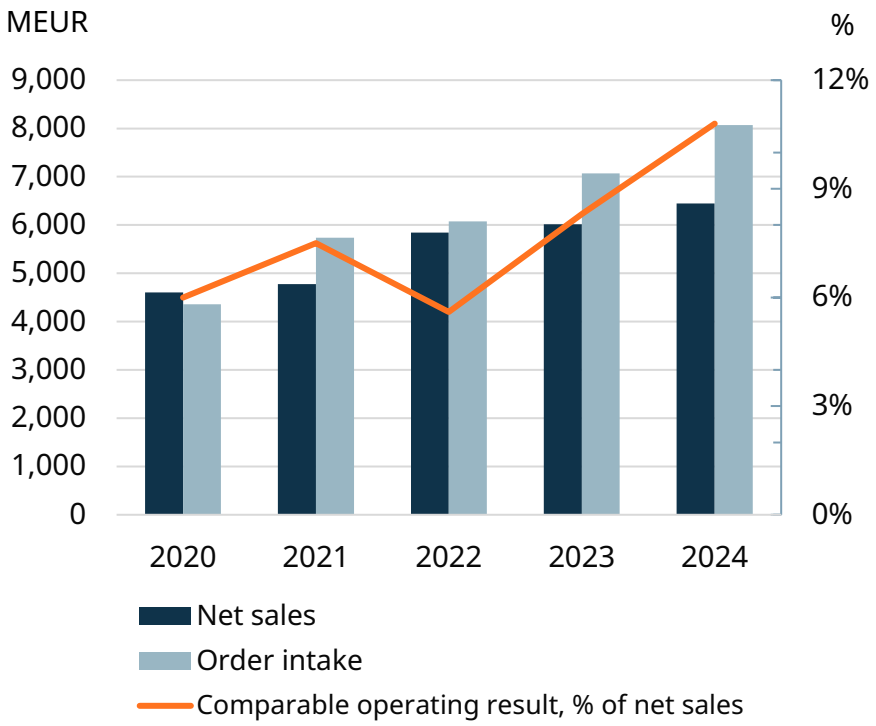
February 2025

Wärtsilä – Shaping the decarbonisation of marine and energy

Wärtsilä simplified the Group structure from 1st January 2024 onwards with two main businesses:

Marine
Our offering of engines, propulsion systems, hybrid technologies and integrated power transmission systems and related services support our customers in moving towards carbon neutrality.

Energy
We support the change towards a future where electricity is produced with 100% renewable energy by offering grid-balancing power plants, hybrid solutions, energy storage and optimisation technology.



Key growth opportunities

⊕⊕⊕ **Energy Storage & Optimisation:** Fast growing demand for power system optimisation solutions

⊕⊕ **Marine newbuild driven by decarbonisation:** Uptake of solutions ready for sustainable fuels and recovery in passenger and offshore segments

⊕ **Moving up the service value ladder in Marine and Energy:** Continuous growth in agreement coverage, decarbonisation-driven retrofits

⊕ **Energy Engine Power Plants new build driven by balancing and baseload:** Gradual shift to renewables

⊖⊖ **Portfolio Business divestments**

Committed to financial targets

Net sales
5% annual organic growth

Profitability
12% operating margin

Capital structure
Gearing below 0.50

Dividend
Distribute a dividend of at least 50% of earnings

Strong track record in innovations

Investing ~4% of net sales on R&D yearly

Today: engines run on biofuels, methanol, pure hydrogen fuel engine concept, pure ammonia fuel engine concept

Market fundamentals

Accelerated decarbonisation targets are shaping the marine industry

POLICIES AND REGULATIONS

- IMO[1] target: to reach net zero greenhouse gas emissions from international shipping by or around 2050
- Access to capital: EU taxonomy, Poseidon Principles and ESG
- Cost of carbon: carbon certificates e.g., EU Fit for 55, IMO carbon levy, and local green policies
- Demand for green sea transport: a growing market driven by corporate carbon reduction pledges

TECHNOLOGY

- Focus on carbon-neutral and zero-carbon fuels. The switch to these fuels will be progressive
- Next steps in abatement technologies, e.g. maritime carbon capture
- Increase in battery systems, hybrid solutions, and energy-saving technologies
- Focus on fuel flexibility and upgradeability to increase overall efficiency

CONNECTIVITY AND DATA

- Optimisation solutions based on a holistic view of the entire transport system
- Performance-based service agreements with a focus on uptime, reliability, and fuel efficiency
- Vessels are data pools, and are becoming increasingly complex
- Cyber security growing in importance

1) International Maritime Organization

Energy is moving towards a 100% renewable energy future

POLICIES AND REGULATIONS

- EU: Climate-neutral by 2050
- USA: Carbon-free electricity production by 2035, net zero emissions by 2050
- China: Carbon neutral by 2060
- Countries with net zero targets cover 88% of global emissions

TECHNOLOGY

- Renewables becoming the main source of energy
- Intermittent energy sources requiring balancing solutions
- Sustainable fuels for balancing power
- Digitalisation creates opportunities for optimising energy use and costs
- Cyber security growing in importance

CONNECTIVITY AND DATA

- Electricity generation would need to grow by almost 3x, and renewables by 8x to reach Net Zero targets by 2050 (Source: IEA World Energy Outlook 2024)
- Renewables-based electricity generation is expected to overtake coal-fired production in 2025 (Source: IEA Renewables 2024 report)
- Power systems becoming increasingly complex with different types of generation assets

Our value creation potential is based on two strategic themes

Transform – attractive growth opportunities at the center of the decarbonisation transformation

Perform – clear path for operational improvements and increased profitability

Significant milestones reached in strategy execution

Good performance since 2021

Transform

- **Market leader in:**
  - 4-stroke medium speed main engines
  - Engine power plants
  - Marine hybrid solutions
- **Technology leader** in green fuels
- **Pioneer** in marine carbon capture & storage
- **Significant growth** since 2021:
  - +39%[1)] in service net sales
  - +33%[1)] in equipment net sales

Perform

- **Good growth in service agreements** by leveraging digital solutions
- **Improved quality of new build order book margins**
- **Turned Energy Storage & Optimisation to profit**
- **Divested businesses and optimised footprint**
- **Revitalised team and organisation**

Clear path to 12% operating margin

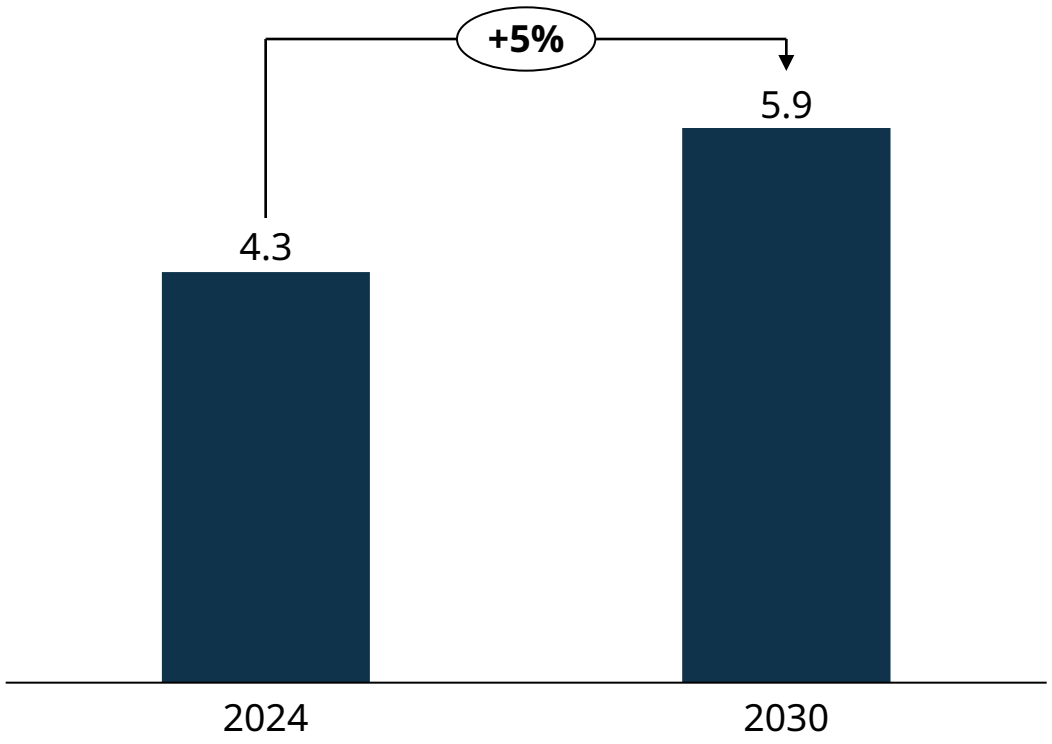
1) Compared to 2024

Transform –
attractive growth opportunities at the center of the decarbonisation transformation

Strong market fundamentals and the decarbonisation transformation will support profitable growth in Marine business

Key target segments

Annual newbuild contracting of 4-stroke medium speed main engine-powered units (GW)[1]; CAGR



- **IMO MEPC 80** has adopted a **revised strategy** to reduce GHG emissions by 20% by 2030, 70% by 2040 and to net-zero by 2050
- **In the EU**, regulatory landscape will **double fuel costs** up to 2030[2]
- **Small but growing market for green transport** driven by corporate carbon reduction pledges
- Switch to **carbon neutral and zero carbon** fuels will be **progressive**
- **Drop-in fuels, hybrid solutions and abatement technologies** will be **key** to reach short-term reduction targets
- Long-term reduction targets will require a **fundamental shift towards sustainable fuels and abatement solutions**

1) Source: Clarksons September 2024 forecasts; 2) Fishing, dredgers, support units, yachts, tugs, etc.; 2) assuming 5,000 tons/year VLSFO consumption subject to Fit for 55, VLSFO at 550 EUR/ton; EU allowances from 100 EUR/ton today to 230 EUR/ton in 2050

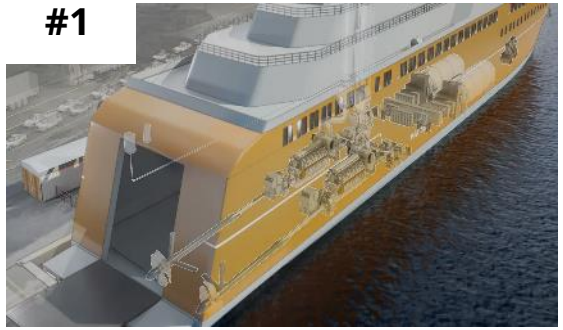
Wärtsilä is a global technology and service leader in shaping the decarbonisation of marine

#1

Industry leading medium speed engine offering

- Biofuels and methanol available already today
- Product industrialisation for ammonia ongoing
- Fuel conversion packages for both 4-stroke and 2-stroke engines available already today

#1



Industry leading hybrid solutions

- Hybrid-electric to challenge 2-stroke engines as prime-mover for LNG carriers
- 6% more cargo space, 10% lower fuel consumption[1)]
- Lower maintenance costs compared to 2-stroke

Pioneer

Pioneer in carbon capture & storage

- Complementary technology to engines
- EUR ~10bn market opportunity in the next 10 years[2)]
- Commercial release in 2025, CCS-ready scrubbers available already today

Global services network to ensure maximum uptime & fuel efficiency

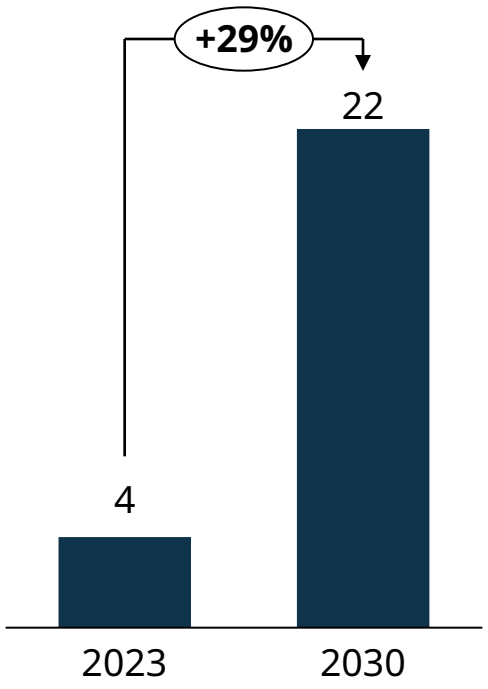
- Transactional: spare parts & field services
- Enhanced support & technical management agreements
- Optimised maintenance & guaranteed asset performance leveraging digital solutions

Source: CMD 2023, 1) example on 174,000 cbm LNG carrier 2) estimated market size for newbuild and retrofit 3) 2024 (Marine)

The increasing share of renewables and need for balancing power will support profitable growth in Energy business

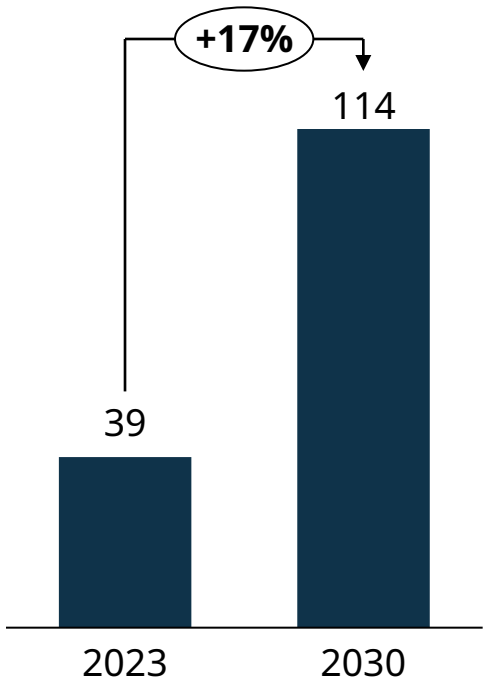
Thermal balancing

Addressable market[1)]
GW; CAGR



Energy storage

Addressable market
GWh; CAGR



- **Thermal balancing** market is **expected to grow +4X by 2030** driven by accelerating intermittent baseload. US is an important market for thermal balancing
- Power generation related **regulatory changes support uptake of thermal balancing** (US Federal and State bills, EU electricity market reform and China market reform)
- **Sustainable fuels together with flexible engine power plants balance grids in an affordable and sustainable way**, also for longer shortages in intermittent renewable generation
- **Energy storage incentives in the US** (IRA investment and production tax credits) **support** the energy storage market **growth**. Local regulatory changes in general support the uptake of energy storage

1) Wärtsilä Engine Power Plants theme call for investors 12/2024. Sources: BNEF, Wärtsilä estimates

Wärtsilä is a global leader in engine power plants. Good track record of growth and profitability improvement in Energy Storage & Optimisation

Industry leading engine power plants[1)]

- Superior operational flexibility through fast ramp-up/ramp-down compared to gas turbines
- Fuel conversion packages available already today
- Hydrogen 25 vol% blend available already, 100% hydrogen-ready engine power plant launched in 2024

Among top players in energy storage

- Focus on profitable growth
- Reliable partner with high bankability
- Highest safety standards (recent milestone in passing UL 9540A requirements)
- Leading software (GEMS) for power system optimisation

Global services network to ensure maximum uptime & fuel efficiency

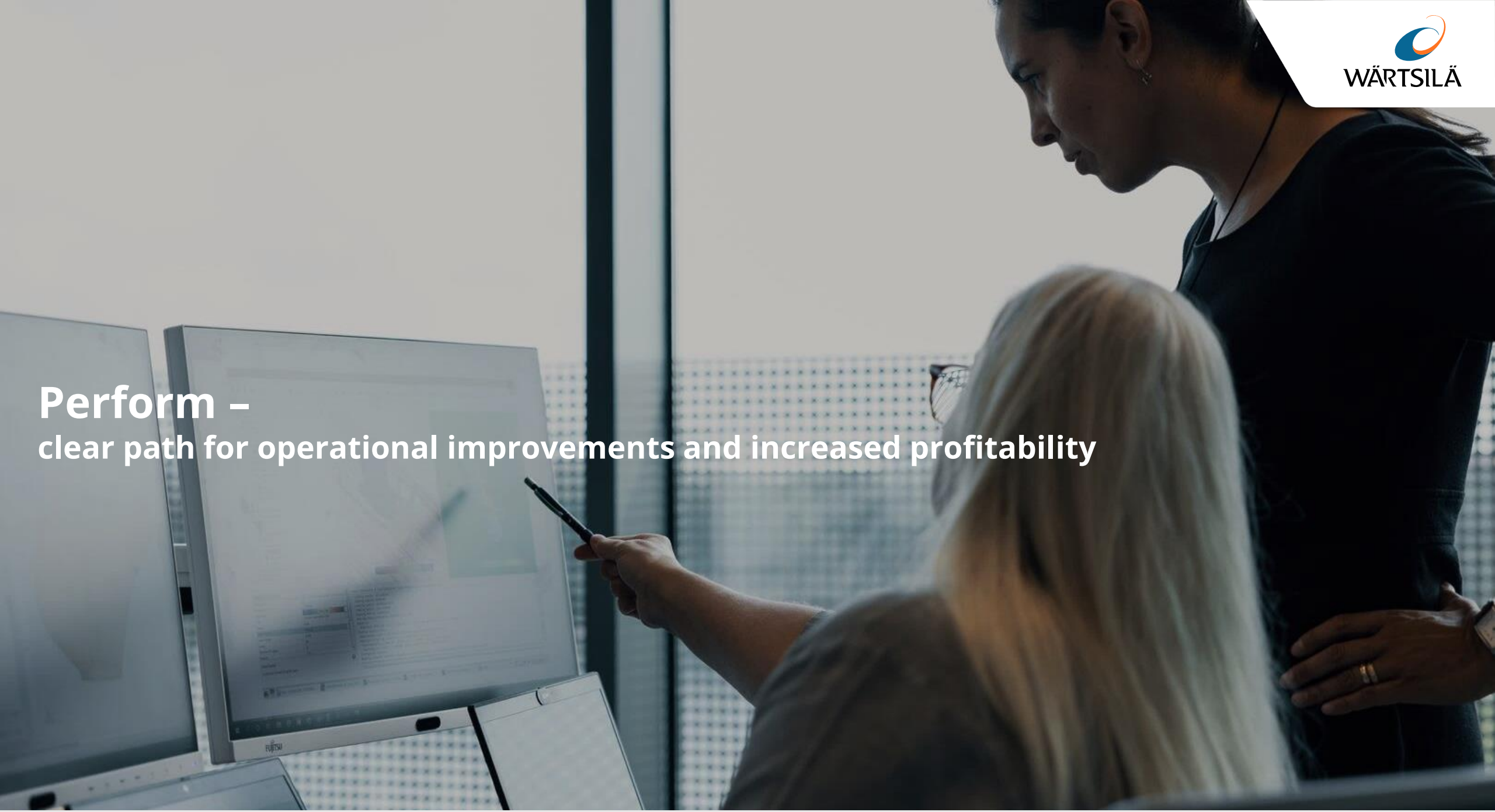
- Transactional: spare parts & field services
- Maintenance & operational support
- Guaranteed performance services
- Outcome-based agreements, including decarbonisation services, leveraging digital solutions

1) units >5MW 2) 2024

To support accelerated profitable growth of Energy Storage & Optimisation, we have launched a strategic review of the business

- Energy storage market is expected to grow rapidly, **addressable market to grow ~3X from 2023 to 2030**
- Wärtsilä Energy Storage & Optimisation has **grown +30X[1)] since the acquisition of the business and is now profitable**
- Strategic review has been launched to **accelerate profitable growth of the business in a way that benefits customers and creates value for Wärtsilä shareholders**
- **All potential alternatives will be considered.** Such alternatives could include different ownership options of the business from continued full ownership to potential full or partial divestment of the business or other possible strategic alternatives
- **No commitment to a particular timeline** is given. Wärtsilä will disclose the progress and conclusions of the review according to applicable disclosure laws and regulations
- **Wärtsilä continues to develop and invest** in Energy Storage & Optimisation and **remains fully committed to its customers** throughout the strategic review

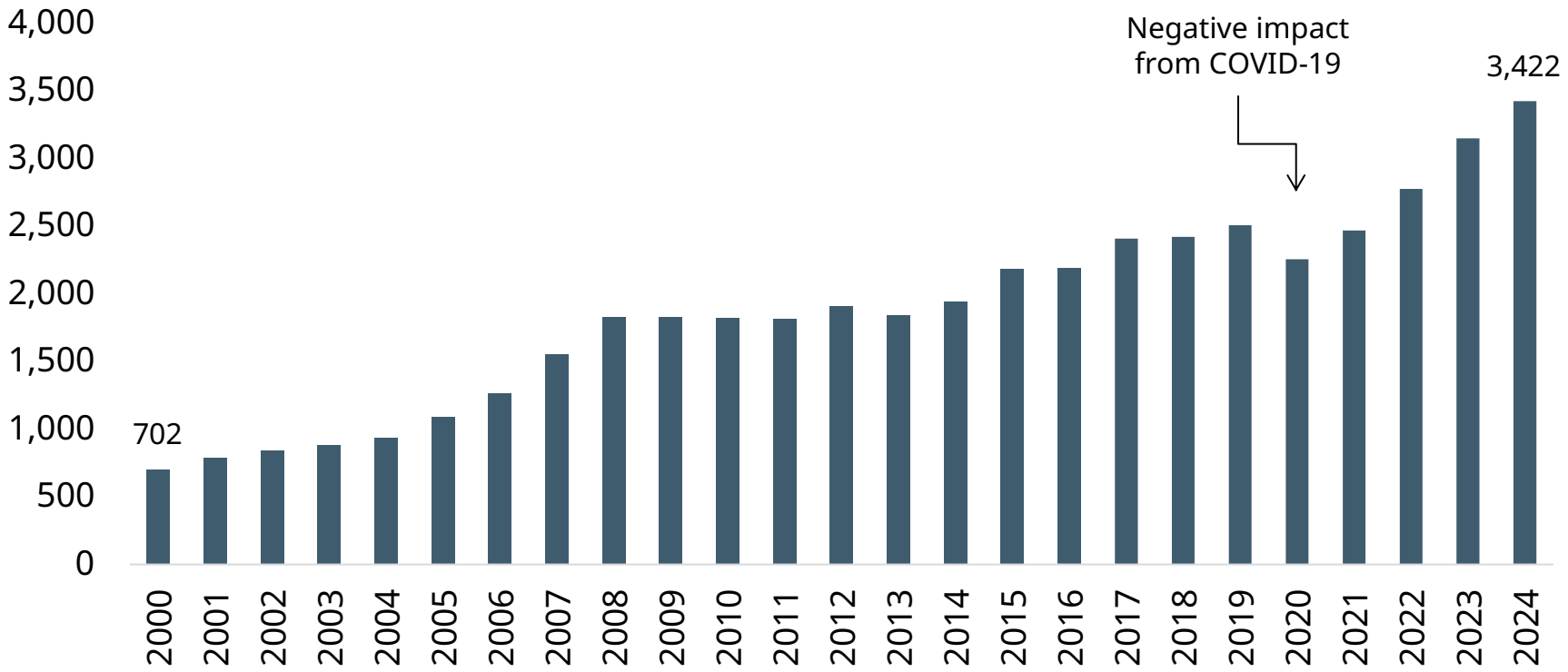
1) 2024 vs. 2016 net sales



Perform –
clear path for operational improvements and increased profitability

Service has provided resilient sales and profits for Wärtsilä over decades

Service Net Sales, EURm[1)]



>€3.4bn
service net sales in 2024 with good future growth potential

~30%
of installed base covered by service agreement at the end of 2024

>90%
LTM renewal rate of existing service contracts in 2024

1) Service net sales as reported in Annual Reports 2000-2024. 2000–2018 service was reported as its own division and from 2019 onwards as a part of the other reporting segments. Figures reflect the data as per the organisation structure at each point in time and is not adjusted for changes such as acquisitions

We continue to execute our services strategy on all steps of the service value ladder

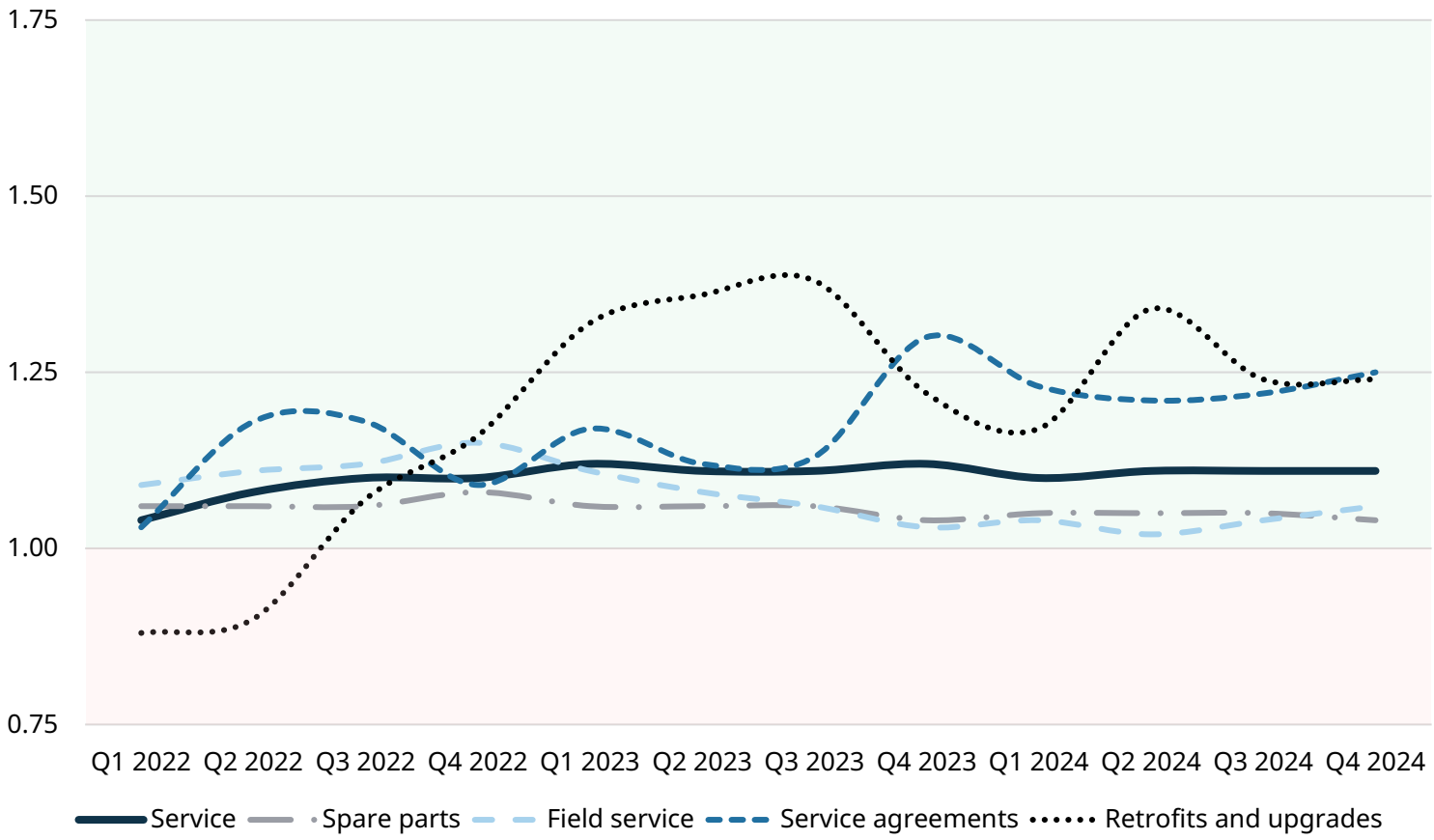
- **Our installed base of medium speed engines is increasing**
- **~30% of installed base[2] is under service agreements with further growth potential**
- **Moving up the service value ladder – agreements and performance-based agreements have 2–5X spend ratio (EUR/kW) relative to transactional services**
- **Total investments in Marine retrofits, including Carbon Capture and Storage solutions (CCS), are estimated to be EUR 15–20bn over the next decade[3]**

1) customer spend ratio EUR/kW 2) 4-stroke engine MW 3) Source: Clarksons, incl. ESTs, CCSs, and engines, excl. hybrids and offshore

Source: CMD 2023

Book-to-bill shows growth for service

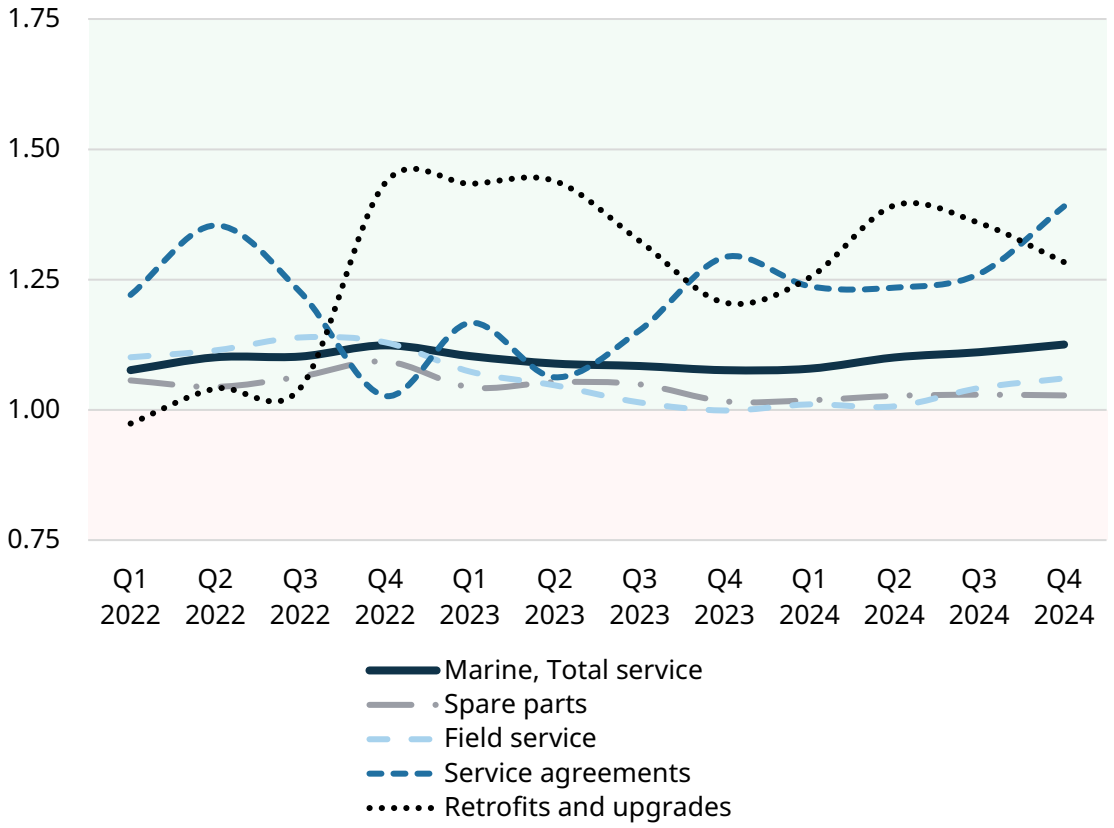
12m rolling book-to-bill[1)]



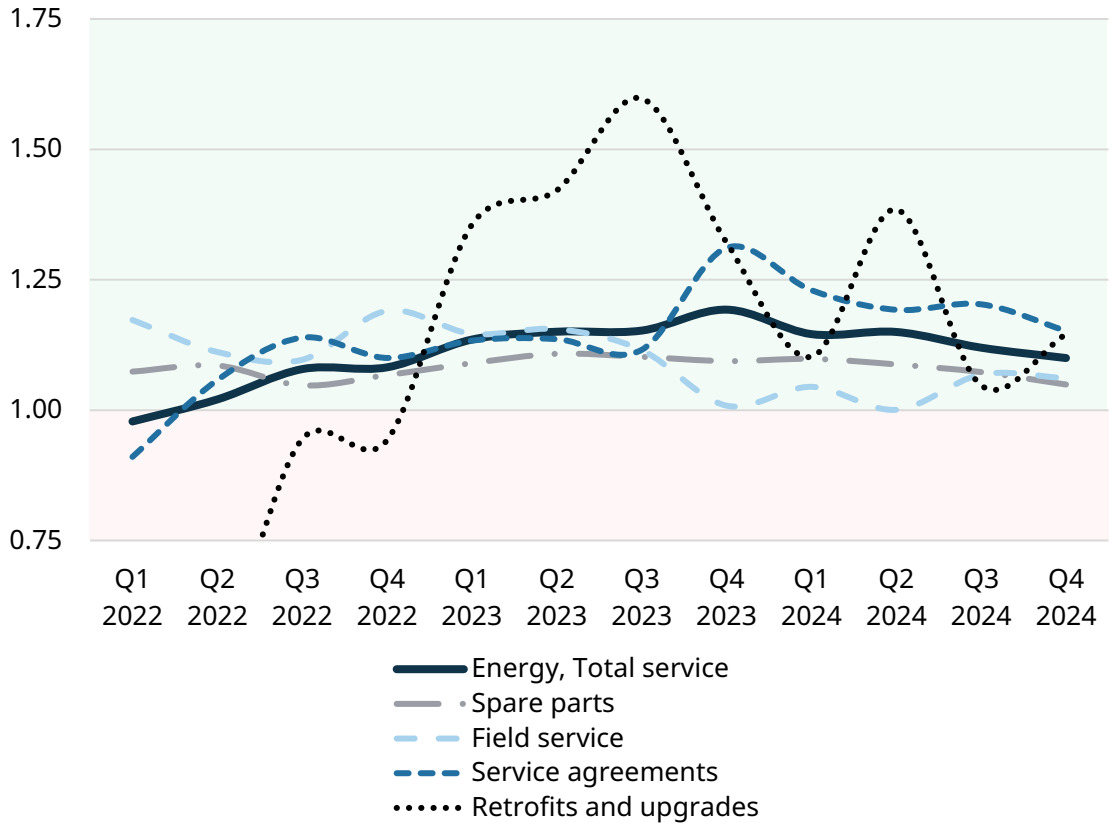
1) 2023 data restated to reflect the redefined organisational structure as of 1 Jan 2024. Figures prior to 2023 reflect the data as per the organisation structure at each point in time and is not adjusted for changes such as acquisitions.

Rolling 12-month book-to-bill's above 1 for all service categories in both Marine and Energy

Marine, 12m rolling book-to-bill[1)]



Energy, 12m rolling book-to-bill



1) 2023 data restated to reflect the redefined organisational structure as of 1 Jan 2024. Figures prior to 2023 reflect the data as per the organisation structure at each point in time.

Strong commitment and a clear path to reach our financial targets

12%
Operating margin

5%
Annual organic growth

<0.5
Gearing

≥50%
Dividend of earnings

Energy transition and decarbonisation driving our >5% organic growth target

LTM Q3/2023 net sales EUR 6.1bn

Drivers of net sales growth[1)]	Share of absolute growth
Energy Storage & Optimisation – Fast growing demand for energy storage and power system optimisation solutions	⊕⊕⊕
Marine newbuild driven by decarbonisation – Uptake of solutions ready for sustainable fuels, and recovery in passenger and offshore segments	⊕⊕
Moving up the service value ladder in Marine and Energy – Continuous growth in agreement coverage – Decarbonisation-driven retrofits	⊕
Energy Engine Power Plants new build driven by balancing and baseload – Gradual shift to renewables – The focus on offering equipment rather than EPC decreases revenue expectations but improves our risk profile	⊕
Portfolio Business divestments – Gas Solutions, ANCS, Water & Waste, and Marine Electrical Systems	⊖⊖

1) drivers' consideration includes the transfer of Shaft Line Solutions and Exhaust Treatment to Marine and Gas Solutions to Portfolio Business

Source: CMD 2023

Services and decarbonisation key drivers towards 12% operating margin

LTM Q3/2023 operating margin 6.0%[1)]

Drivers of improved profitability[2)]	Share of absolute improvements
▪ Moving up the service value ladder in Marine and Energy	⊕ ⊕ ⊕
▪ Marine new build driven by decarbonisation	⊕ ⊕
▪ Energy Engine Power Plants new build driven by balancing and baseload	⊕ ⊕
▪ Energy Storage & Optimisation	⊕
▪ Portfolio Business divestments	⊕
▪ Continuous improvement	>0
▪ Cost inflation & related price adjustments	

1) excluding EUR 40m provision related to Olkiluoto 1 and 2 nuclear projects taken in Q4/2022 (discontinued nuclear business) as well as EUR 19m provision taken for a single sizeable turnkey project in Gas Solutions in Q2/2023 (discontinued turnkey business) 2) drivers' consideration includes the transfer of Shaft Line Solutions and Exhaust Treatment to Marine and Gas Solutions to Portfolio Business

Source: CMD 2023

We continue to actively manage our business portfolio

Automation, Navigation & Control Systems to be divested

- Wärtsilä has agreed to divest its Automation, Navigation and Control System (ANCS) business to the Swedish investment company Solix Group AB.
- ANCS is a global leader in innovative hardware and software technologies for marine navigation and automation.
- Wärtsilä acquired ANCS in 2015 as part of Marine Systems International. In 2024, the annual revenue of ANCS was close to EUR 230 million.
- Subject to approvals, the transaction is expected to be completed in the second quarter of 2025.

Portfolio Business

Plan to divest. Timeline subject to internal separation & turnaround

- Water & Waste
- Marine Electrical Systems
- Automation, Navigation & Control Systems
- Gas Solutions

2024	Group total	Group total excl. Portfolio Business
Net sales, EURm	6,449	5,743
Comparable operating margin	10.8%	11.5%
Operating margin	11.1%	11.6%

Profitability drivers

+ Supporting drivers

- Continued decarbonisation in both the energy and marine markets
- Good service performance
- Strong order book both in new equipment and services
- Profitability improvements in Energy Storage and former Voyage Business
- Improved capacity utilisation
- Continuous improvement

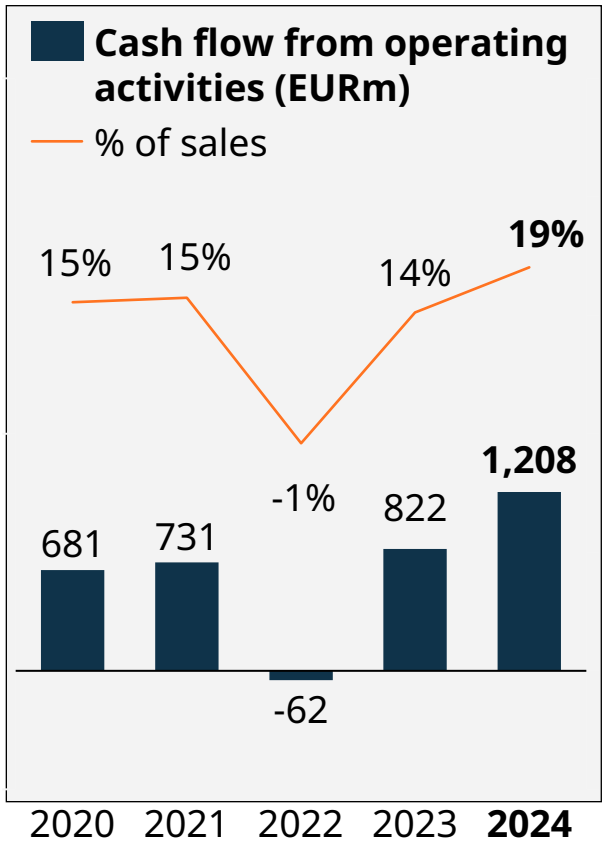
+ / - Uncertainties

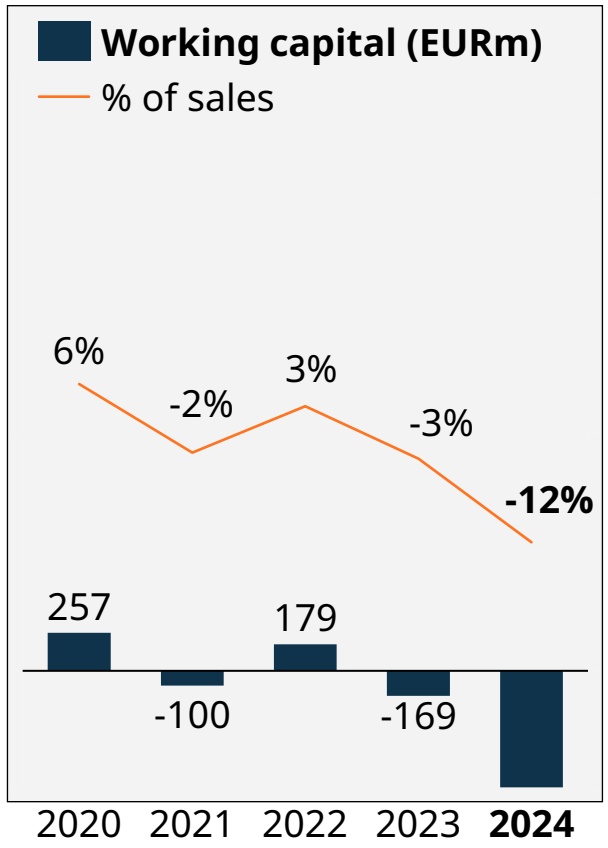
- Geopolitical tensions
- Potential trade restrictions / trade wars
- Recession risk

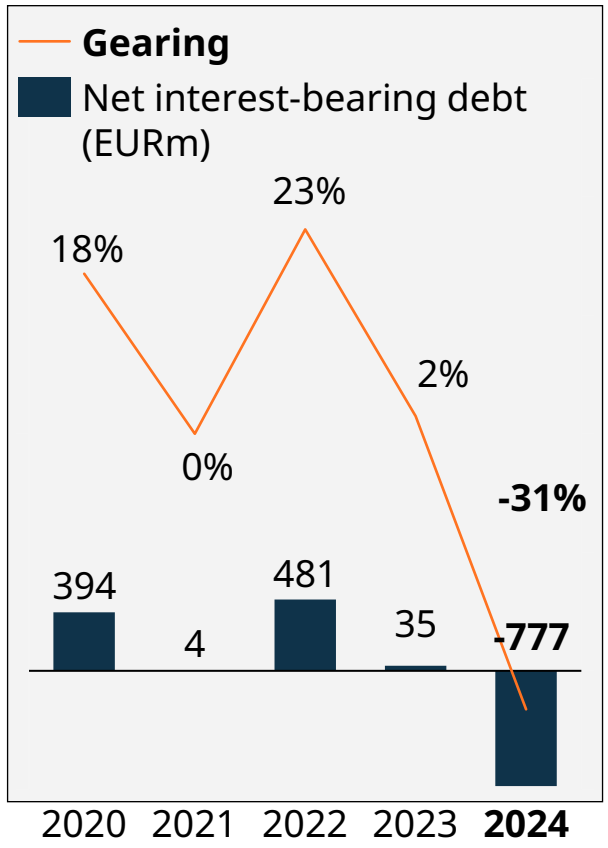
- Negative factors

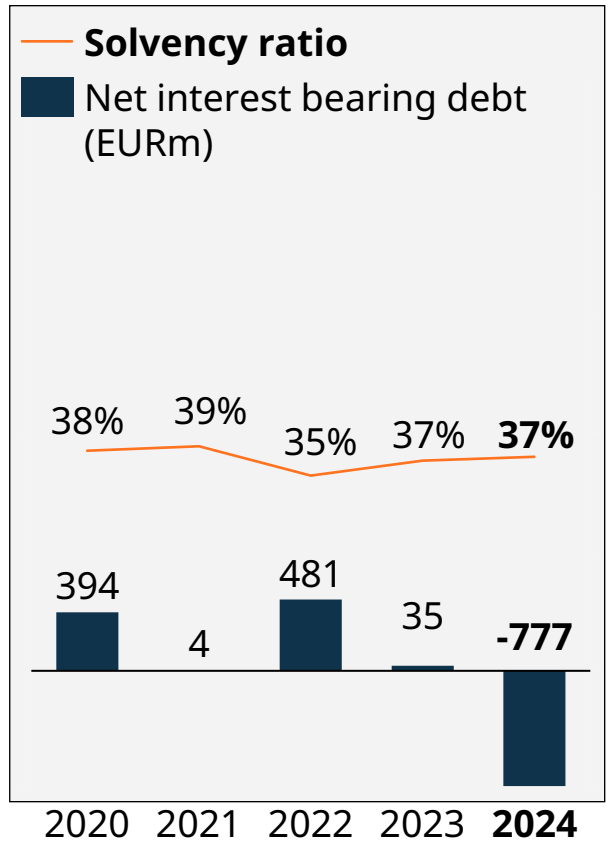
- Wage inflation
- Negative mix impact from increasing equipment deliveries

Strong balance sheet and financial position to support strategy execution









Strong cash flow development from 2022 level

Continued good working capital development

Strength to make strategic investments

Source: CMD 2023, updated with 2024 data.

The Wärtsilä Way sets the scene for profitable growth. We reconfirm our financial targets

THE WÄRTSILÄ WAY

Purpose
Enabling sustainable societies through innovation in technology and services

Target position
Shaping the decarbonisation of marine and energy

- 5% annual growth
- 12% operating margin
- To become carbon neutral in own operations and to provide a product portfolio which will be ready for zero carbon fuels by 2030

Strategic priorities
Roadmap to improve performance and reach Target position

Execution plan
What to do – tactics & operations, updates yearly

Values, leadership and continuous improvement
Customer success, Passion, Performance

The strategic priorities are the key levers to improve our performance and reach our target position

1

Excel in creating customer value
We continuously evolve our understanding of, and responsiveness to, our customers to make them successful

2

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

3

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

4

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

5

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

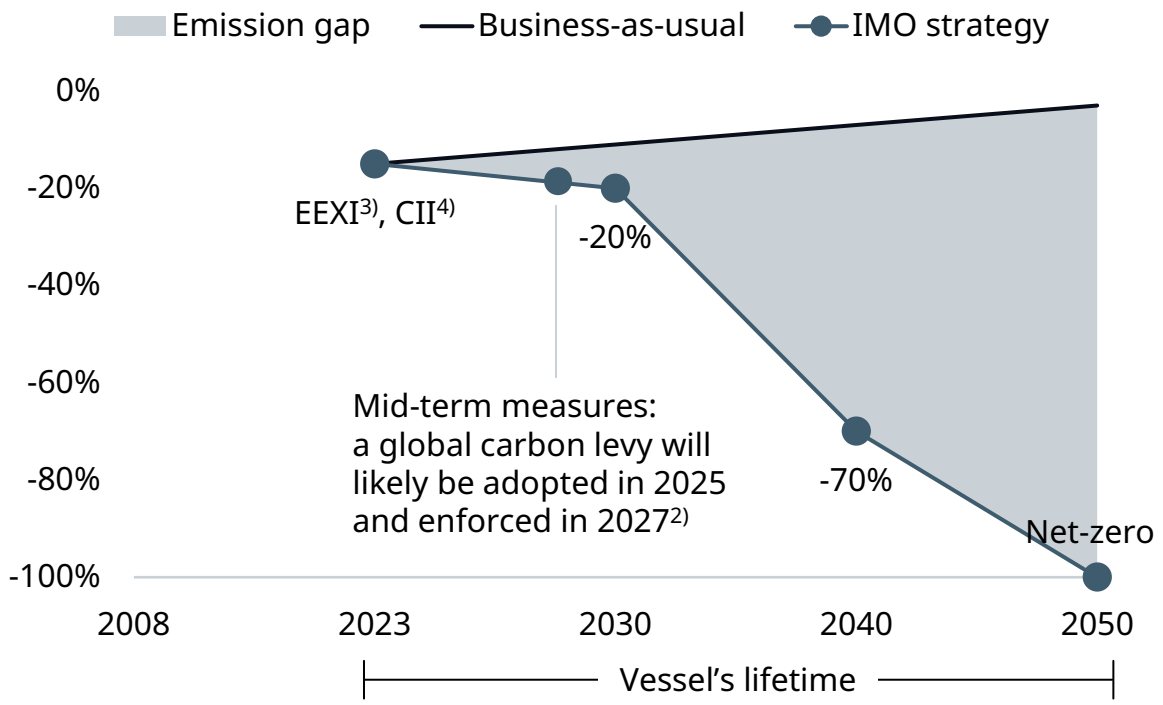
Marine highlights

After IMO net-zero commitment in 2023, the regulatory focus has moved to “mid-term measures”

For vessels operating in EU waters, fuel cost may double due to emission fees up to 2030, compared to 2023

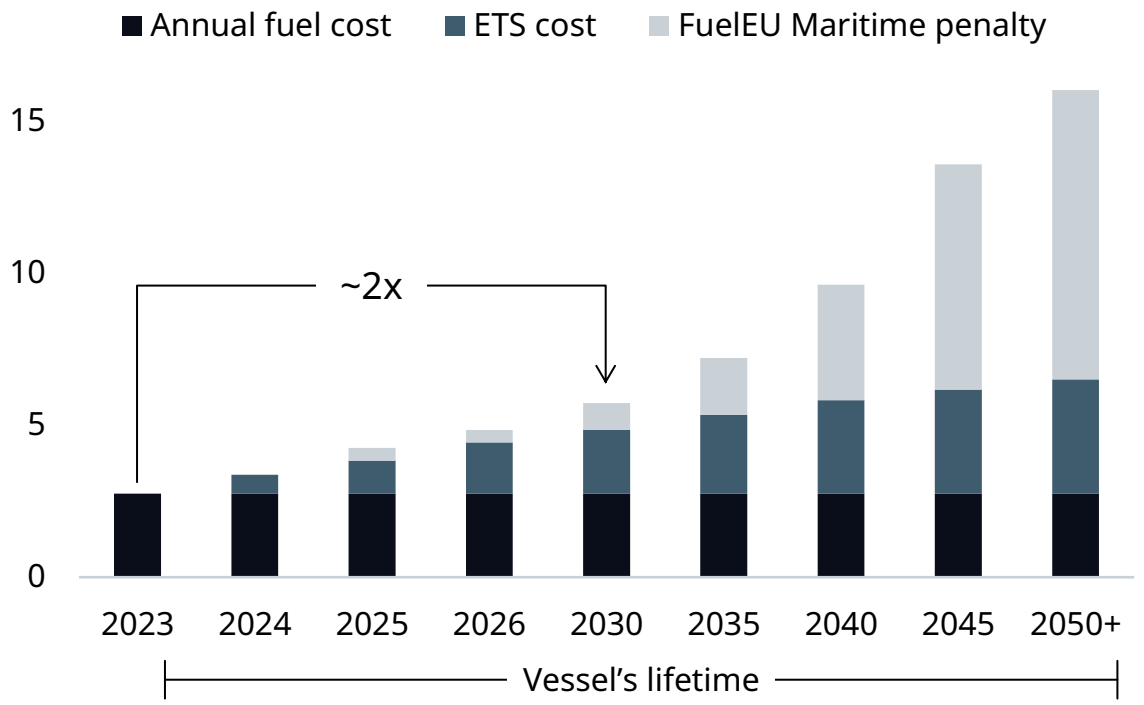
IMO GHG Strategy[1)]

GHG emission reduction % vs 2008



EU Fit-for-55

Fuel-related costs for Handymax bulker operating in EU, EURm[3)]



1) Source: IMO; data refers to well-to-wake Green House Gases (GHG) emissions; 2) E.g., goal-based marine fuel standard, GHG emissions pricing mechanism; 3) Assuming 5 000 tons/year VLSFO (Very Low Sulphur Fuel Oil) consumption subject to EU Fit-for-55, VLSFO at EUR 550/ton; EU ETS allowances from EUR 100/ton today to EUR 230/ton in 2050 (source: Transport & Environment NGO)

Source: Marine call 2024

Decarbonisation can be reached through different pathways; net-zero targets will require a fundamental shift towards sustainable fuels

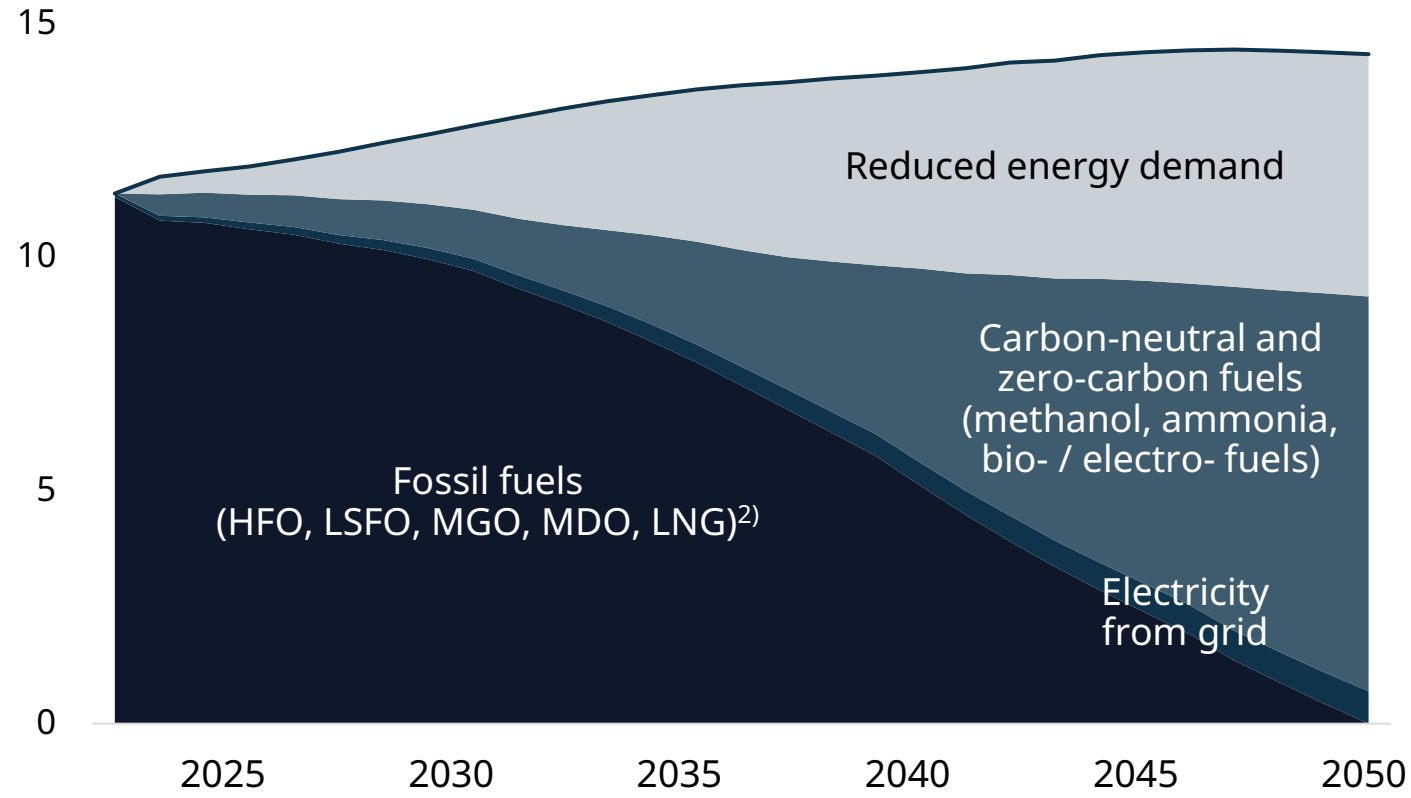
Decarbonisation pathways

Burn less fuel[1)]		Clean up emissions[1)]	Use alternative energy sources	
Vessel efficiency	**Operational efficiency**	**Emission abatement**	**Sustainable fuels**	**Electrification**
▪ Reduction of GHG emissions and fuel cost ▪ E.g., energy efficiency improvement of engine, propulsion, hull, other systems	▪ Reduction of GHG emissions and fuel cost ▪ E.g., speed reduction, route optimisation, onboard energy management	▪ Significant reduction of GHG emissions through onboard carbon capture, regardless of the fuel ▪ CO2 offloading infrastructure, onboard storage and value chain needed	▪ Significant / total reduction of GHG emissions ▪ Technology available; infrastructure and supply under development	▪ Zero GHG emissions through battery-electric propulsion ▪ Viable on short ranges due to low energy density
Approximate greenhouse gas (GHG) emission reduction potential				
25%	**25%**	**70%**	**100%**	**100%**

1) These pathways shall be combined with the utilisation of alternative fuels to support long term IMO targets

A progressive switch to sustainable fuels is already under way

Sustainable fuel uptake scenario for net-zero in 2050[1)]



- ✓ **Fuel transition is under way**: ~50% of tonnage on orderbook is set to use alternative fuels; long-term fuel mix is dependent on supply of different fuels
- ✓ **LNG is still #1 alternative fuel.** Methanol and ammonia will pick up in the longer run
- ✓ **Hybrids, batteries, ESTs[3)] are growing**:
  - ~200 hybrid / full-electric 2 000+ GT vessels were ordered in 2024 (compared to 99 in 2022 and 55 in 2019)

1) Source: DNV Maritime Forecast 2050; 2) HFO – Heavy Fuel Oil; LSFO – Low Sulphur Fuel Oil; MGO – Marine Gas Oil; MDO – Marine Diesel Oil; 3) Energy Saving Technology

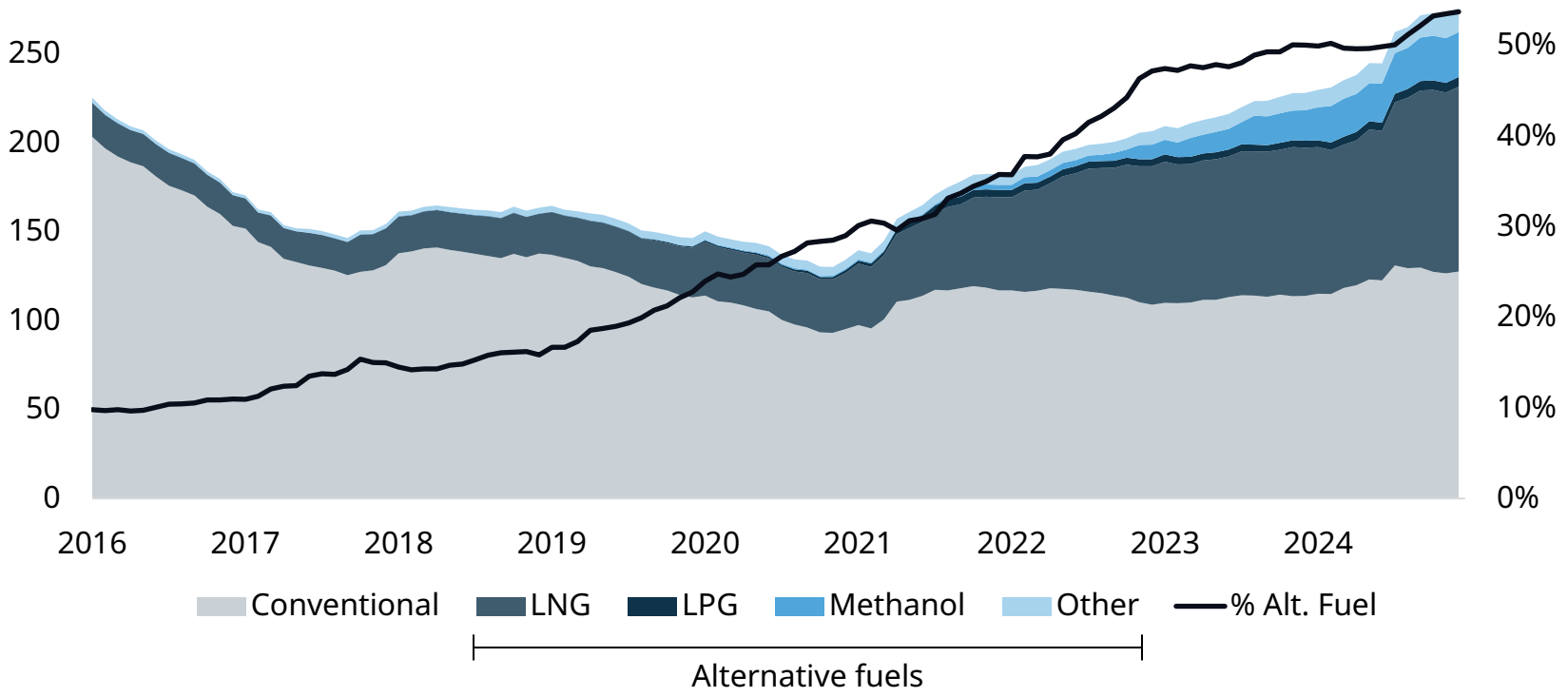
Source: CMD 2023

The regulatory changes impact maritime now: half of the total shipbuilding orderbook is set to run on alternative fuels

2024 saw the highest-ever alternative fuel capable vessel ordering, excluding gas carriers

Alternative fuels uptake

Orderbook by fuel type, mGT[1)]



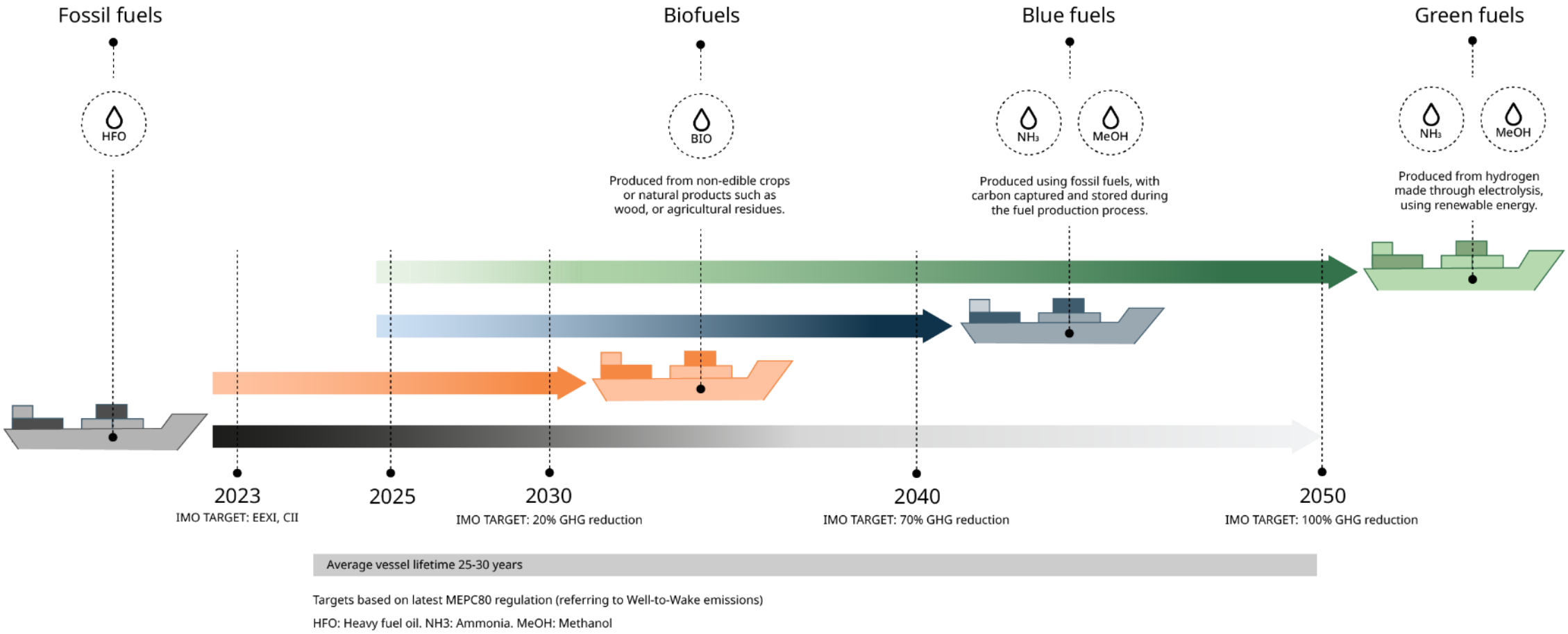
~50%

vessel GT ordered since 2022 is set to run on alternative fuels

1) Source: Clarksons Research, September 2024; other includes ammonia, nuclear, ethane, hydrogen, biofuels, and battery/hybrid

Sustainable fuels roadmap to 2050

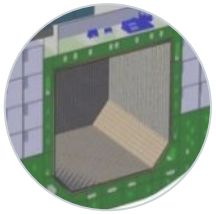
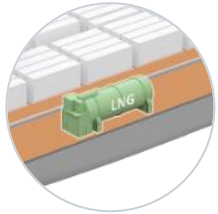
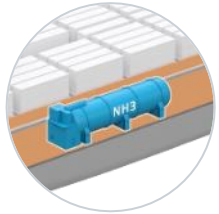
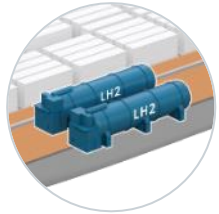
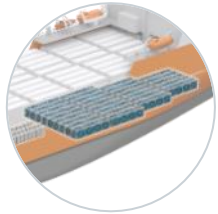
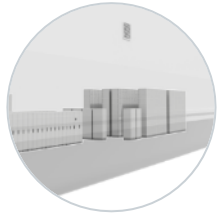
In Wärtsilä, alternative fuel-capable engines account for 70% MW delivered in 2024



Targets based on latest MEPC80 regulation (referring to Well-to-Wake emissions)

HFO: Heavy fuel oil. NH3: Ammonia. MeOH: Methanol

Cost of emissions will close the price gap between fossil and sustainable fuels; fuel selection impacts the vessel structure

							
Fuel type	**Low Sulphur Fuel Oil** @ 20°C	**Liquified Natural Gas** @ -162°C	**Methanol** @ 20°C	**Ammonia** @ -33°C	**Liquid Hydrogen** @ -253°C	**Compressed Hydrogen** @ 350bar	**Marine Battery Rack**
Fuel price factor (per GJ)[1)]	1x	1.1x – 4.6x[2)]	2.6x – 5.5x[3)]	2.4x – 4.3x[4)]	3.6x – 4.6x[4)]	2.1x – 3.1x[4)]	2.0x – 5.3x[8)]
Fuel price factor in 2035, incl. carbon tax[1) 5)]	1x	0.8x – 1.4[2)]	0.8x – 1.6x[3)]	0.7x – 1.2x[4)]	1.2x – 1.5x[4)]	0.6x – 1.0x[4)]	0.8x – 2.0x[8)]
Gross tank size factor[6)]	1x	1.7x – 2.4x[7)]	1.7x	3.9x	7.3x	19.5x	~40x (~20x potential)

1) Fuel production cost estimate for 2025 and 2035; source: Maersk Mc-Kinney Møller Center for Zero Carbon Shipping – NavigaTE 2023; 2) Price range spans between fossil & electro- methane; 3) Price range spans between bio- & electro- methanol; 4) Price range spans between blue- & electro- ammonia/hydrogen; 5) Assuming 100% consumption subject to EU Fit-for-55, EU allowances at EUR 159/ton (source: Transport & Environment NGO); 6) Gross tank estimations based on Wärtsilä data; 7) 1.7x membrane tanks, 2.4x type C tanks; 8) Shore energy price EUR 0.1-0.27/kWh

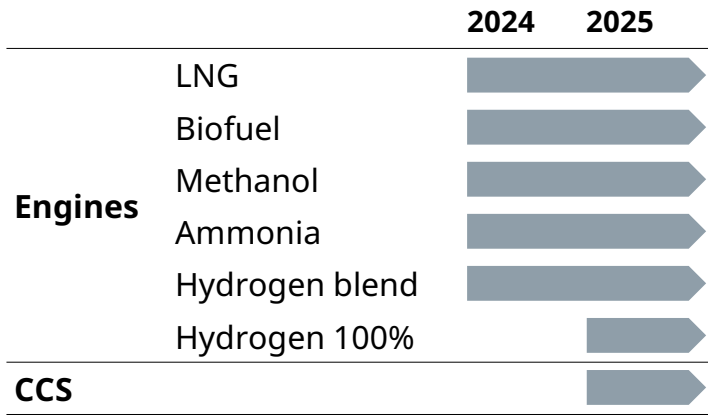
Source: CMD 2023

The alternative fuel ecosystem must continue to develop further to support the maritime green transition

Engine technology

- Technology is readily available, with ~50% of the current vessel orderbook set to run on alternative fuels
- Wärtsilä leads in fuel flexibility and efficiency, having the industry's most comprehensive offering:

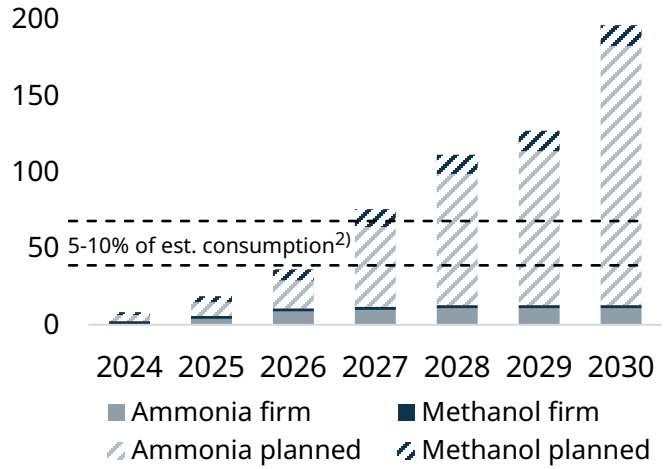
Wärtsilä's alternative fuel roadmap



Availability of fuels

- Alternative fuels are not yet available at the required scale
- Production is estimated to pick up, with planned capacity of sustainable methanol and ammonia reaching ~190 Mt by 2030[1]:

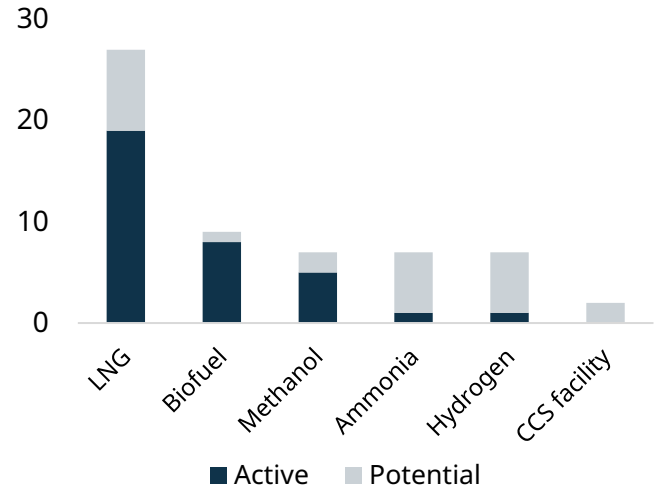
Production of sust. methanol and ammonia, Mt



Port infrastructure

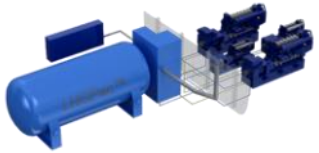
- Bunkering infrastructure is limited but developing rapidly; carbon capture and storage infrastructure is still lacking
- ~60% of the top 50 ports worldwide are planning to build alternative fuel bunkering[3]:

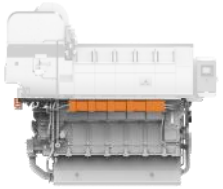
Alternative fuels bunkering in top 50 ports, no. ports

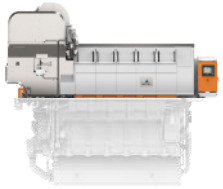


1) Source: DNV AFI, 2) global fleet would require an estimated ~600Mt of fuel to run solely on ammonia and methanol due to their lower energy content, 3) Source: Clarksons

Our engines have built-in upgradability to future fuels, with significant part commonality between different fuel versions and a modular design







LNG DF[1] engine to run on:	Fuel System	Engine base	Engine top
▪ Bio/Synthetic diesel	▪ No changes	▪ No changes	▪ No changes
▪ Bio/Blue/Green methane	▪ No changes	▪ No changes	▪ No changes
▪ Ammonia	▪ Replace with AmmoniaPac	▪ No changes	▪ Change fuel injection system and power pack[2]
▪ Methanol	▪ Replace with MethanolPac	▪ No changes	▪ Change fuel injection system and power pack[2]
▪ Hydrogen blend[3]	▪ Move to alternative fuel handling system	▪ No changes	▪ No changes

↓

Replacement of fuel handling and storage system has bigger impact in terms of CapEx, cargo space and vessel range

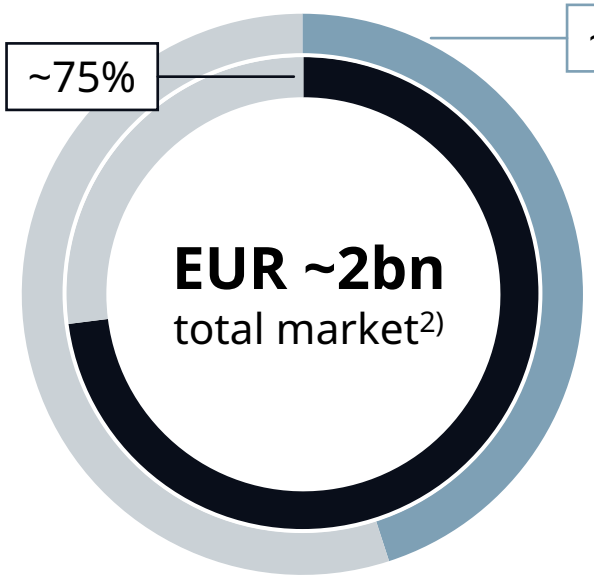
↓

Upgrading a multi-fuel engine to a new fuel requires limited investment thanks to high modularity and part commonality

1) DF – Dual Fuel; 2) I.e., piston, cylinder liner, connecting rod; 3) Up to 15% on fuel volume

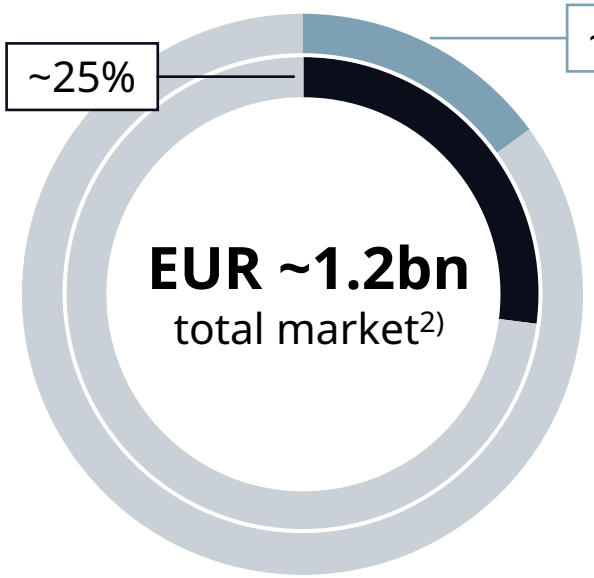
Our market share is stronger on alternative fuel capable engines compared to diesel engines

4-stroke medium speed main engines market share[1)]



We are **market leaders** in 4-stroke medium speed main engines, and particularly strong in high-value segments and sustainable fuels

Auxiliary engines market share[1)]



We are **growing** in auxiliary engines, as sustainable fuels are de-commoditising and consolidating the market

Outer circle: Wärtsilä total market share

Inner circle: Wärtsilä market share on alternative fuel engines

1) Wärtsilä estimates, MW; 2) Average 2024-2028, based on Clarksons March 2024 forecasts and internal models

Source: Marine theme call, May 2024

We focus on the most high-value, performance-driven segments

Typical Wärtsilä Marine offering per vessel[1)]

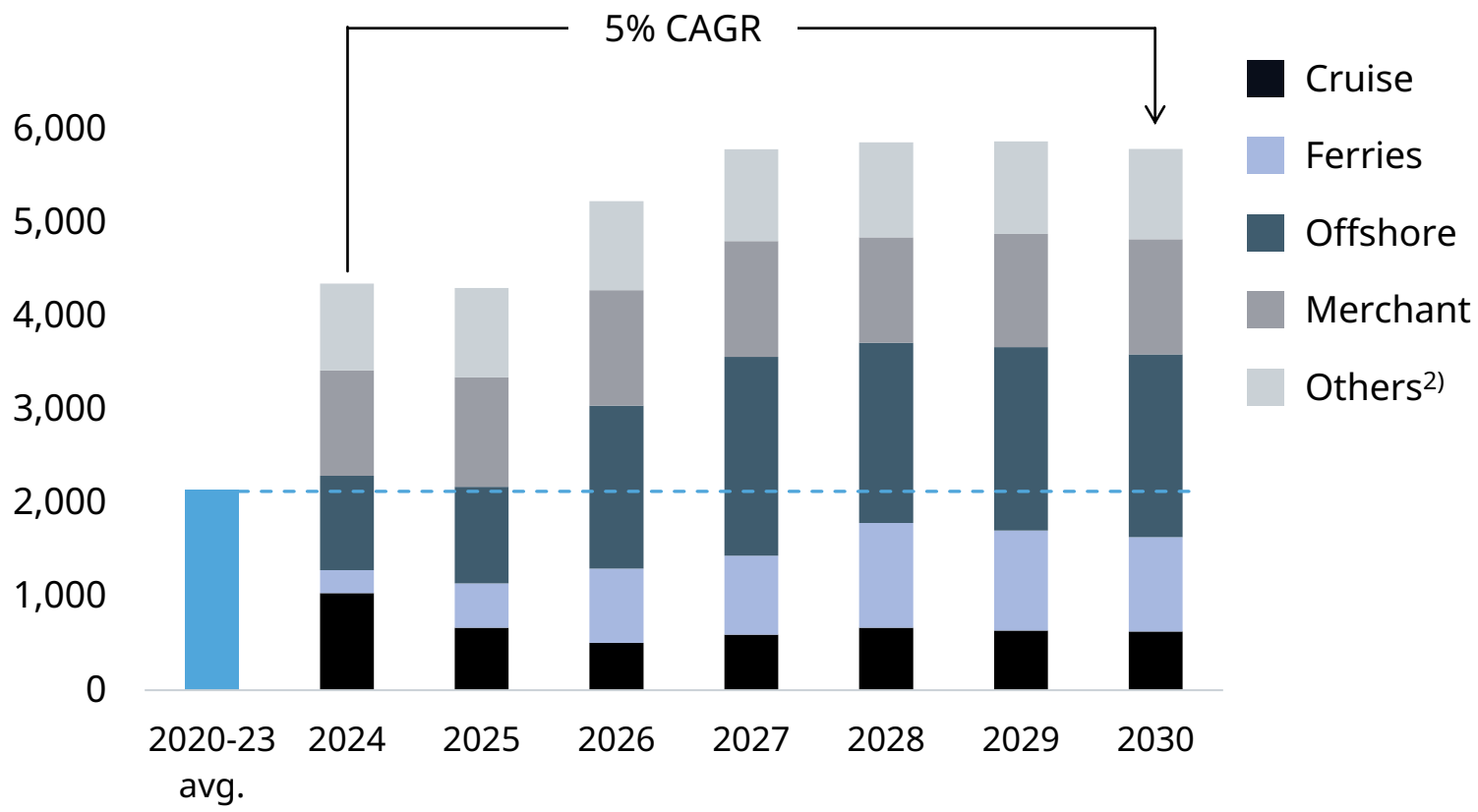
	Cruise	Ferries	Offshore	Navy	Specials	Merchant	Hy-El merchant
							
Engines / Hybrid[1)]	Diesel-Electric	Main Engines Aux Engines Hybrid System	Hybrid-Electric	Aux Engines	Main Engines	Aux Engines Main Engines[5)]	Hybrid-Electric
Propulsion[2)]	Tunnel Thrusters	CPP or Waterjets	Steerable Thrusters Tunnel Thrusters	CPP, FPP or Waterjets	CPP or Steerable Thrusters Tunnel Thrusters	CPP Tunnel Thrusters EST	CPP Tunnel Thrusters EST
Potential[3)]	**EUR 15-40m**	**EUR 10-25m**	**EUR 5-15m**	**EUR 5-15m**	**EUR 5-15m**	**EUR 2-15m**	**EUR 25-30m**
% of Order Intake[4)]	**~25%**		**~5%**	**~10%**	**~5%**	**~50%**	**-**

1) Non-exhaustive list; offering depends on vessel specific configuration and may vary substantially. 2) CPP/FPP = Controllable/Fixed Pitch Propeller; EST = Energy Saving Technology, e.g., gate rudder, EnergoProFin, EnergoFlow, EnergoPac; 3) Potential per shipset; it includes catalyst systems and electrical systems; carbon capture is not included, and could unlock additional EUR 2-8m potential; 4) Marine equipment order intake, 2023; ~5% in non-vessel markets, mainly simulation and ports; 2-stroke cargo order intake mainly from LNG carriers and containerships;
5) Predominantly 2-stroke main engines, 4-stroke main engines only on small vessels and coastal vessels

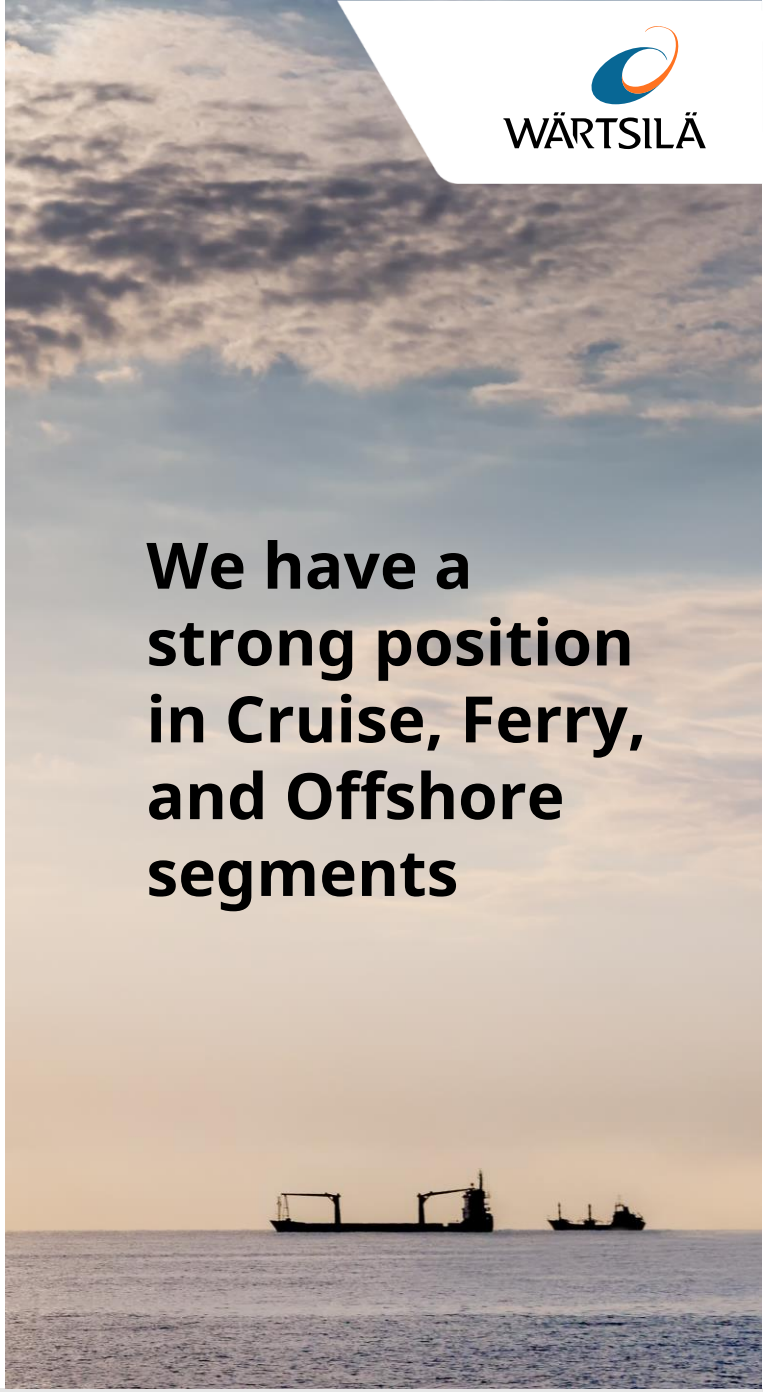
Source: Marine call 2024

Recovery in our key target segments is growing the 4-stroke medium speed main engine addressable market

Newbuild ordering of 4-stroke medium speed main engines, MW[1)]

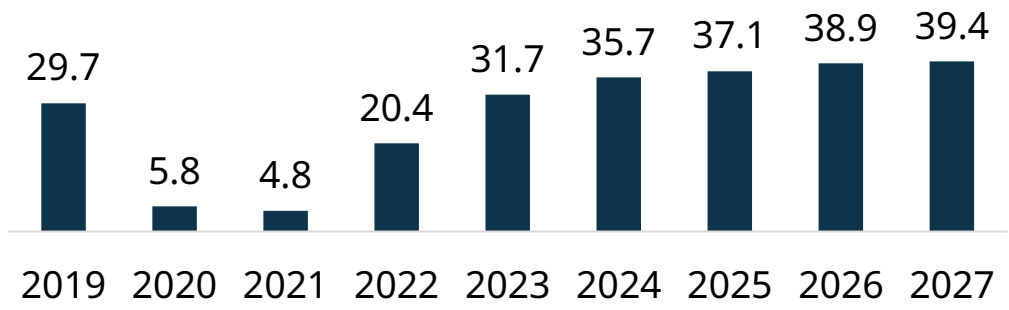


1) Clarksons September 2024 forecasts; 2) Fishing, dredgers, support units, yachts, tugs, etc.; 3) Market share on 4-stroke main and auxiliary engines as per Q4 2023, Wärtsilä estimates, MW

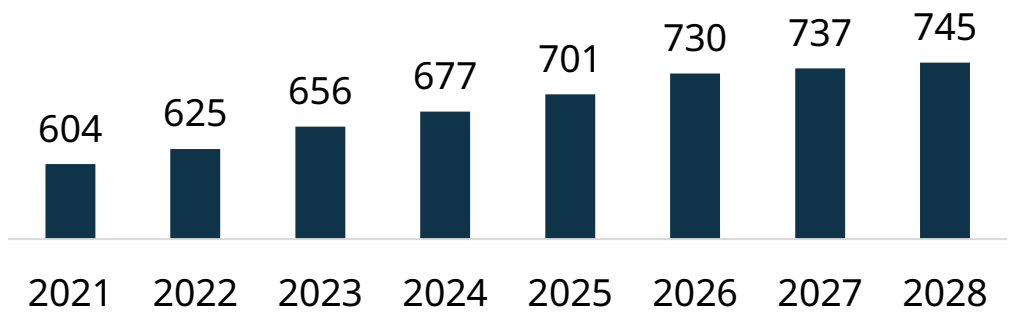


Global cruise capacity is forecast to grow over 10% from 2024 to 2028

Cruise passengers, million passengers



Cruise capacity, 1000x lower berths[1)]



- ✓ Cruise travel reached 107% of 2019 levels in 2023, with 31.7 million passengers sailing; this compares to overall international tourism arrivals, which are 12% lower than 2019
- ✓ By 2027, cruise is forecast to grow to nearly 40 million passengers (+24% vs 2023)
- ✓ 60% of ships with delivery between 2023 and 2028 are set to run on LNG fuel
- ✓ Methanol is gaining traction, e.g., Celebrity Cruises new Edge Series ship will be equipped with Wärtsilä 46F methanol-ready engines

Source: CLIA, the state of the cruise industry 2024; 1) Lower berths indicate cruise capacity, assuming two passengers per stateroom

Hybrid-Electric will challenge 2-stroke as prime-mover for LNG carriers, enabling higher efficiency and increased cargo capacity

Wärtsilä Hybrid-Electric LNG carrier

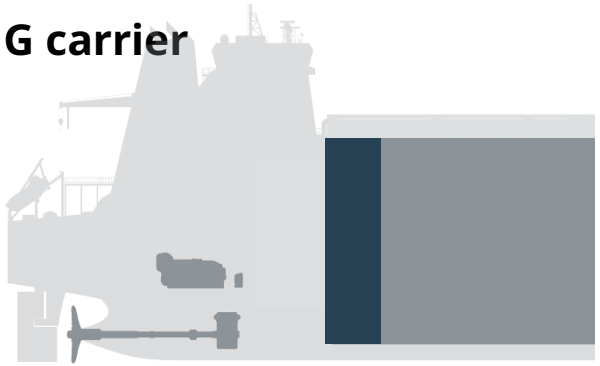
~185k cbm capacity

3x 4-stroke spark-gas gensets

2x 4-stroke dual fuel gensets

2 MWh batteries

■ Extra cargo capacity

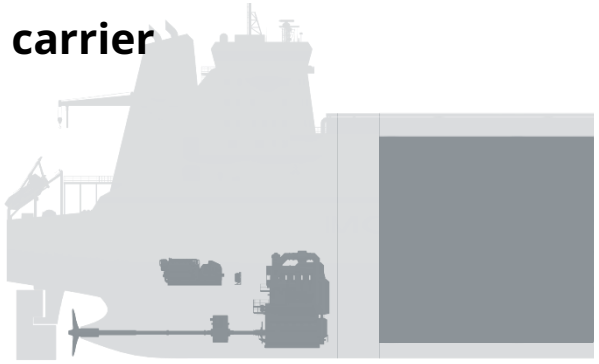


Conventional 2-stroke LNG carrier

174k cbm capacity

2x 2-stroke main engines

4x 4-stroke aux engines

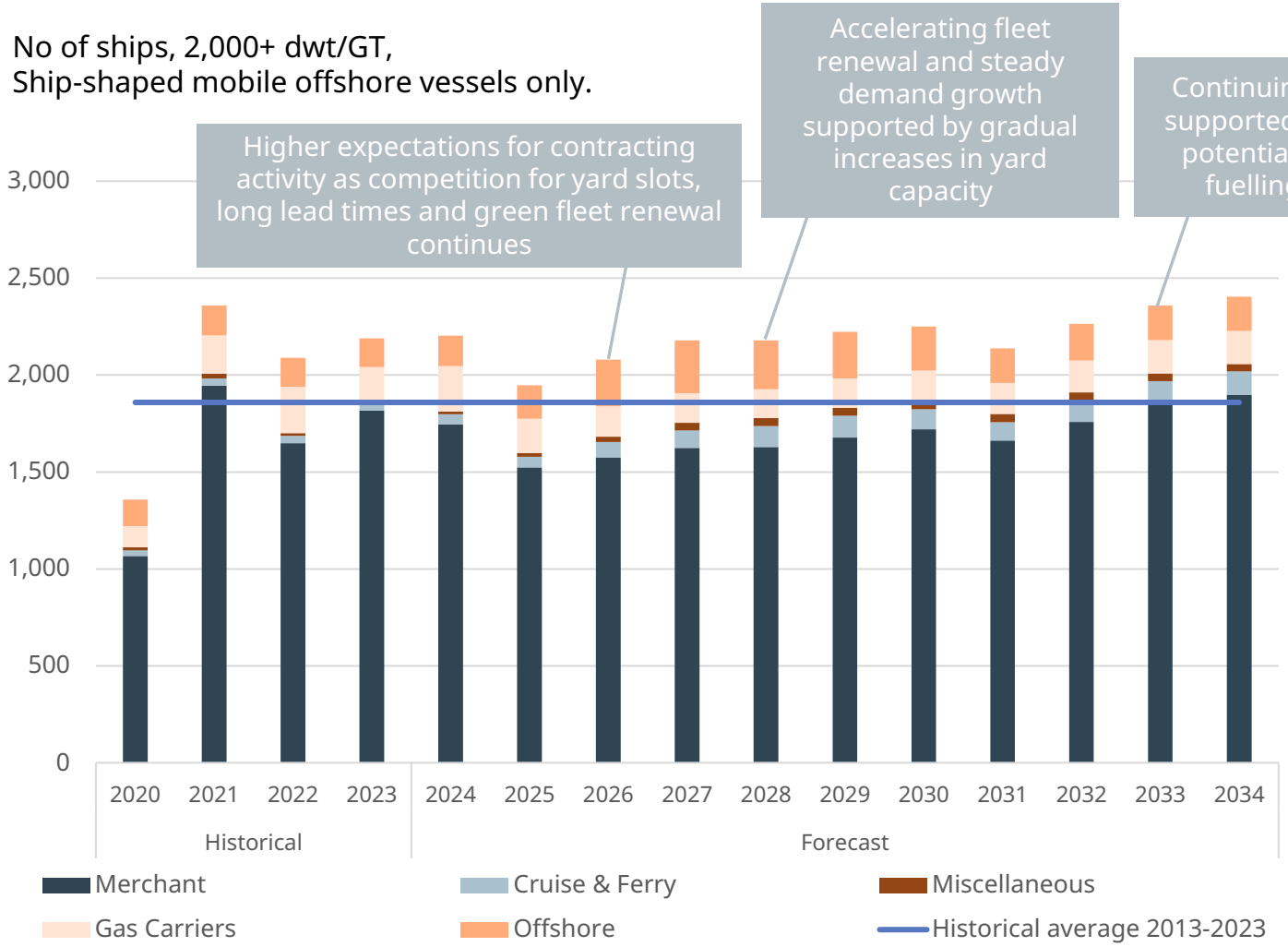


- ✓ **Launched at Gastech in 2023**
  with Shell and Hudong-Zhonghua Shipbuilding
- ✓ **6% extra cargo capacity**
  with same ship dimensions
- ✓ **>10% lower fuel consumption and emissions**
  with optimal efficiency across all speeds
- ✓ **20% lower maintenance costs**
  with fewer engine running hours
- ✓ **Superior redundancy, uptime, flexibility**
  as it can operate with fewer engines
- ✓ **Future proof**
  as it can integrate alternative power sources

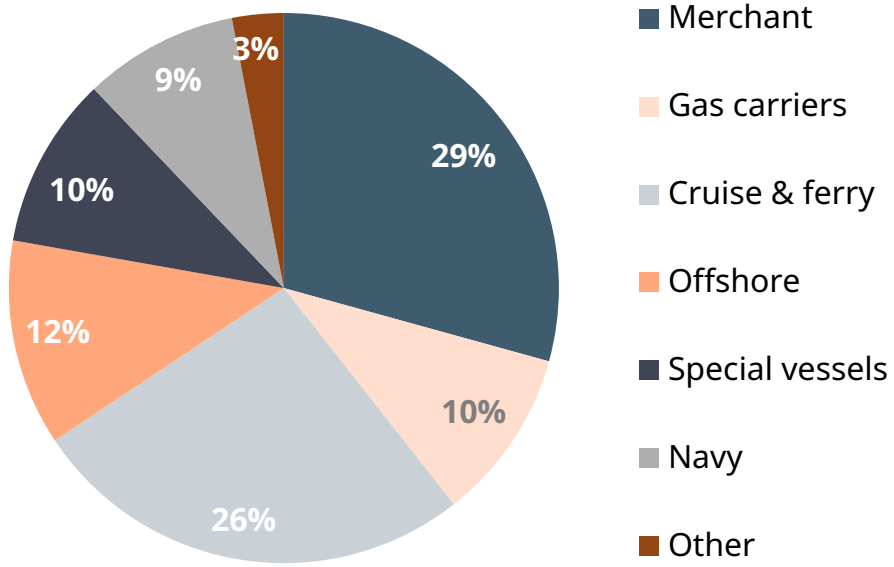
Values refer to a comparison with a conventional 174k cbm LNGC (2x 2-stroke low pressure DF main engines, 4x 34DF 4-stroke aux engines), calculated on full year cycle real operating profile with average speed of 15 knots in laden and 13.5 knots in ballast; cargo increase confirmed by Hanwa Ocean and Hudong-Zhonghua shipyards in their general arrangements and outline specifications

Vessel contracting forecast

No of ships, 2,000+ dwt/GT,
Ship-shaped mobile offshore vessels only.



Wärtsilä's order intake in Marine businesses by customer segment in 2024



Includes both orders for equipment and services. The vessel types included in Merchant segment are bulk carriers, cargo-, container-, and RoRo vessels as well as tankers. The vessel types included in Special vessel segment are dredgers, fishing-, inland-, and service vessels as well as tugs.

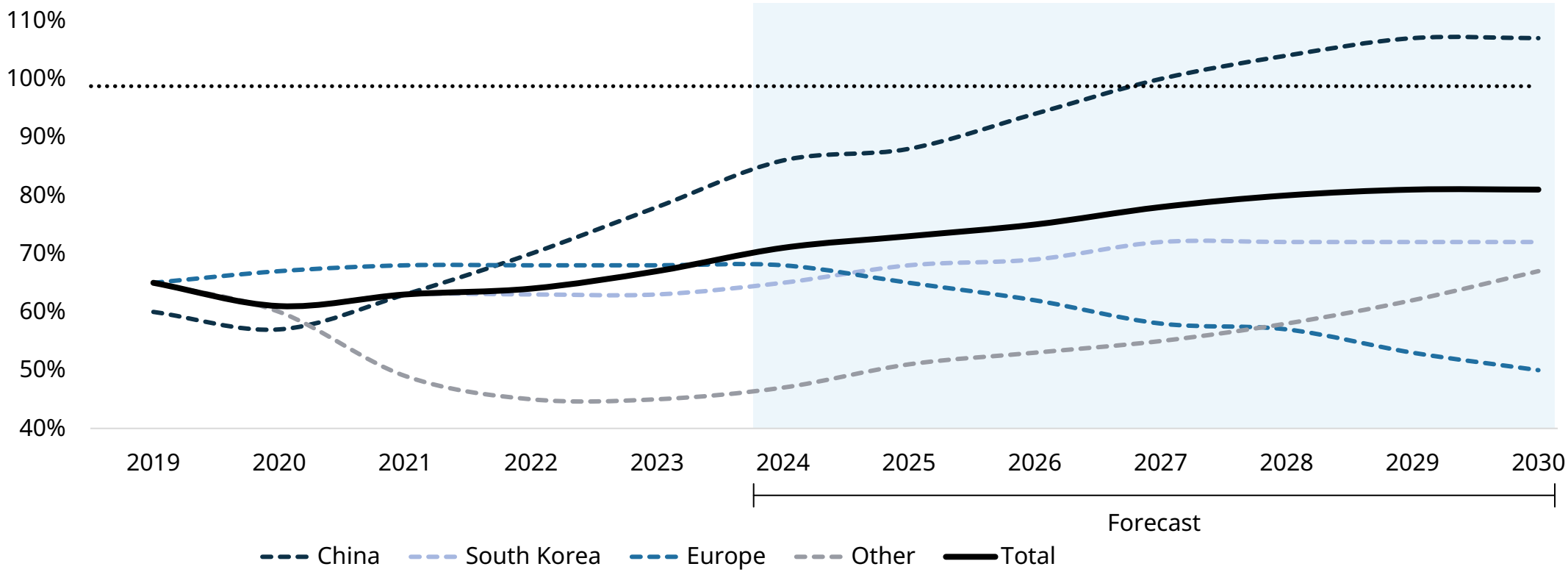
Source: Clarksons Research, September 2024

Global shipyard capacity is currently at ~70% of previous peak, but is expected to increase to >80% by 2030

Capacity increases are expected especially in China

Development of global shipyard capacity

Regional shipyard capacity as % of 2011-12 peak, CGT[1)]



1) Source: Clarksons Research, September 2024

Services accounts for >60% of Marine sales; we operate through an integrated service framework with three service delivery models

	Transactional	Agreements	Retrofits and upgrades[2)]
% services sales[1)]	~60%	~30%	~10%
Growth drivers	▪ Installed base growth	▪ Increasing ship complexity ▪ Increasing cost of emissions ▪ Increasing cost of fuel	▪ New regulations ▪ Increasing cost of emissions ▪ Increasing cost of fuel
Focus areas	▪ Customer service ▪ Service offering ▪ Long-tail customers	▪ Guaranteed performance and outcome-based models ▪ Service level differentiation ▪ AI Digital tools combined with in-depth product know-how	▪ New retrofit solutions ▪ Consultative sales through Decarbonisation Services

Source: Service call 2024. 1) Q3 2023–Q2 2024; agreement sales include all spare parts and field services sold to vessels under agreement, plus the agreement fee; 2) Referred to as Service Projects in the interim reports

Moving up the service value ladder in Marine

We increase sales and profits by moving up our service value ladder

From 1x[1)] → **Up to 2-3x[1)]**

Enhanced support agreement

- ✓ Data visibility
- ✓ Operational support
- ✓ Frame agreement for supply of parts and labour

Technical management agreement

- ✓ AI-based Expert Insight
- ✓ Operational support
- ✓ Data-driven dynamic maintenance planning
- ✓ Parts and labour invoiced as orders are received

Optimised maintenance agreement

- ✓ AI-based Expert Insight
- ✓ Operational support
- ✓ Data-driven dynamic maintenance planning
- ✓ Execution with parts and labour included

Guaranteed asset performance agreement

- ✓ AI-based Expert Insight
- ✓ Operational support
- ✓ Data-driven dynamic maintenance planning
- ✓ Execution with parts and labour included
- ✓ Profit sharing, guaranteed performance

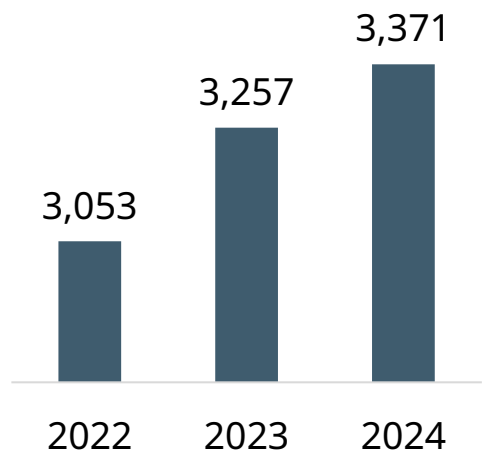
1) Sales EUR/kW relative to transactional

Source: CMD 2023

We have the widest service network in marine

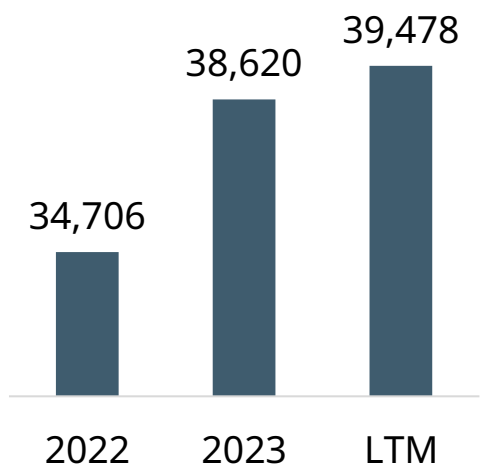
~3,400

professionals in 70+ countries[1)]



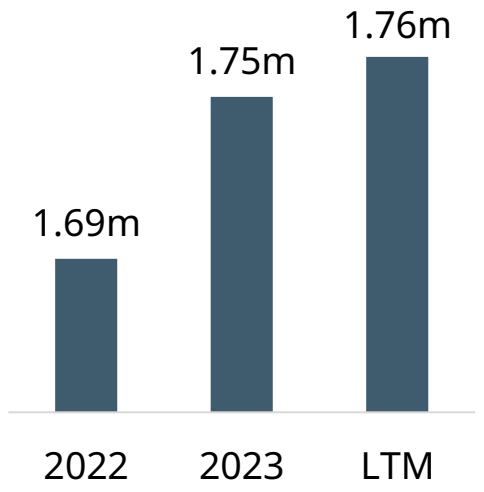
~39,500

marine field service jobs started annually

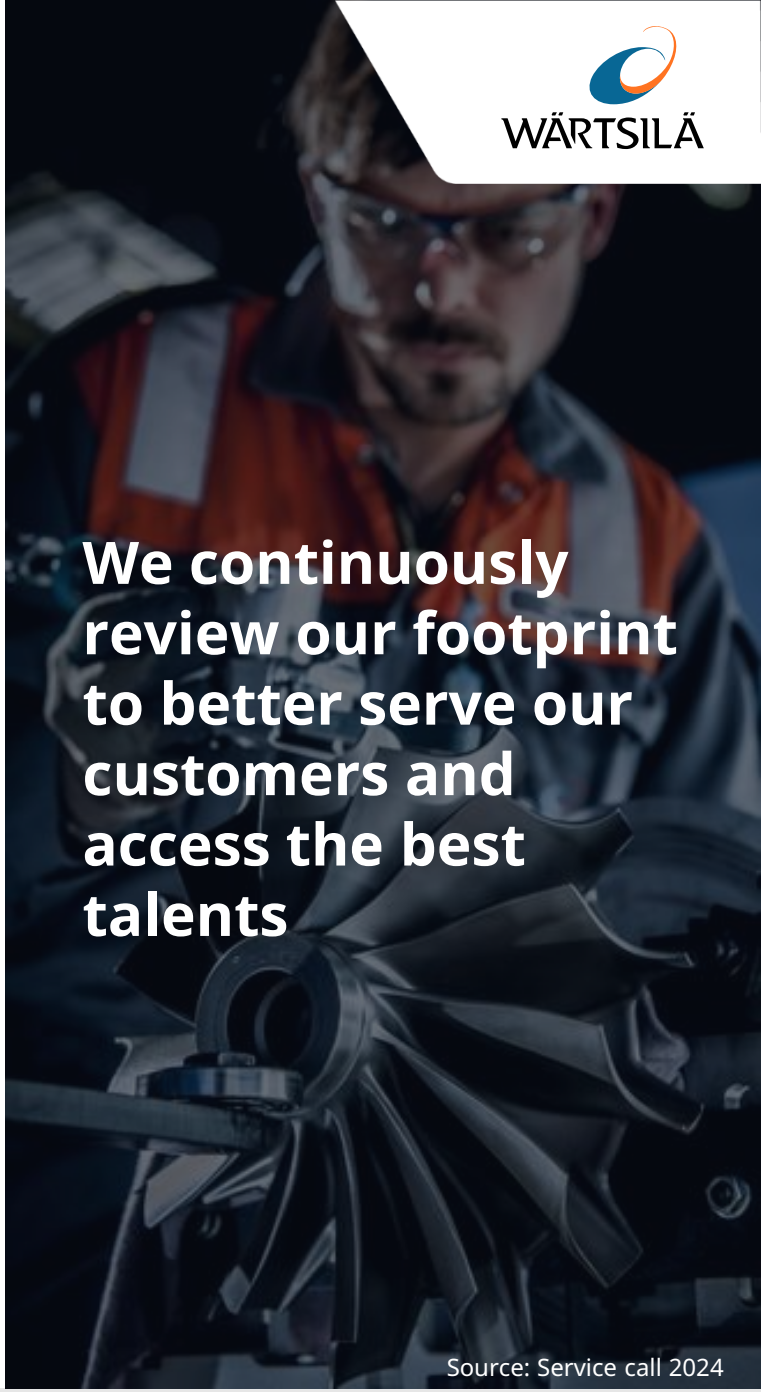


~1,760,000

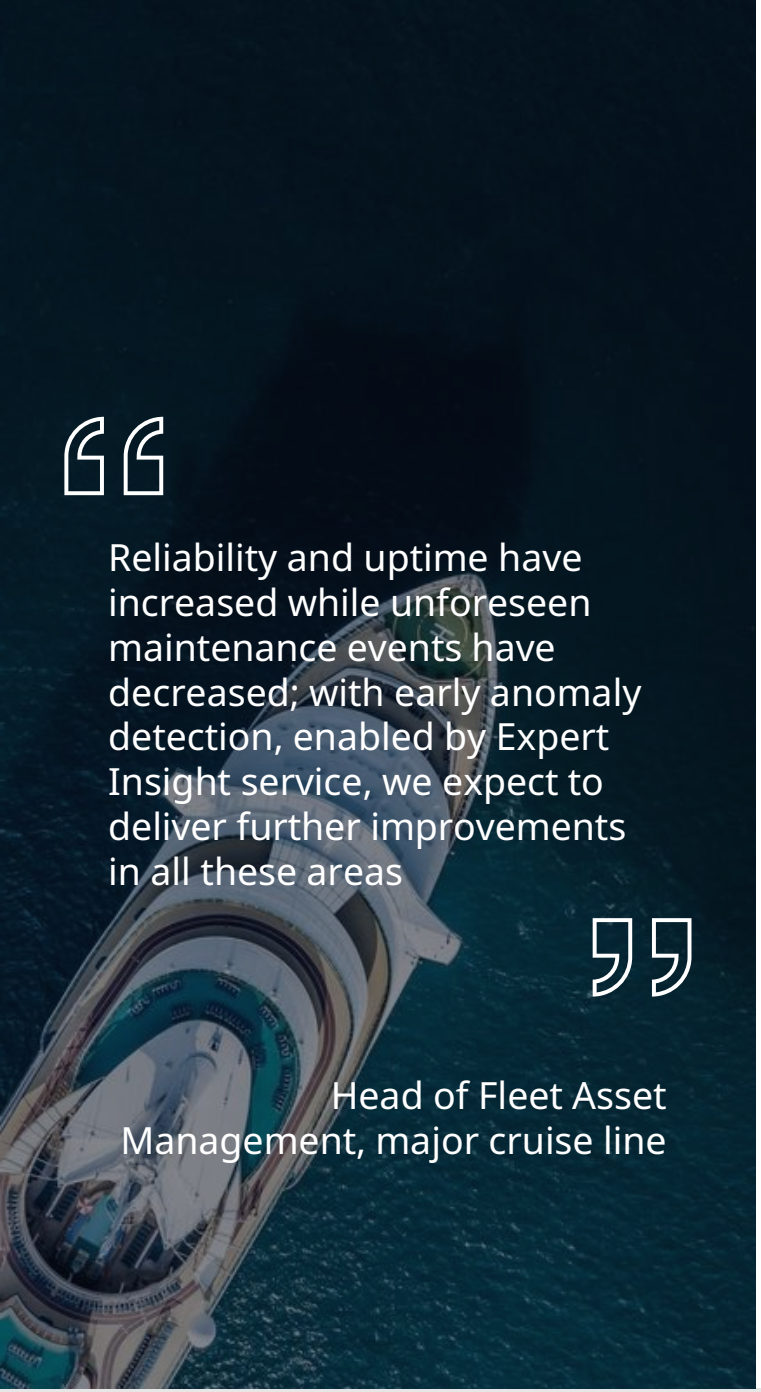
marine outbound delivery lines annually[2)]



LTM - Last twelve months, Q3 2023-Q2 2024; 1) Billable field services and workshop personnel as per Q2 2024, including Marine and Energy; 2) One delivery can include one or multiple lines to for the same customer, one line includes a material number and its quantity



Service agreements enable maximum fleet efficiency and uptime



> Reliability and uptime have increased while unforeseen maintenance events have decreased; with early anomaly detection, enabled by Expert Insight service, we expect to deliver further improvements in all these areas

Head of Fleet Asset Management, major cruise line

11

Expertise Centres, providing 24/7 remote technical support to agreement customers

40 million

datapoints collected on average every day from a connected vessel

>90%

issues resolved remotely

EUR >60m

fuel savings on a cruise fleet over a 6-year contract period

25–30%

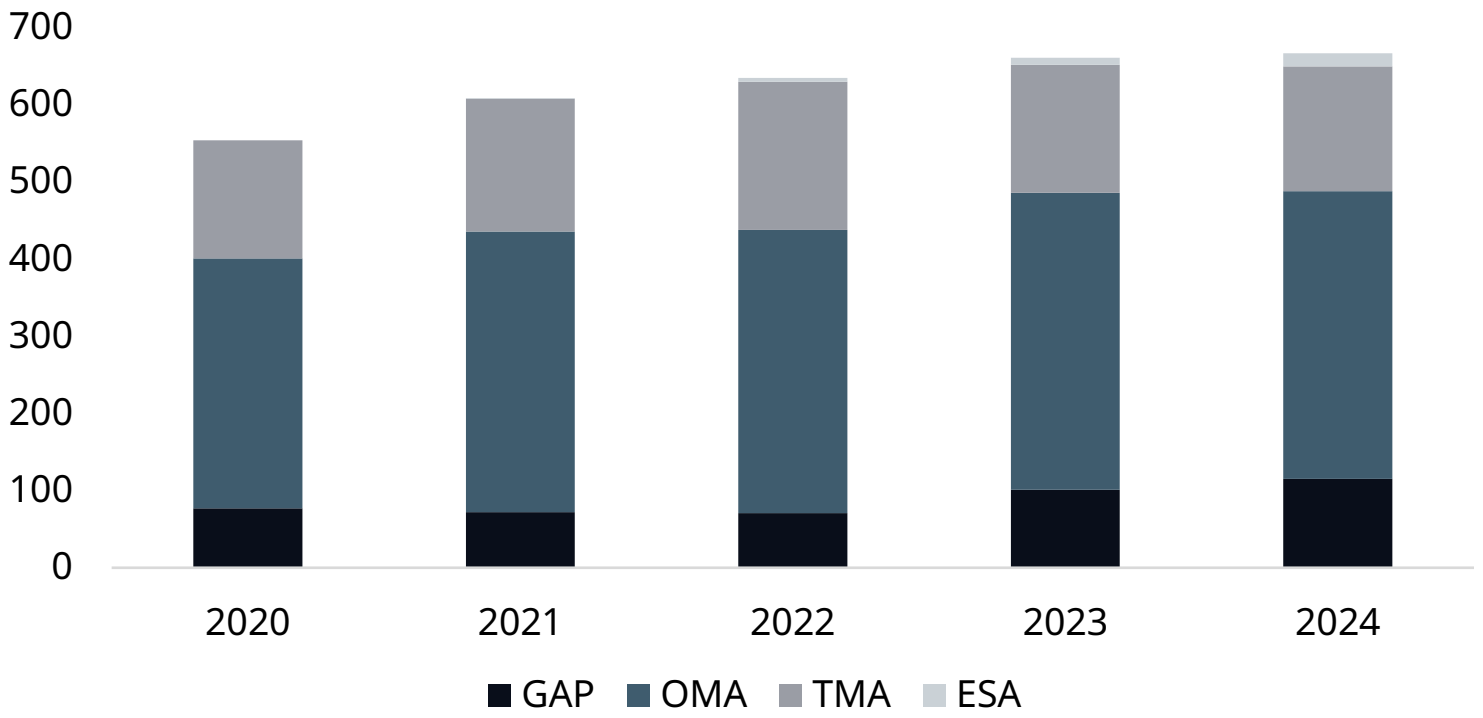
average reduction in planned/unplanned maintenance[1)]

1) Analysis on 160 LNG carriers with an active GAP - Guaranteed asset performance or OMA - Optimised maintenance agreement

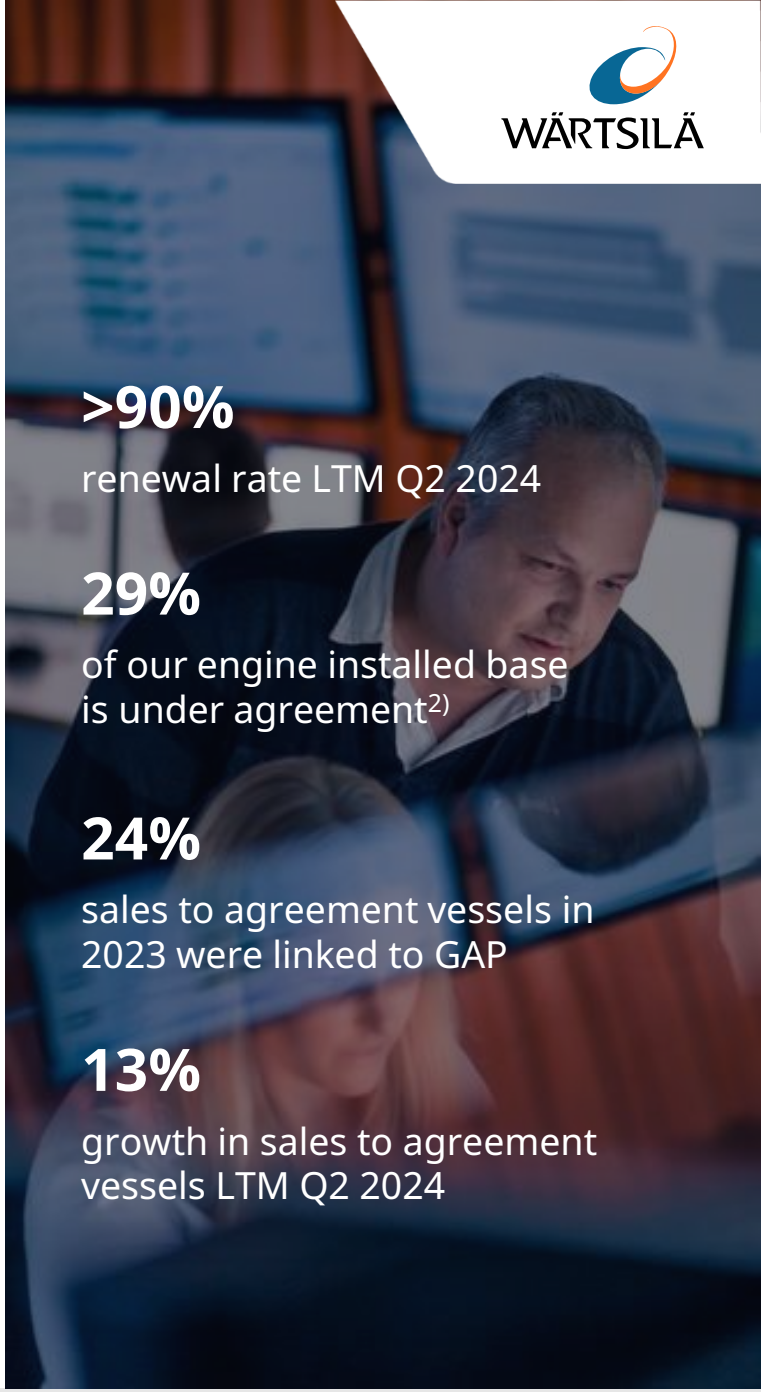
Source: Service call 2024

The fleet under Wärtsilä service agreement keeps expanding and shifting towards higher-tier agreements

Fleet under agreement as end of Q2 over 2020-2024, # ships[1)]



Source: Service call 2024. LTM - Last twelve months, Q3 2023–Q2 2024; 1) Agreement scope including 4-stroke and 2-stroke engines; Ship Electrical Solutions, Propulsions, Voyage, Exhaust Treatment excluded; GAP - Guaranteed asset performance agreement, OMA - Optimised maintenance agreement, TMA - Technical management agreement, ESA - Enhanced support agreement; figures as per end of June of each year; 2) In MW terms, 4-stroke installed base, excluding QuantiParts



>90%
renewal rate LTM Q2 2024

29%
of our engine installed base is under agreement[2)]

24%
sales to agreement vessels in 2023 were linked to GAP

13%
growth in sales to agreement vessels LTM Q2 2024

Tightening regulations and increasing fuel and emission cost will boost demand for retrofits

Total investments in retrofits, including Carbon Capture and Storage solutions (CCS), are estimated to be EUR 15-20bn over the next decade[1)]

Propulsion efficiency upgrades	Alternative fuel conversions	Radical power derating	Electrification projects
Propulsion efficiency improvements, e.g., OptiDesign, EnergoFlow, EnergyProFin[3)]	Engine retrofits to run on alternative fuels on top of conventional diesel	2-stroke power output reduction to optimise efficiency, fuel consumption and emissions at lower speeds	Electrical system[4)] upgrade, including hybrids and shaft generators to improve OpEx, emissions, safety
700+ vessels contracted	**10+** vessels contracted	**30+** vessels contracted	**30+** vessels delivered[5)]
EUR 20k-1m per shipset	**EUR 3-8m** per shipset	**EUR 5-8m** per shipset	**EUR 3-8m** per shipset

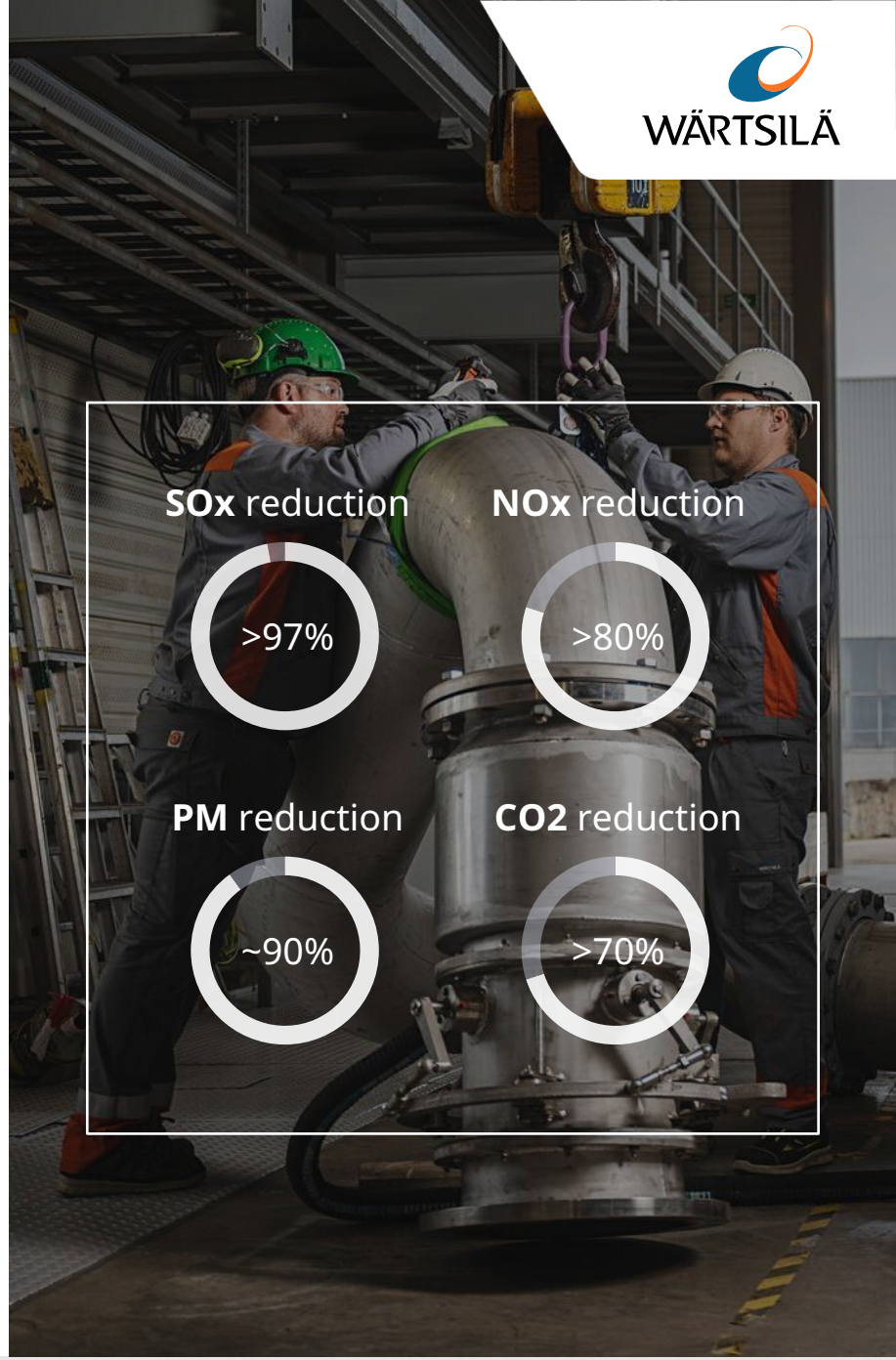
1) Source: Clarksons, incl. ESTs, CCSs, and engines, excl. hybrids and offshore; 2) CII (Carbon Intensity Indicator) applies to cargo, RoPax, cruise ships >5 000 GT (with some exceptions); source: Wärtsilä CII tool, correction factors excluded, ships with D or E rating considered as non-compliant; 3) OptiDesign: optimised propeller for actual operating profile; EnergoFlow: pre-swirl stator; EnergyProFin: propeller cap; OptiDesign, EnergoFlow, EnergyProFin can be sold both combined and as stand-alone; 4) E.g., Energy storage system, power distribution, energy management system; 5) Hybrid upgrades

Source: Marine call 2024

Onboard Carbon Capture and Storage (CCS) allows to capture >70% of the CO2 generated onboard

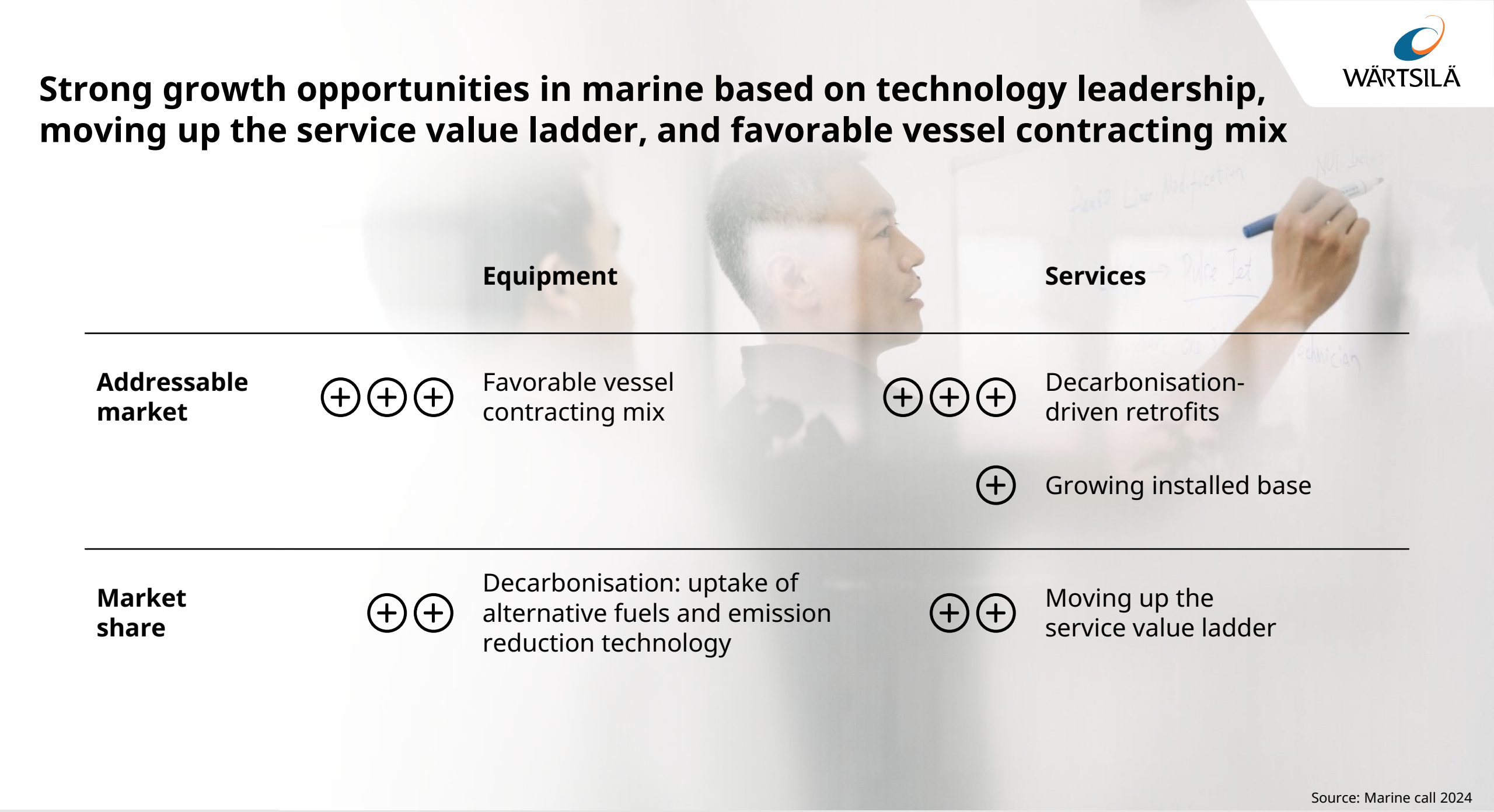
Onboard CCS can unlock EUR ~10bn business in the next 10 years[1)]

- ✓ Applicable to all carbon-based fuels, vessels types and sizes
- ✓ Captured CO2 is stored onboard for discharge at port reception facility
- ✓ At our research centre and test facility in Moss, Norway, we simulate vessel installations of onboard carbon capture:
  - Operated for >2 years
  - CO2 capture capacity: 10 tons/day
  - CO2 capture rate: ~70%
- ✓ First full-scale system operational on LPG carrier “Clipper Eris” in Q4 2024
- ✓ Commercial release in 2025



1) Newbuild and retrofits, mainly merchant 2-stroke, dependent on speed of regulation, CO2 tax incentives, development of carbon capture and storage infrastructure, price spread development between fossil and green fuels

Strong growth opportunities in marine based on technology leadership, moving up the service value ladder, and favorable vessel contracting mix



	Equipment	Services
Addressable market	⊕⊕⊕ Favorable vessel contracting mix	⊕⊕⊕ Decarbonisation-driven retrofits ⊕ Growing installed base
Market share	⊕⊕ Decarbonisation: uptake of alternative fuels and emission reduction technology	⊕⊕ Moving up the service value ladder

Source: Marine call 2024

Energy highlights

Significant value creation opportunity – improving performance and capturing growth

Perform – on track to deliver our targets

- Driving performance in new build through **improved risk / reward**
- Continued **strong profitability in services** with a solid foundation for growth – Moving up the service value ladder
- Driving profitability in Energy Storage & Optimisation through **increasing value add in our products**
- Achieving **positive comparable operating result in Energy Storage & Optimisation**

Transform – growth opportunity in Engine Power Plants

- **Thermal balancing** addressable market is expected to **grow 29% p.a.** between 2023-2030
- Wärtsilä is the **global market leader in engine power plants** with superior balancing capabilities vs. gas turbines
- **Capability to convert to future fuels** key for customers to avoid risk of stranded assets

Transform – growth opportunity in Energy Storage & Optimisation

- **Energy storage addressable market** is expected to **grow 17% p.a.** between 2023-2030
- Wärtsilä is among top players in energy storage
- **Differentiated** by project execution excellence, safety, reliability, and a fully integrated design
- **Strategic review** now started

Source: CMD 2023, Service theme call for investors 9/2024

Actions taken to improve new build profitability and achieve better risk / reward

Organisation, team & governance

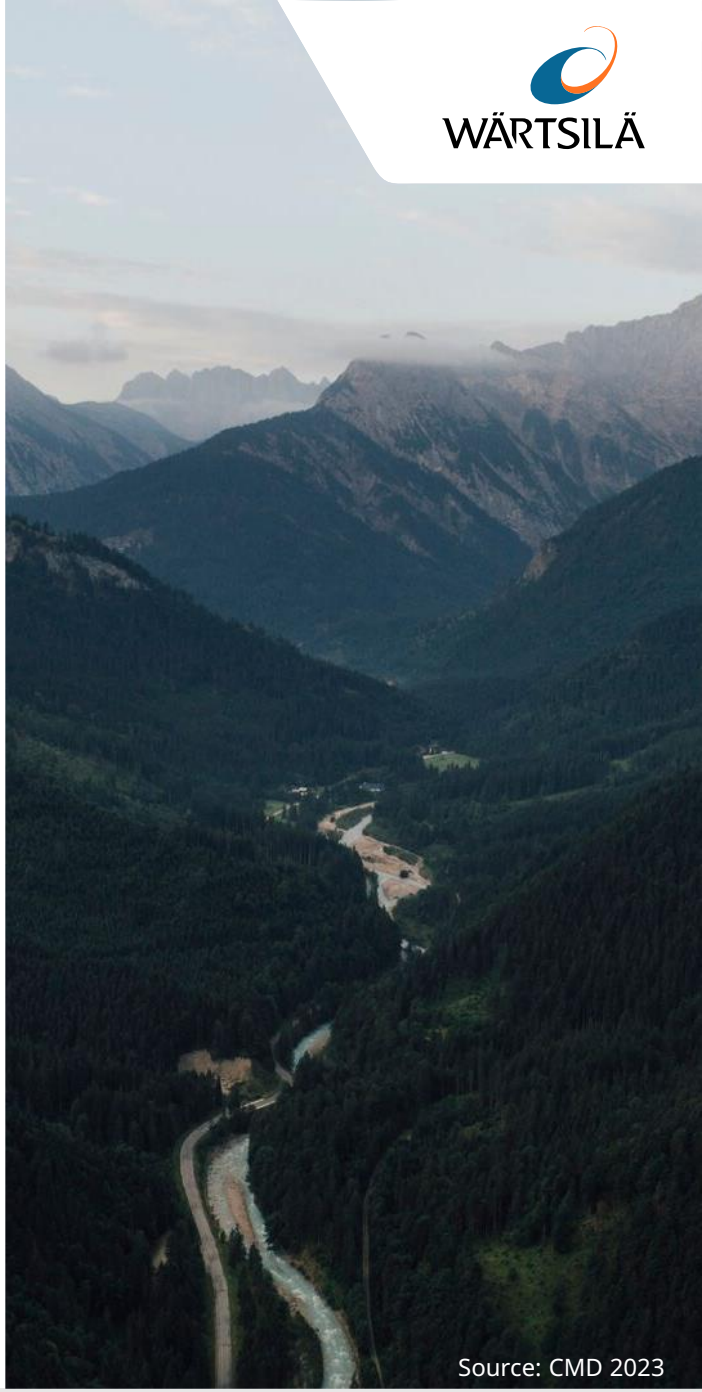
- **New organisation structure** with three global Business Units with P&L responsibility
- Significant changes in **Energy management & leadership**
- Energy has implemented **new governance**:

  - Updated sales-to-order processes to focus on **profitability** and a less volatile business

  - Sales and operations planning is regularly executed to improve productivity

Offering & risk management

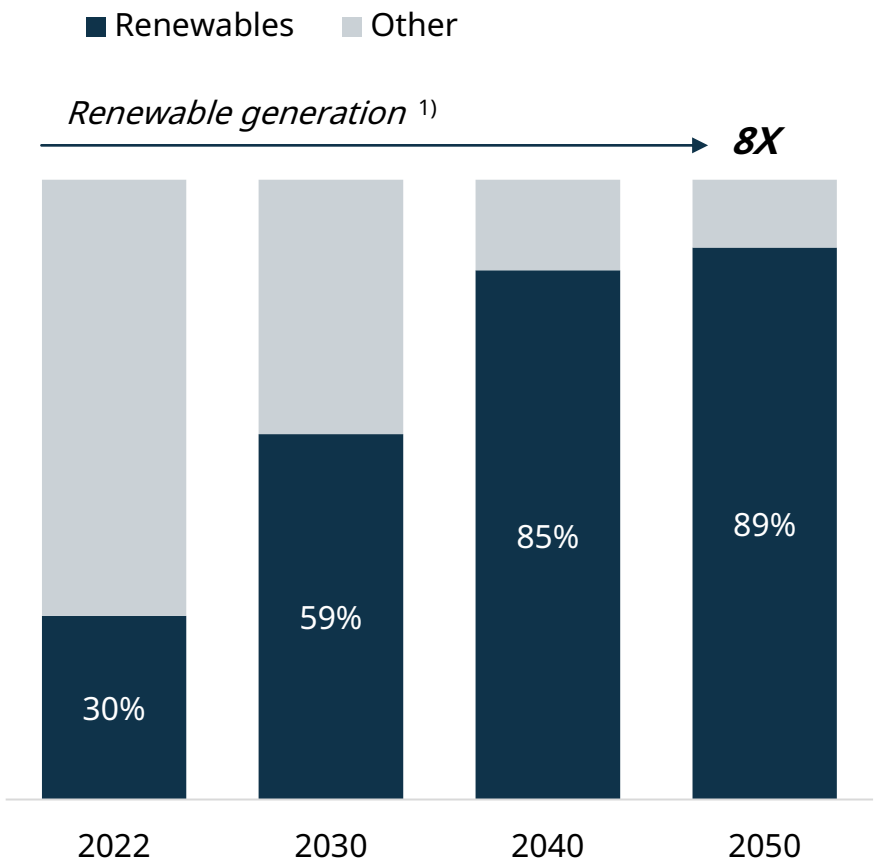
- Energy has **EEQ** (extended equipment supply) as **the preferred offering**, EPC (engineering, procurement and construction) is only considered in selected markets
- **More than 80% of the equipment net sales in 2024** consisted of extended equipment supply (EEQ) deliveries, compared to less than 50% in 2022
- Rebalance in risk appetite leads to **stronger order book risk/reward profile**



Source: CMD 2023

As the renewable energy transition accelerates, balancing solutions are key enablers for the transition

Share of renewables in global energy generation



Technology disruption in the energy sector

- **Renewables becoming main source of power**
- **Gradual replacement of coal**
- **Increased need for balancing solutions**
- **Development and increasing use of sustainable fuels – Being enabled for future fuels avoids stranded assets**
- **Power systems becoming increasingly more complex**

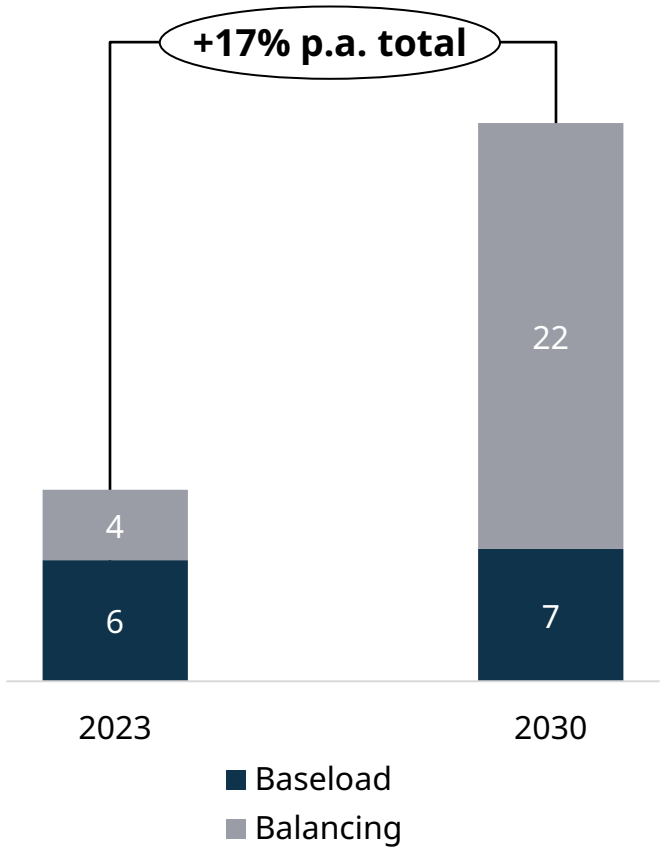
1) IEA World Energy Outlook 2023 (Net Zero Emissions scenario)

Source: CMD 2023

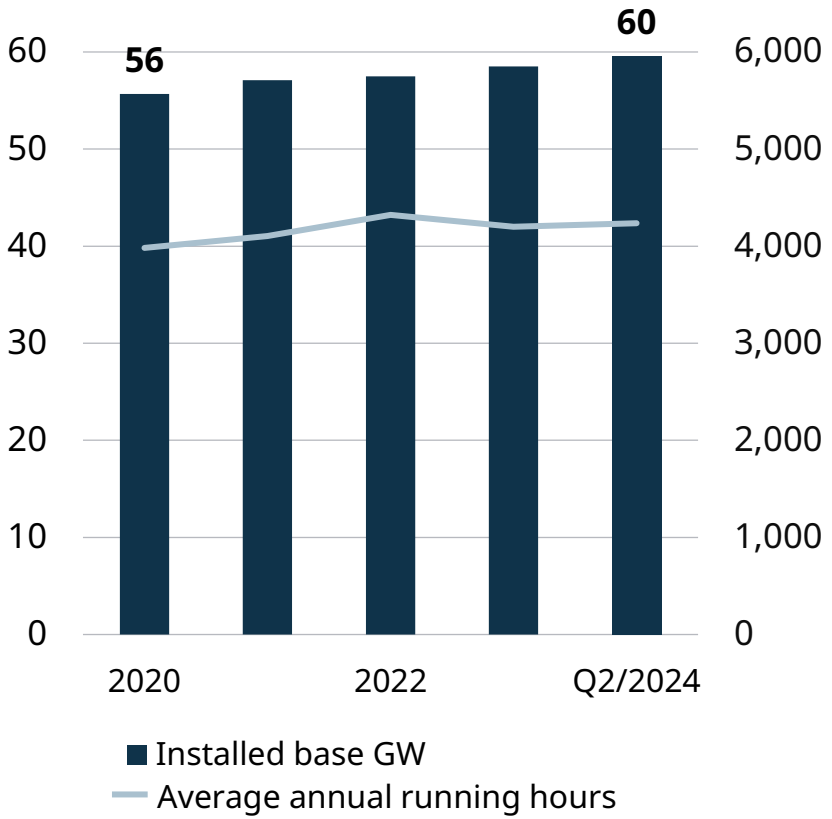
Thermal balancer market expected to grow ~29% per year – the baseload market outlook remains stable

Engine power plants

Addressable annual market (GW)



Wärtsilä operating installed base (GW)



Outlook

- The transition towards renewables is the driving force behind demand for thermal balancing
- We see large balancing market potential e.g. in North America and Europe
- The role of gas as a transition fuel is essential for a secure transition, as highlighted by the IEA
- Future fuels will play an important role, a credible roadmap is essential
- Running hours have remained stable even with the growth of balancing

1) Forecast based on BloombergNEF forecast on wind and solar capacity additions, and estimated share of balancing capacity compared to renewables growth

Source: Service call 2024

Engine power plants are in a strong position as the balancing market grows. Power system knowledge makes Wärtsilä the go-to partner for capacity planning

Engines superior to Gas Turbines for balancing

- **Faster start up** and continuous **ramping** for renewables
- **Cycling** several times per day with **no cost impact**
- **High efficiency** due to multiple modular units
- **Catching price spikes** and avoiding negative prices

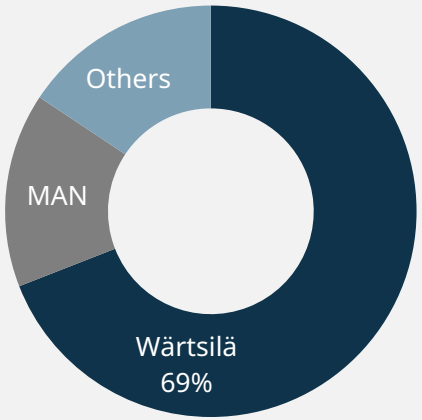
Modelling supports Wärtsilä go to market approach

- We have modelled >190 countries and systems worldwide
- Transparent modelling shows value of balancing with engines
- Shift to net zero energy feasible with existing technology

Wärtsilä is clear market leader in engine power plants

- Clear market lead in engine power plants with 50-70% market share
- **Technology leader** in new green fuels and performance-based services
- **Proactively develops** new engine markets, competing with gas turbines

Engine market shares [1)]



1) >5MW units, LTM Q2/2023. Based on public and Wärtsilä data

Wärtsilä in strong position as thermal balancing market grows

- Balancing market expected to grow in key regions [2)]

	2027 (GW)	5-year CAGR
US	3.6	19%
Australia	0.7	
Europe	5.0	
India	1.7	

- Additional potential in markets like Brazil, Argentina, China, Japan and Vietnam

2) Based on BloombergNEF ETS and Wärtsilä data

Source: CMD 2023

Wärtsilä's sweet spot is in 50 - 400 MW plants

Engine technologies

High-speed engines

- Low capex and low efficiency
- Best suited for backup and low running hours applications

Wärtsilä medium-speed engines

- High efficiency due to multiple modular units
- Faster start-up; can cycle several times per day with no cost impact
- Transparent modelling shows the value of balancing with engines

Most competitive in applications with high numbers of starts/stops and markets with structures and incentives that reward flexibility

Gas turbine technologies

Aeroderivative gas turbines

- Lower capex than engines but less fuel-efficient
- More flexible than heavy-duty gas turbines (HDGTs)

Open-cycle gas turbines (OCGTs)

- Low efficiency; poorly suited for balancing
- Competitive mainly in peaking applications with low amount of starts/stops

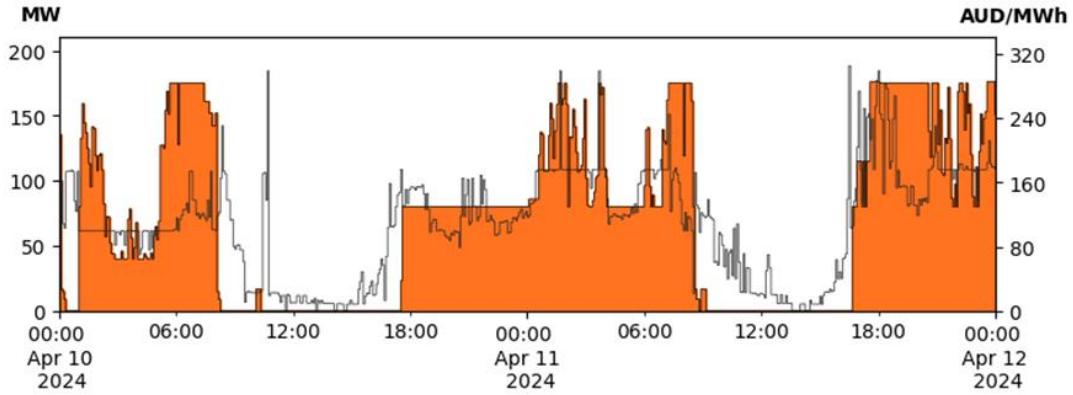
Combined-cycle gas turbines (CCGTs)

- High efficiency, but high capital costs (CAPEX)
- Best suited for large-scale baseload applications

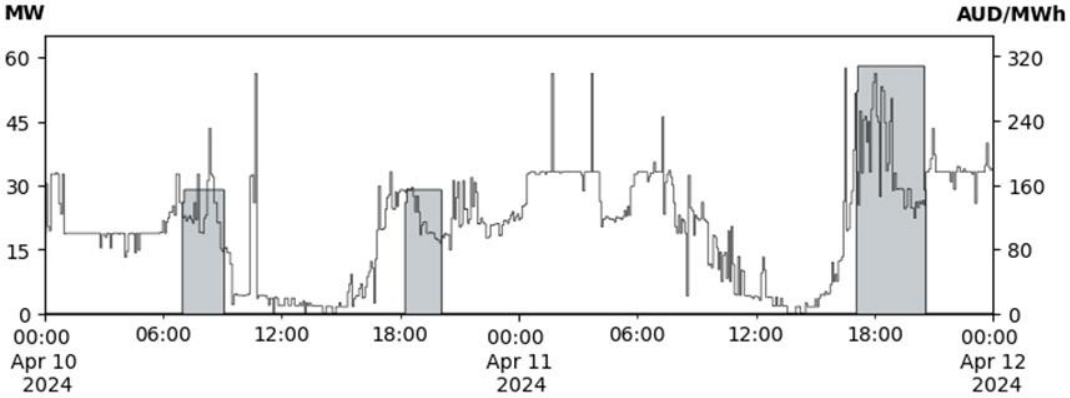
Source: Engine Power Plants call 2024

Engines are unique, flexible market assets

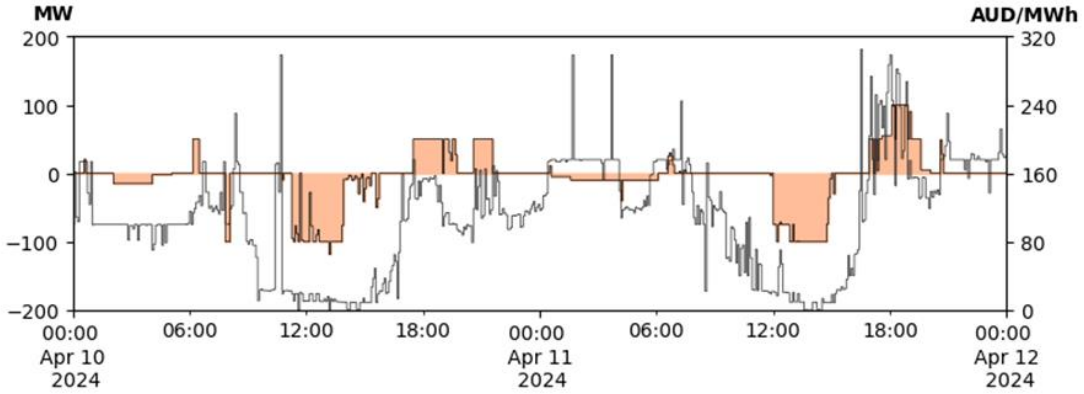
Internal combustion engines (ICE)
Rapid start-stops, part-loading, and load following



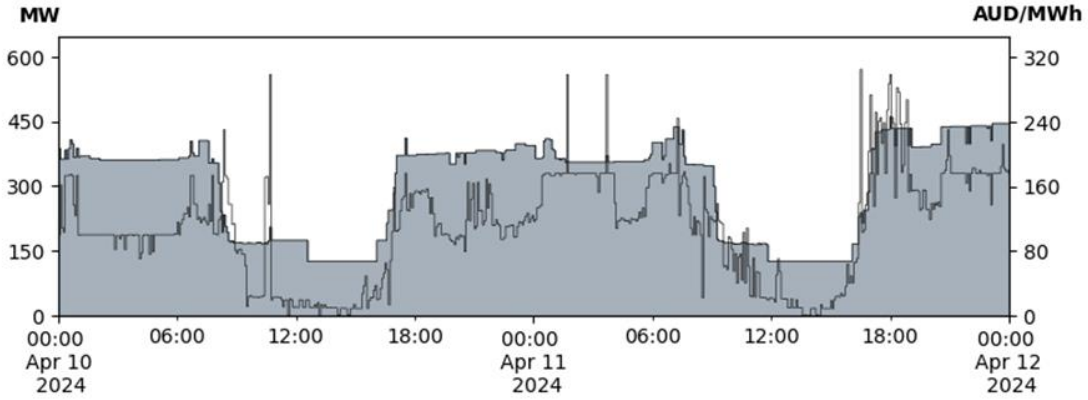
Aeroderivatives and other open-cycle gas turbines (OCGTs)
Operating in an on-off pattern



Battery energy storage systems (BESS)
Focus on energy shifting and frequency regulation



Combined-cycle gas turbines (CCGTs)
Continuous running, constrained by minimum load



Source: Energy Power Plants investor theme call in December 2024

Source: Engine Power Plants call 2024

Advantages of Wärtsilä power plants over combined cycle gas turbines

Faster startup time

- Combined cycle gas turbines can take over 30 minutes to start, whereas combustion engine power plants can start and reach full load in less than 5 minutes

Advantages of modularity

- Combustion engine power plants are comprised of multiple generating units

Better part-load efficiency and flexibility

- Unlike gas turbines, Wärtsilä engine power plants have near full range capability of emissions-compliant turndown

Better pulse-load efficiency and profitability

- Combustion engine power plants are dispatchable and can adjust load daily, ramping up and down with demand

Higher ramp rate

- Ramp rate = the rate at which a power plant can increase or decrease output
- Wärtsilä engines can ramp at over 100%/minute. For combined cycle gas turbines, typical ramp rates are around 10%/minute.

Derating due to ambient temperature

- Combustion engines are less sensible to temperature and humidity

Fuel flexibility

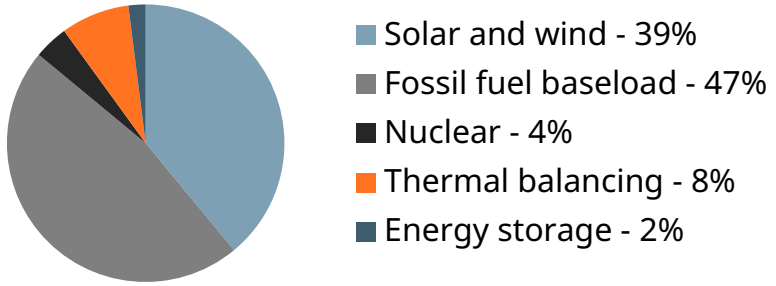
- Gas turbines have reduced availability and output when running on fuel oils

Lower water consumption

- A combined cycle gas turbine power plant (CCGT) with a recirculating system = 780 liters/MWh.
- Wärtsilä combustion engine power plant operating in simple cycle on natural gas = 3 liters/MWh.

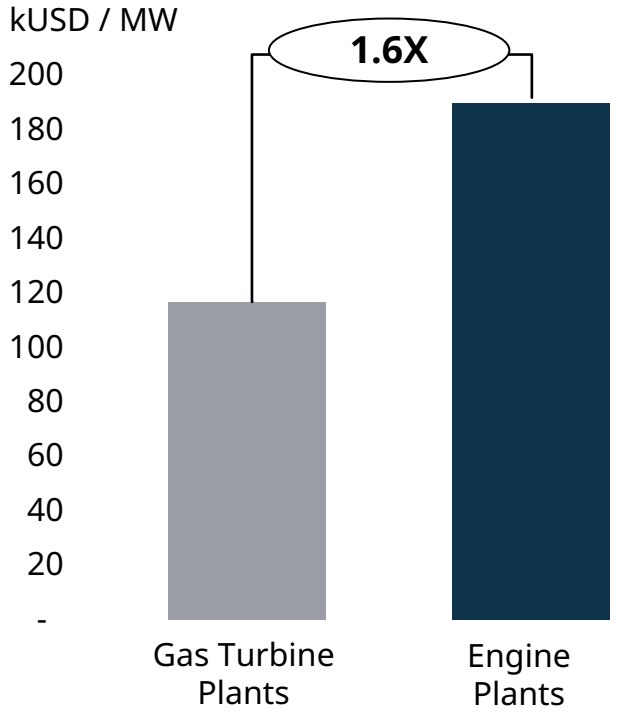
Case Texas shows future trends. Increasing renewables creates need for balancing with engines outperforming competing technologies

30 million population with **133 GW** of installed power (system size equal to France)



- 7% in annual growth of thermal balancing the last 5 years with expected continued growth
- Growing regulatory support for balancing in Texas
- Wärtsilä installed based (and growing):
  - 1 GW of thermal balancing
  - 1.2 GWh of energy storage

1.6X higher[1] real time market revenue potential for engines vs. gas turbines



Texas as a proofpoint for thermal balancing

- High amount of renewables
- Granular price signals
- Policy support for balancing

Similar conditions forming in:

- Midwestern USA (SPP and MISO)*,
- Australia
- Europe

Source: S&P Capital IQ Pro, ERCOT (September 2023 data), 1) ERCOT's Security Constrained Economic Dispatch (SCED) data – Wärtsilä study. Data based on average of 2 Aeroderivative gas turbine plants and 2 Wärtsilä engine plants for the full year 2022

*SPP = Southwest Power Pool
*MISO = Midcontinent Independent System Operator

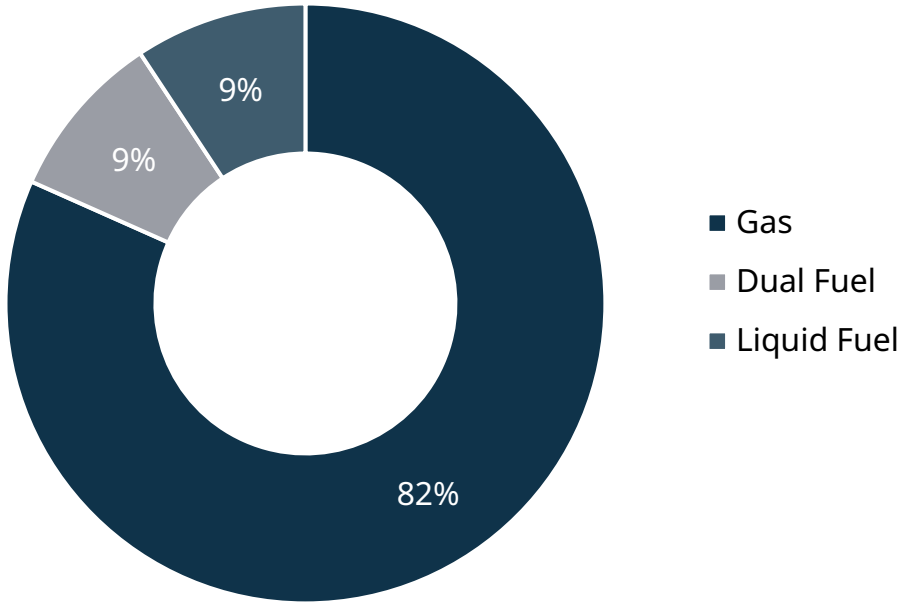
Source: CMD 2023

Wärtsilä Energy is well positioned to provide the fuel flexibility needed for the energy transition

Technology roadmap for engines

- Plant lifetimes stretching to 2050: **fuel flexibility future-proofs engines**
- There will be **no single global green fuel** for use in the energy sector
- We launched our **100% hydrogen** power plant in Q2 this year, expected to be released for sales in 2025
- 25% hydrogen blend already possible today
- Sustainable fuels come with high conversion losses and should be used **exclusively for balancing** and the decarbonisation of hard to abate sectors
- Using expensive sustainable fuels for inflexible baseload power does not make commercial or environmental sense – leading to a **future advantage for balancing**

Energy Power Plants order intake by fuel, 2020-24 (MW)



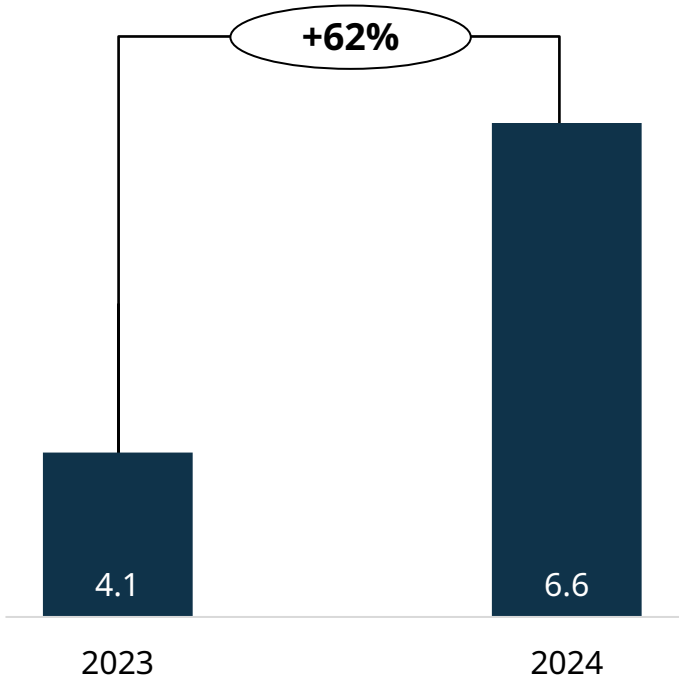
- **91%** of engine MW designed for natural gas operation
- Strong upgrade track record, with **140 liquid fuel engines converted to gas** in 18 countries

Source: Engine Power Plants call 2024

Energy storage growth outlook remains strong

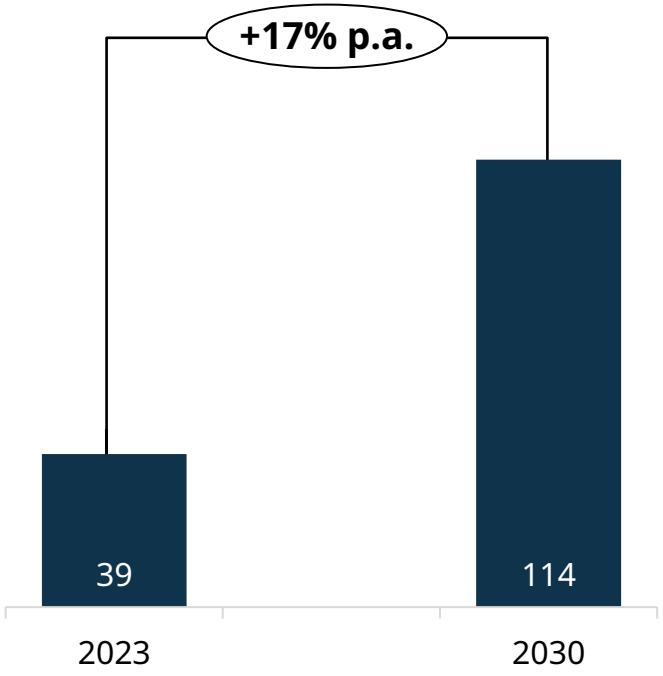
Order intake

Order intake (GWh)



Market outlook

Addressable annual market (GWh) [1)]



Outlook

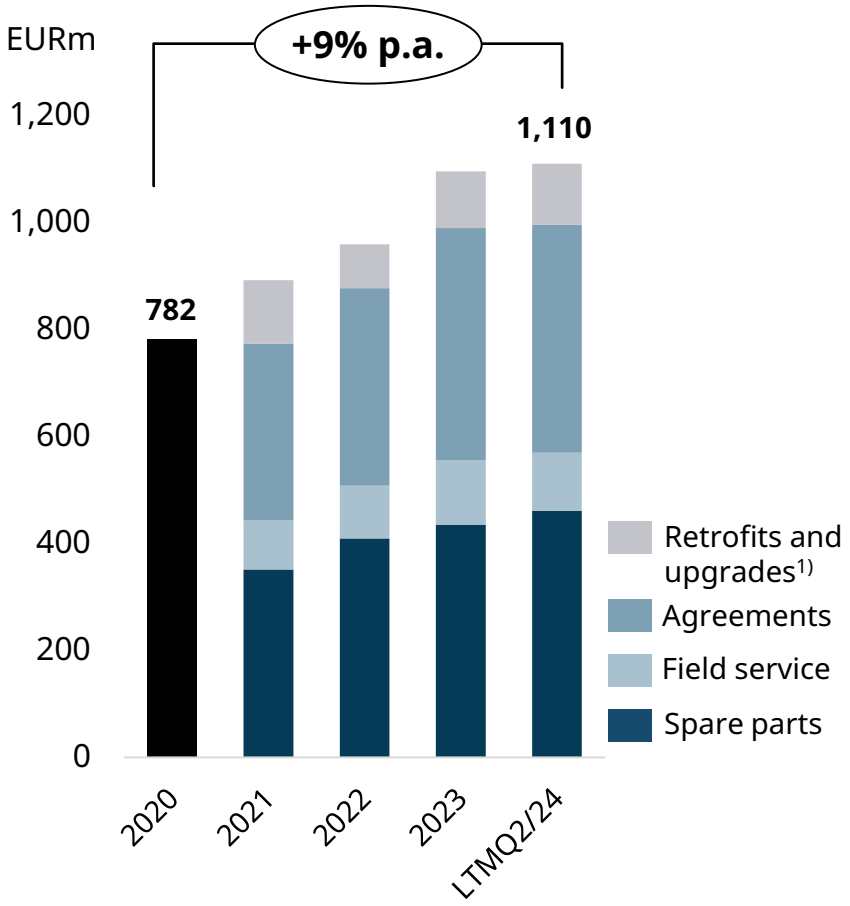
- Focus on profitable growth
- **Strong new build sales growth** expected, driven by market demand
- **>11 GWh** energy storage capacity delivered, awarded, contracted or in deployment
- **Complexity drives demand** for advanced energy management systems

1) Sources: BNEF and Wärtsilä estimates. Addressable market excluding certain geographical markets and residential and commercial storage

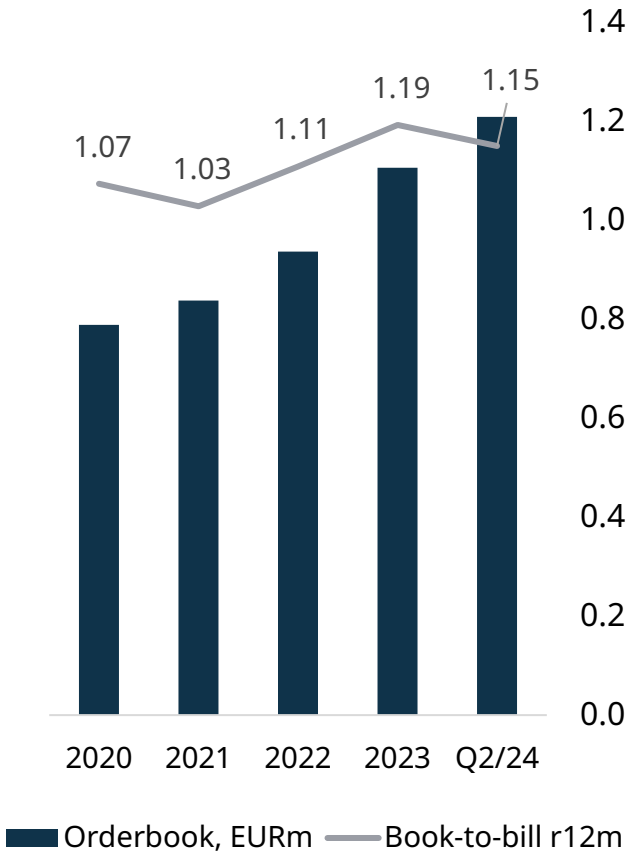
Source: CMD 2023

Good performance in Energy Services with a solid foundation for future growth

Growing Service Net sales



All time high orderbook & strong book-to-bill



1) Referred to as Service Projects in the interim reports

+24% total Services sales
2021–LTM Q2/2024

+29% Service agreements sales
2021–LTM Q2/2024

+40% total orderbook
2020–2023

Energy services growth drivers remain solid

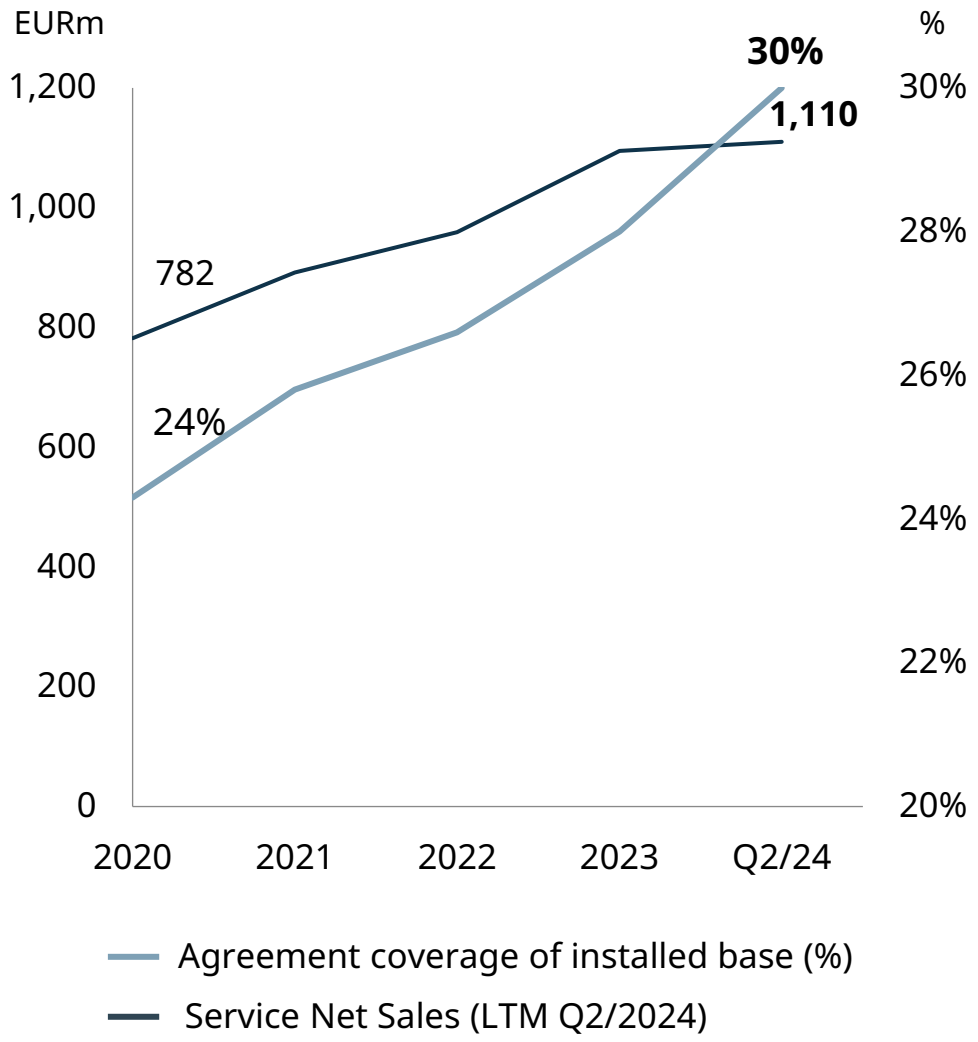
- Increasing agreement coverage
- Growing installed base
- Upgrades & sustainable fuel conversion demand
- Growth potential in outcome-based and decarbonisation agreements
- Stable total running hours

Source: Service call 2024

Our strategic focus to increase lifecycle agreement coverage is generating growth in Energy

Anders Lindberg
President, Energy

Increasing agreement coverage is supporting growth



Increasing share of agreement customers in our installed base
30% agreement coverage

High agreement renewal rate for existing customers
>90% renewal rate LTM Q2/24

Sales to installations under agreement account for
56% of net sales (2023)

Source: Service call 2024

Decarbonisation Services provide new growth opportunities

Decarbonisation Services optimises microgrids by integrating

- Energy Management Systems
- Engine Power Plants
- Battery Energy Storage
- Customer’s renewable power generation

→ **into outcome-based agreements**

Our target customers are captive microgrids in the industrial segment and small-scale island utilities, with requirements in:

grid efficiency, reliability, and sustainability

Our modelling shows that customers face challenges with optimising microgrids even at low renewable penetrations. As share of renewables grow, grid reliability constraints further complicates optimisation for **lowest CO2 and Levelised Cost of Electricity**

Out of our installed base, approximately 23% or **14 GW is addressable for Decarbonisation Services.**

In addition, as a part of new microgrid investments, we see an increasing interest for decarbonisation services

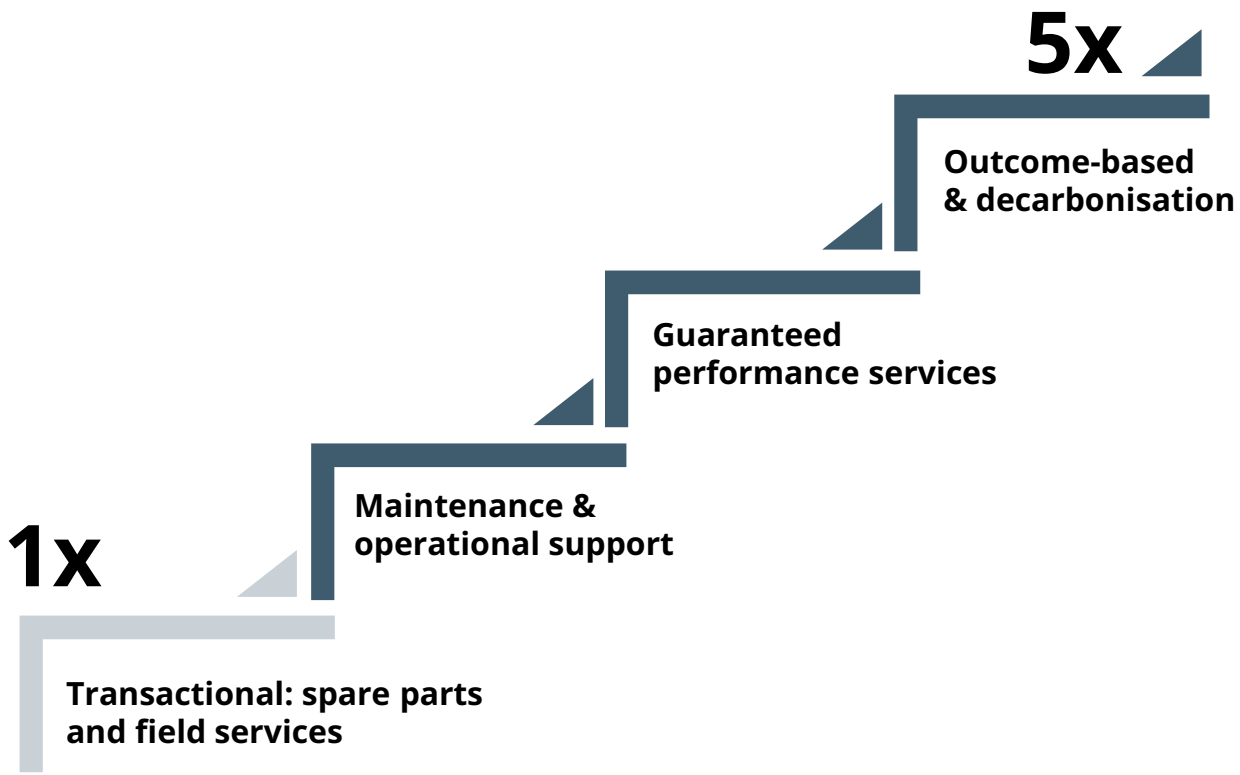
Source: Service call 2024

Moving up the service value ladder in Energy

We increase sales, profitability and customer satisfaction by moving up the service value ladder

Wärtsilä service value ladder

Sales EUR/kW relative to transactional



Continuous growth in agreement coverage

- Securing service agreements for **new power plants**
- Maintaining **high renewal rate** for existing agreements: >90% renewal rate shows high customer satisfaction
- Increasing the **share of agreement customers** in our installed base: 29% agreement coverage and ~18GW under agreement[1)], 3,4GW added since 2021

Moving customers up the service value ladder

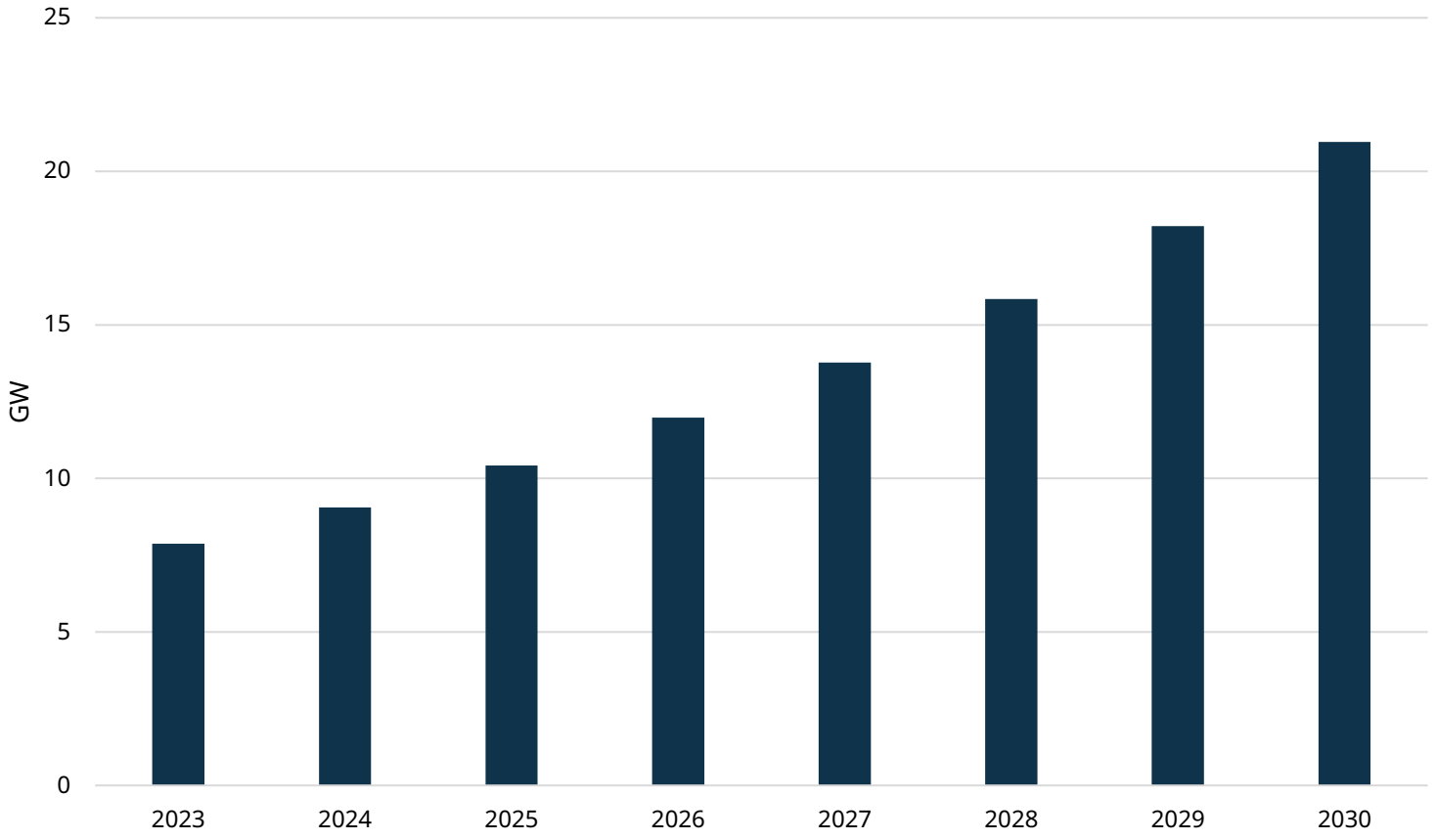
- Local presence, global operations, and investments in data & digital solutions enable us to meet high customer expectations
- Higher satisfaction scores for agreement customers that are higher up the value ladder
- Portfolio of **agreements with performance guarantees** is growing: Total 7GW with ~2GW added since 2021

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

Source: CMD 2023

We see growth opportunities for baseload engine power plants in Data Centres

Global data centre power demand growth[1]



New data centre power capacity expected to be added 2024-2027
~ 45 GW

Typical grid connection time currently
5 years

Wärtsilä's sweet spot
Baseload power for off-grid data centres[2]

1) Adapted from IEA Electricity 2024, 2) Waiting for grid interconnection due to grid constraints

Source: Engine Power Plants call 2024

The Data Centre power market is shifting, with new thermal baseload opportunities in specific markets

Historical: backup power

20-100 MW

typical power need

Grid interconnections immediately available

- Customer focus: CAPEX, availability
- Segment typically served by high-speed engines
- High risk in case of strict availability guarantees
- Limited lifecycle service opportunity

Emerging: off-grid baseload

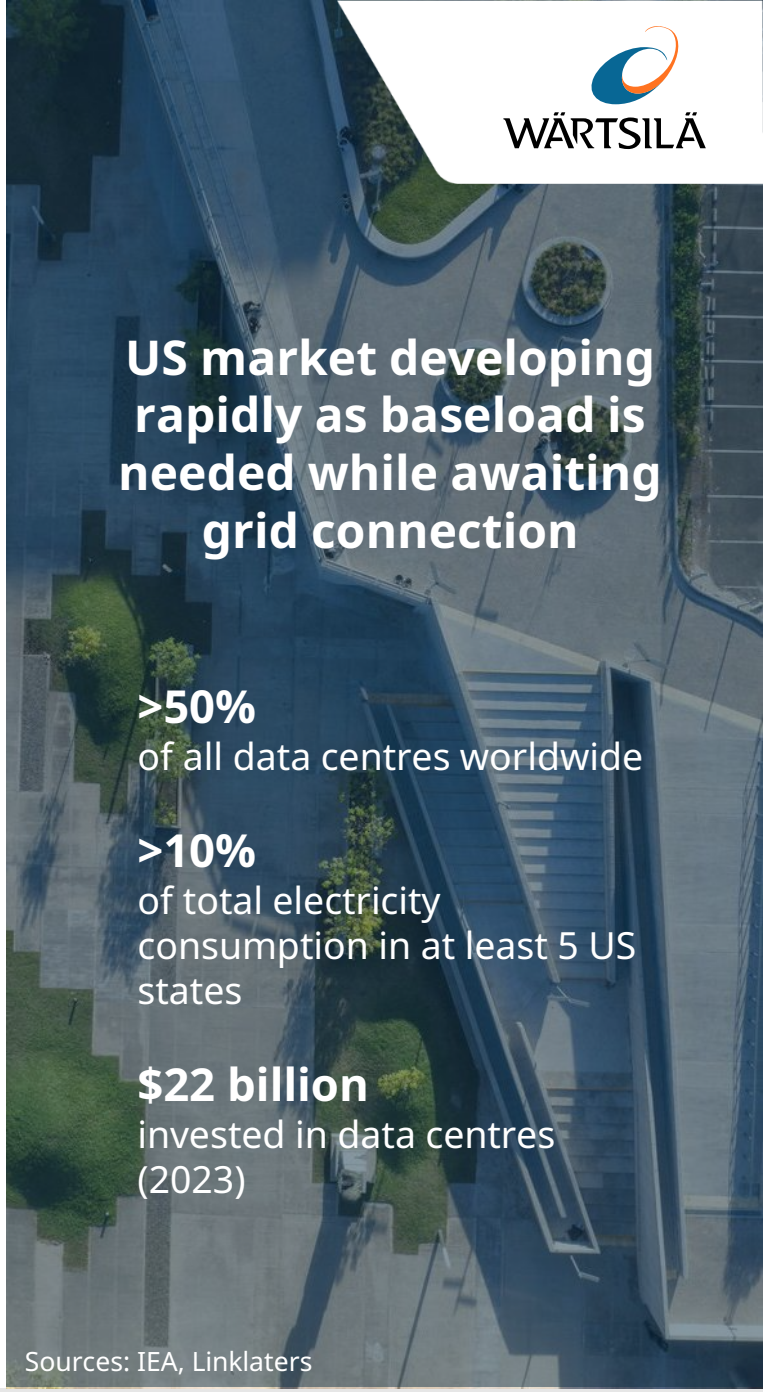
50-300 MW

typical power need

Grid interconnection times up to 5-7 years in some markets

- Customer focus: delivery time, OPEX, emissions
- Typically requires medium-speed engines or gas turbines
- Wärtsilä competitiveness high due to shorter lead times, modularity, reliability
- High lifecycle sales potential

Source: Engine Power Plants call 2024



US market developing rapidly as baseload is needed while awaiting grid connection

>50%
of all data centres worldwide

>10%
of total electricity consumption in at least 5 US states

$22 billion
invested in data centres (2023)

Sources: IEA, Linklaters

Future performance will be driven by strong sales growth and service volumes, continuous improvement, and a future-proof solution portfolio

Recent actions:

- ✓ **New organisational structure and processes:** Updated sales-to-order processes and Business Units with P&L responsibility
- ✓ **Rebalance in risk appetite:** EEQ as the preferred offering, EPC only considered in selected markets
- ✓ **Stronger risk / reward profile:** Legacy projects have been concluded

New build margins

- ✓ New organisation & governance
- ✓ Stronger risk management
- ✓ Operational leverage from growth

Continuous improvement

- ✓ Lean operations and flow efficiency
- ✓ Predictive and autonomous operations
- ✓ Cost indexation & active pricing

New build sales

- ✓ Strong thermal balancing growth
- ✓ Strong energy storage growth
- ✓ Future-proofed portfolio for sustainable fuels and optimisation

Service sales

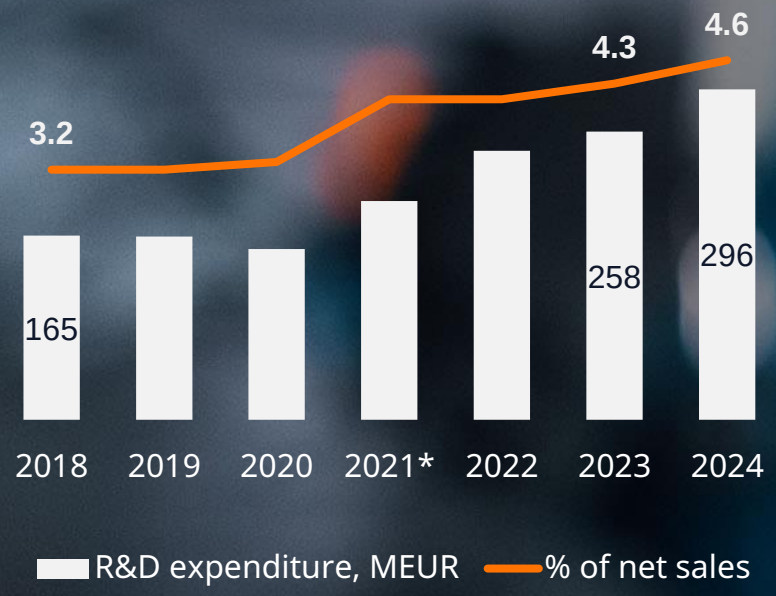
- ✓ Growing installed base
- ✓ Increasing agreement coverage
- ✓ Climbing the service value ladder

Profitability ← → **Growth**

Source: CMD 2023

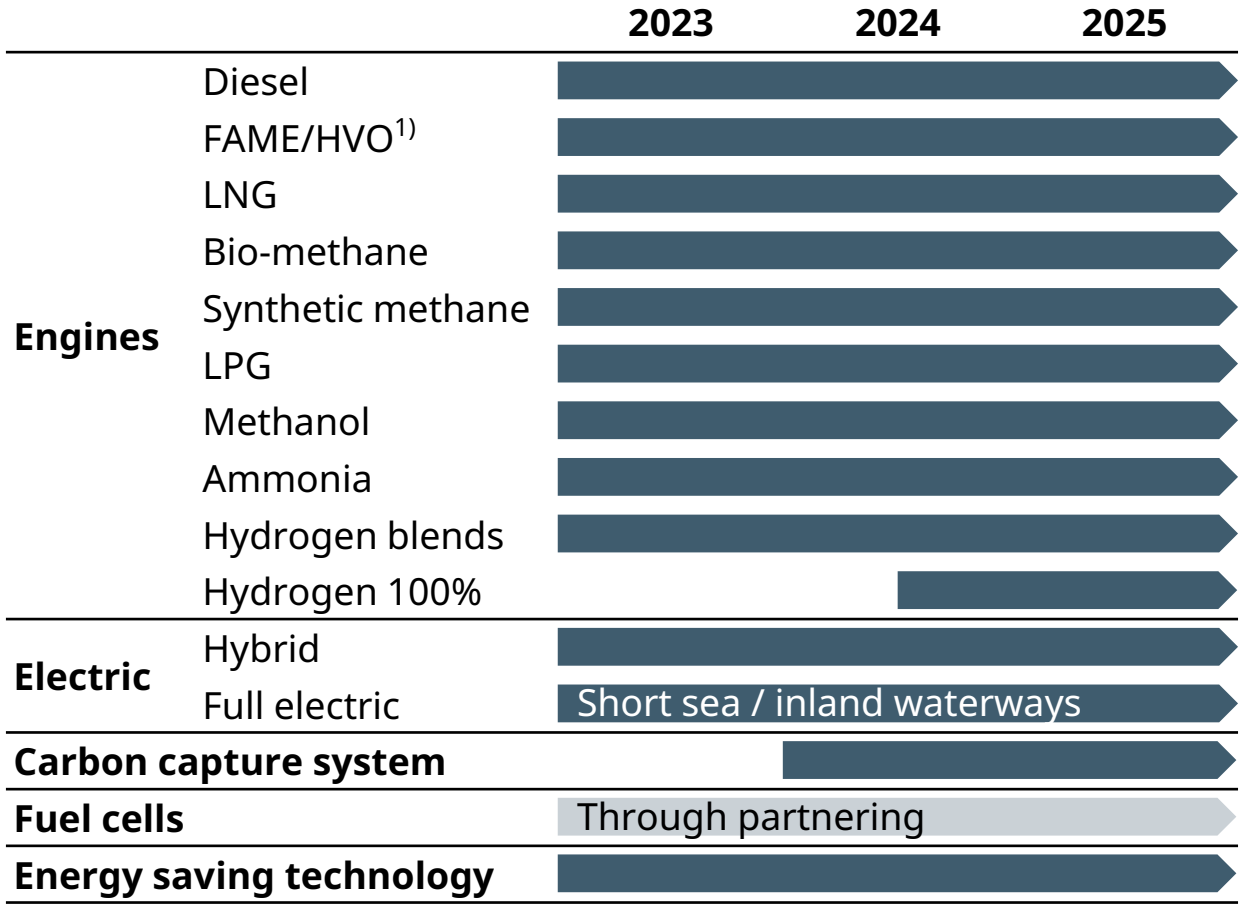
R&D

We continue investing in innovation to ensure a broad, industry-leading solution offering



* Figure in the comparison period 2021 has been restated to reflect a change in the definition of research and development expenditure.

Industry’s most comprehensive offering for decarbonisation



- ✓ Industry’s fastest and broadest future fuel roadmap
  - ✓ Market leaders in 4-stroke medium-speed main engines
  - ✓ Industry-leading hybrid solutions
  - ✓ Pioneer with the world’s first full scale carbon capture plant in 2024 and full commercial release in 2025
- ✓ Methanol engine types available today[3)],
- ✓ Ammonia engine was launched in Q4 2023,
- ✓ 100% hydrogen-ready power plant engine technology was launched in Q2 2024

1) Biodiesels: FAME – Fatty Acid Methyl Esters, HVO – Hydrogenated Vegetable Oil; 2) Battery MWh on 2000+ GT hybrid vessels; 3) Newbuild and retrofits

Q4 2024 development

5 February 2025

Strong growth in order intake, net sales and profitability in Q4

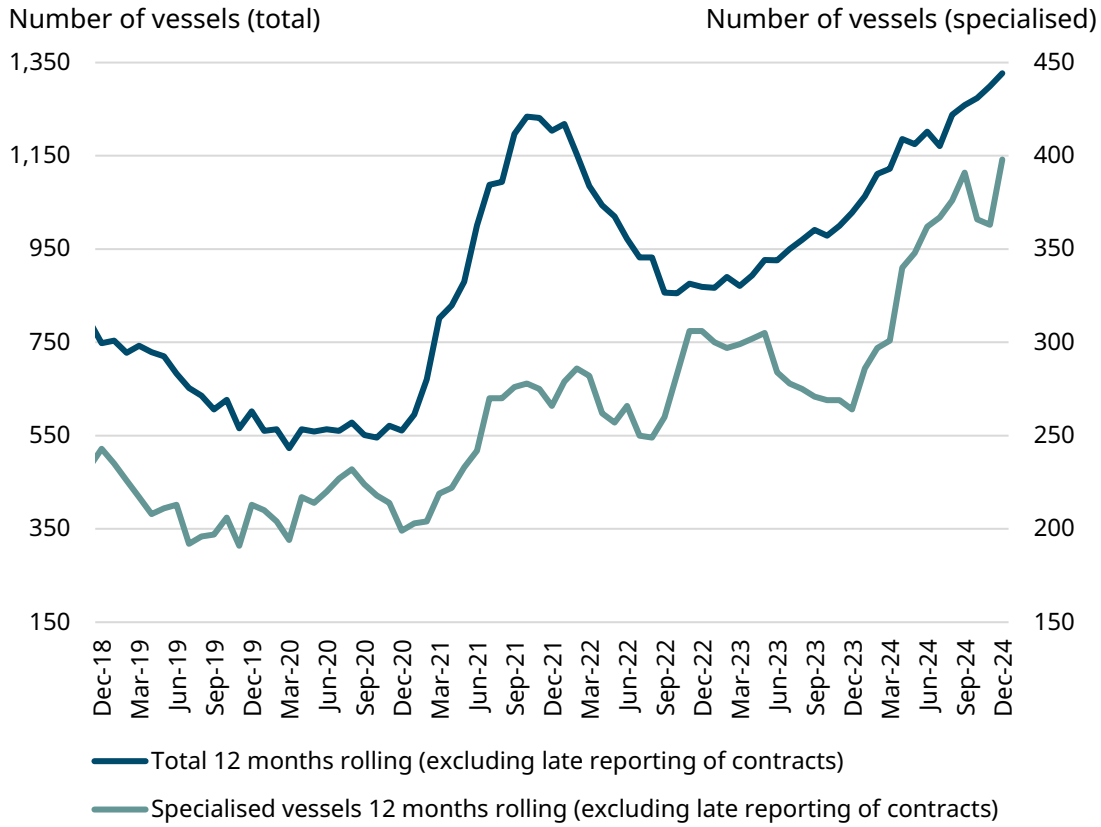
- All-time high order book (8,366 MEUR)
- Order intake increased by 34%
- Net sales increased by 13%
- Comparable operating result increased by 18%
- Good progress in services continued:
  - Service order intake increased by 15%
  - Service net sales increased by 12%
- Strong cash flow from operating activities (437 MEUR)

Marine: market sentiment is positive for Wärtsilä's key segments

Increase in demand for new ships continued

- The number of vessels ordered in the review period increased to 2,765 (1,977 in the corresponding period in 2023), excluding late reporting of contracts.
- Newbuild contracting in 2024 was strong overall, driven by supportive freight market especially due to Red Sea re-routing, and underlying fleet renewal requirements.
- Global shipyard capacity reached its low point in 2020 at ~60% of 2011 peak level, currently being at ~70% of the peak and could increase to 80-85% by 2030, driven by yard reactivations and expansions in China.
- In 2024, 653 orders for new alternative fuel capable ships were reported in 2024, accounting for 24% (23) of all contracted vessels and 49% (43) of contracted vessel gross tonnage.

12 months rolling contracting trend



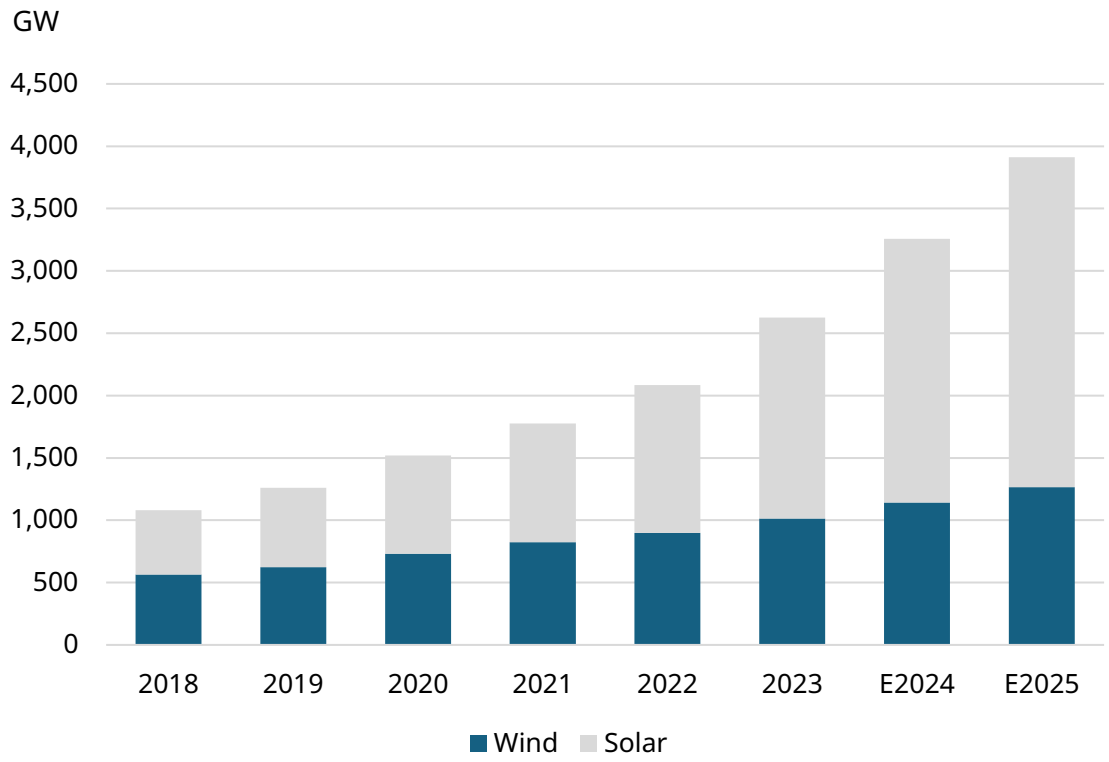
Source: Clarksons Research, as per 3rd of January 2025 (+100 gt, excluding late reporting of contracts).
12m rolling contracting in chart is based on the numbers taken at the beginning of each month for the previous month, excluding late reporting of contracts.
Specialised vessels include LNG carriers, LPG carriers, cruise & ferry, offshore, and special vessels.

Energy: solid long-term market opportunities

The energy transition continued to advance in 2024

- Wind and solar are expected to post record installations in 2024 and 2025. Combined capacity additions from wind and solar are expected to be between 650 GW and 800 GW in 2025 according to IEA and BNEF.
- Energy-related macroeconomic development in 2024 was impacted by elevated risks in the geopolitical environment creating uncertainty and slower decision making.
- In 2024, both thermal balancing and battery energy storage experienced highest levels of market activity to date driven by the increasing share of renewables.
- Data centres present a promising baseload opportunity due to delayed grid connections. According to IEA, additional 45 GW of power capacity are expected to be added for data centres between 2024 and 2027.

Development on installed wind and solar capacity

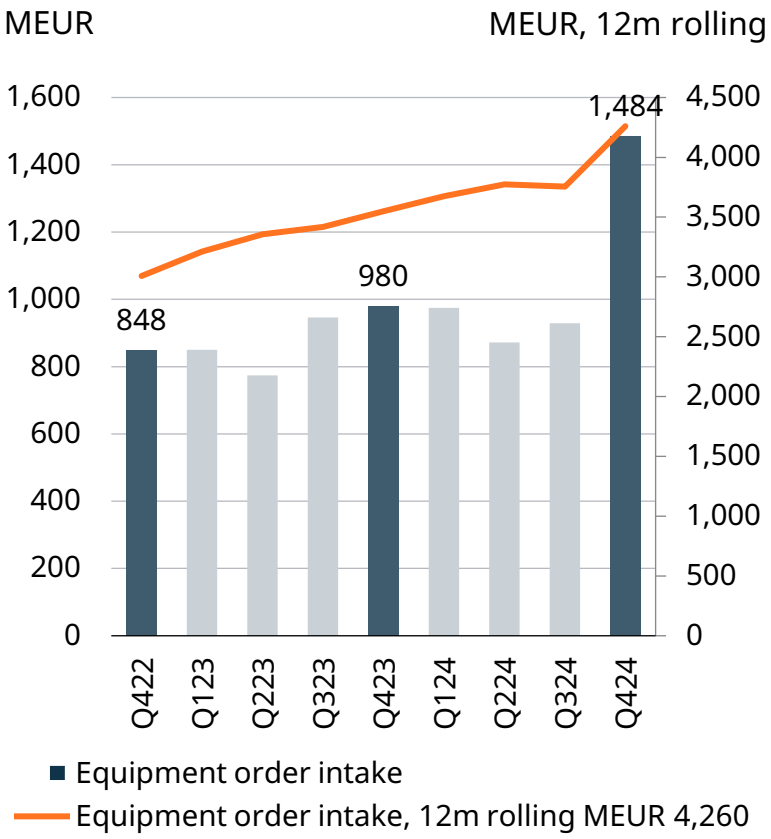


Source: IEA Renewables 2024 - Renewable Energy Progress Tracker

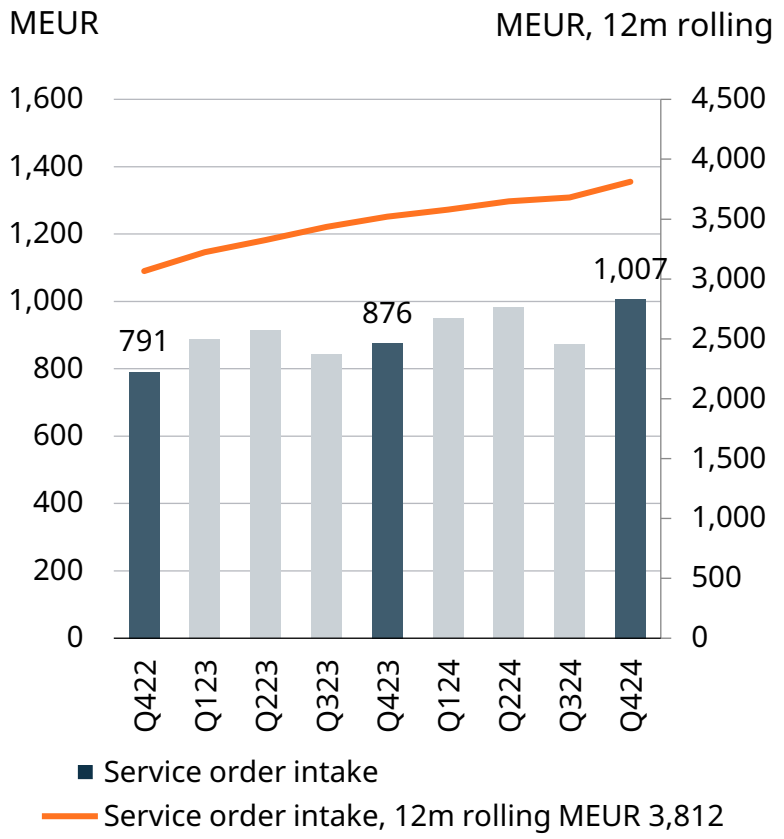
Sources: DNV Energy Transition Outlook 2024, IEA Renewables 2024 - Renewable Energy Progress Tracker and IEA Electricity 2024
IEA: International Energy Agency, BNEF: Bloomberg New Energy Finance

Organic order intake increased by 35%

Equipment



Services



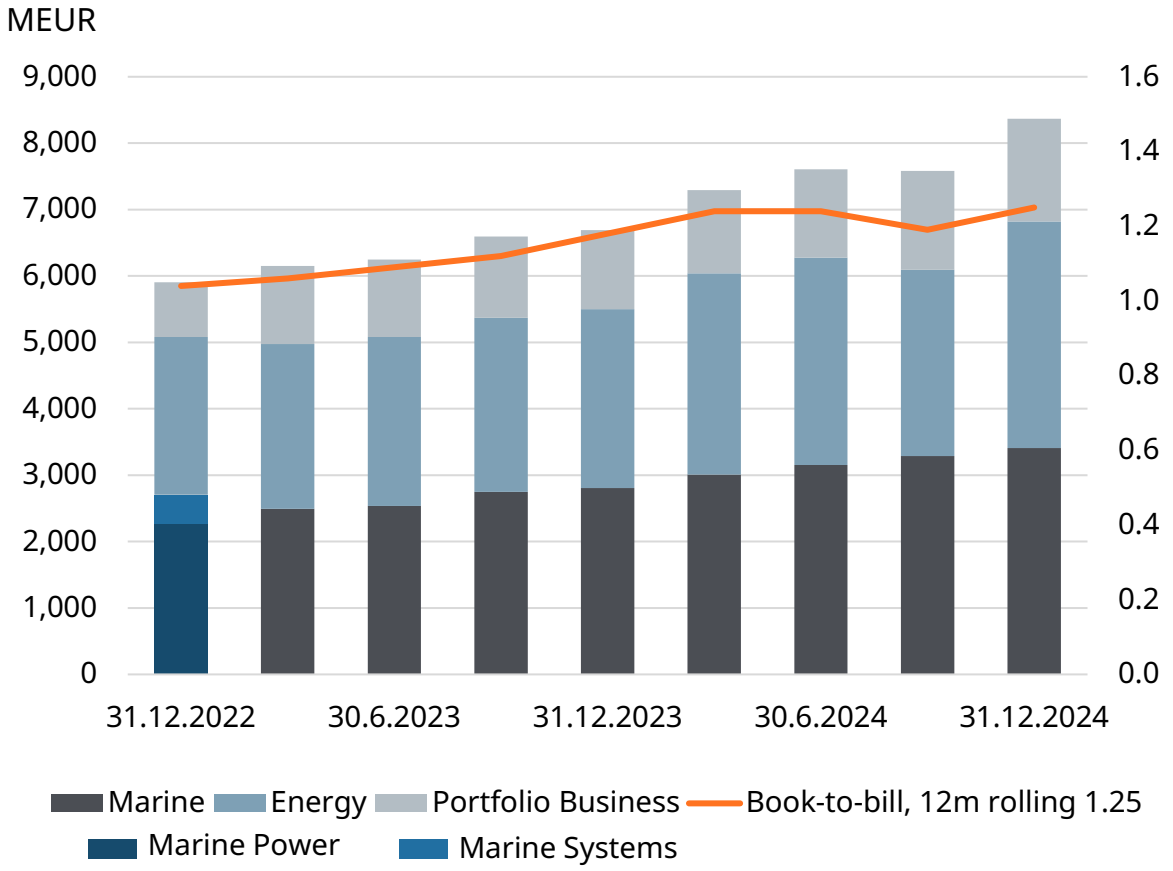
Order intake increased by 34%

Equipment order intake increased by 51%

Service order intake increased by 15%

All-time high order book, rolling book-to-bill continues above 1

Order book by business

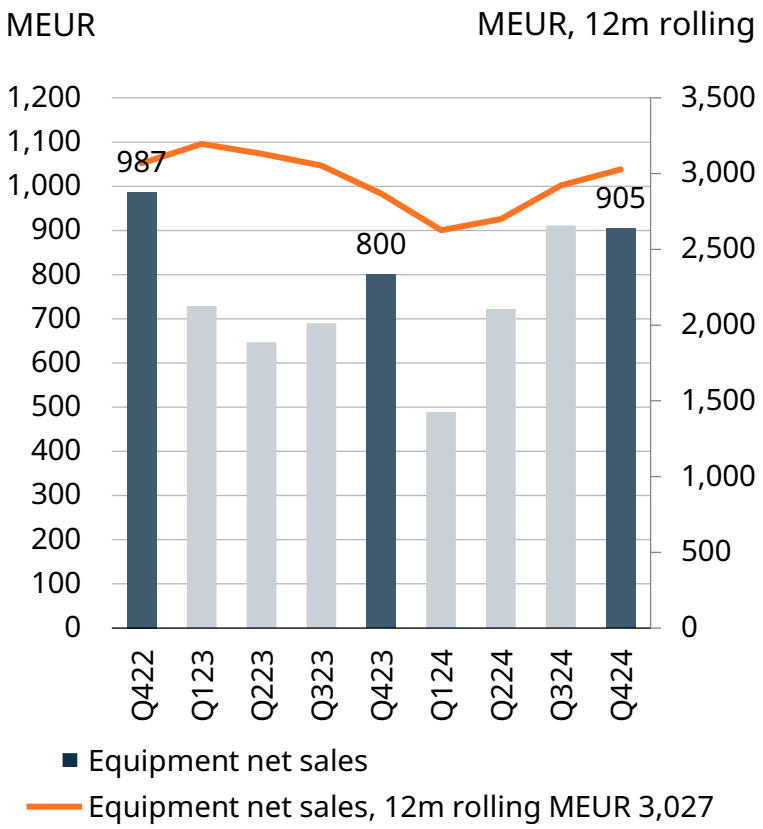


Order book delivery schedule

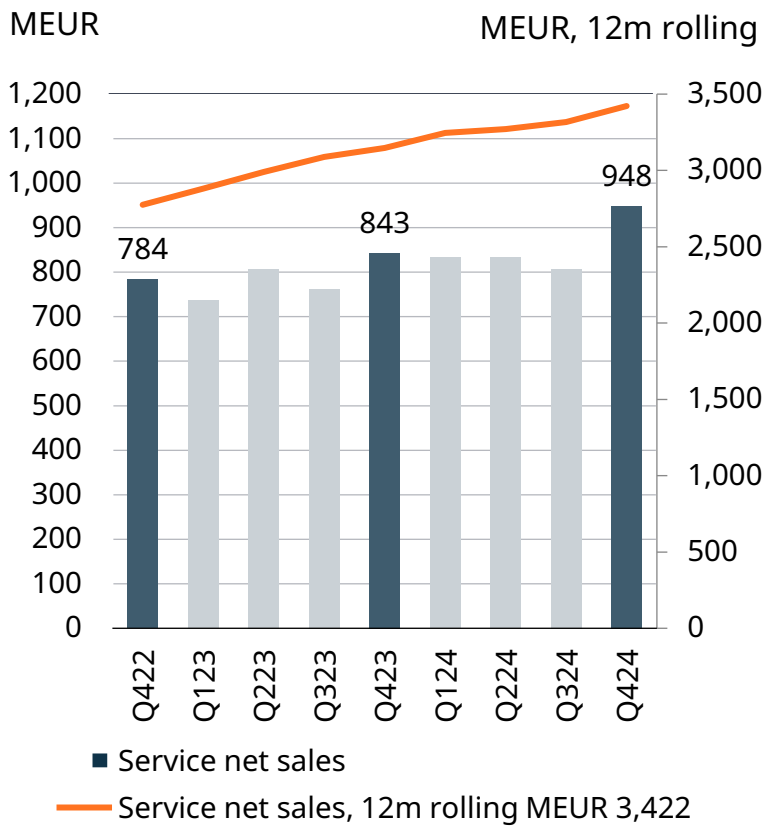
Financial figures for 2023 have been restated to reflect a redefined organisational structure after discontinuation of Marine Systems as a reporting segment as of 1 January 2024. Gas Solutions business unit was moved to Portfolio Business for divestment, and Exhaust Treatment and Shaft Line Solutions business units were moved from Marine Systems to Marine Power and consequently, Marine Power changed its name to Marine as of 1 January 2024. 2022 figures are restated to reflect the redefined organisational change considering the integration of Voyage into Marine Power and moving part of the Voyage business to the Portfolio Business.

Organic net sales increased by 13%

Equipment



Services



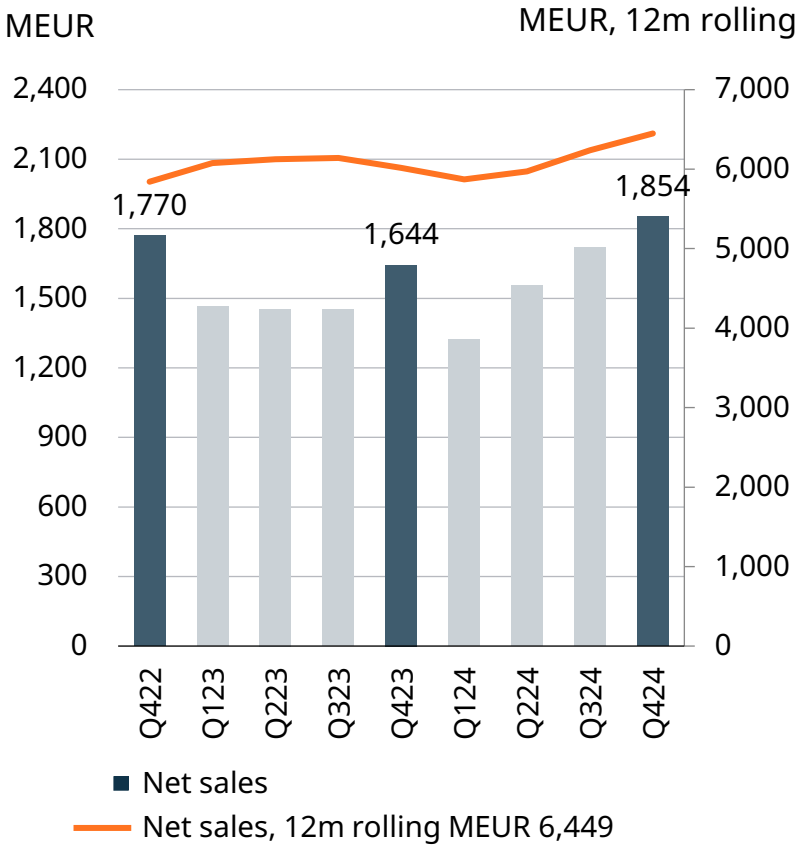
Net sales increased by 13%

Equipment net sales increased by 13%

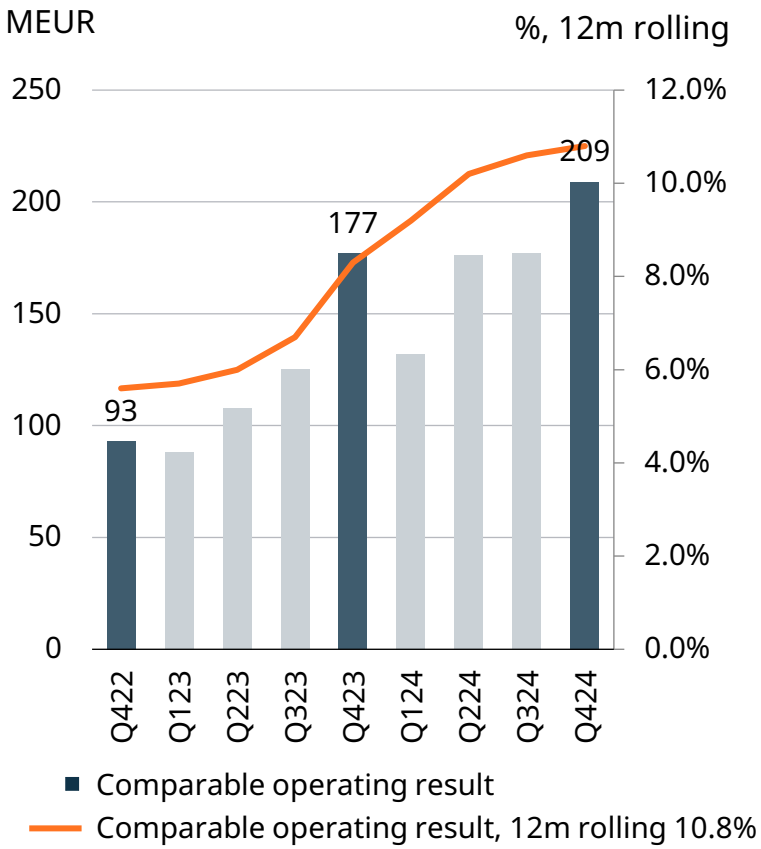
Service net sales increased by 12%

Profitability continued to improve

Net sales



Comparable operating result



Net sales increased by 13%

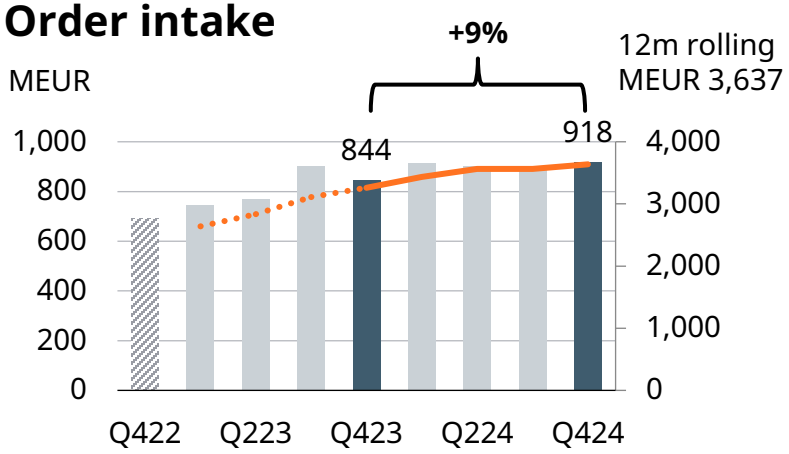
Comparable operating result increased by 18%

Comparable operating result margin 12m rolling at 10.8% (8.3%)

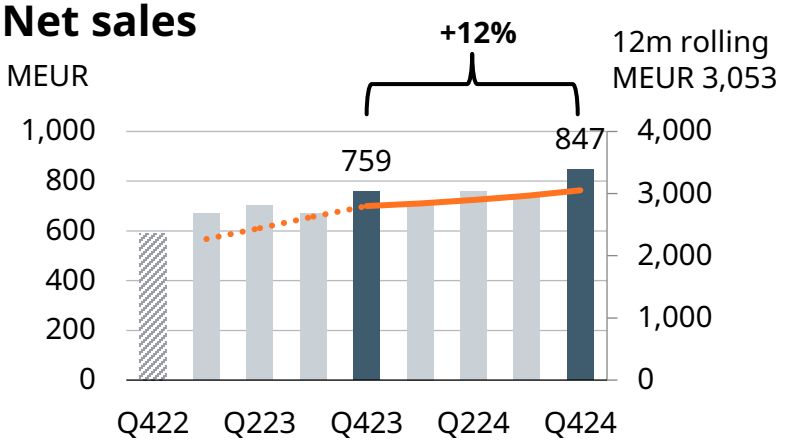
Marine: Good performance continued

Order intake and net sales increased

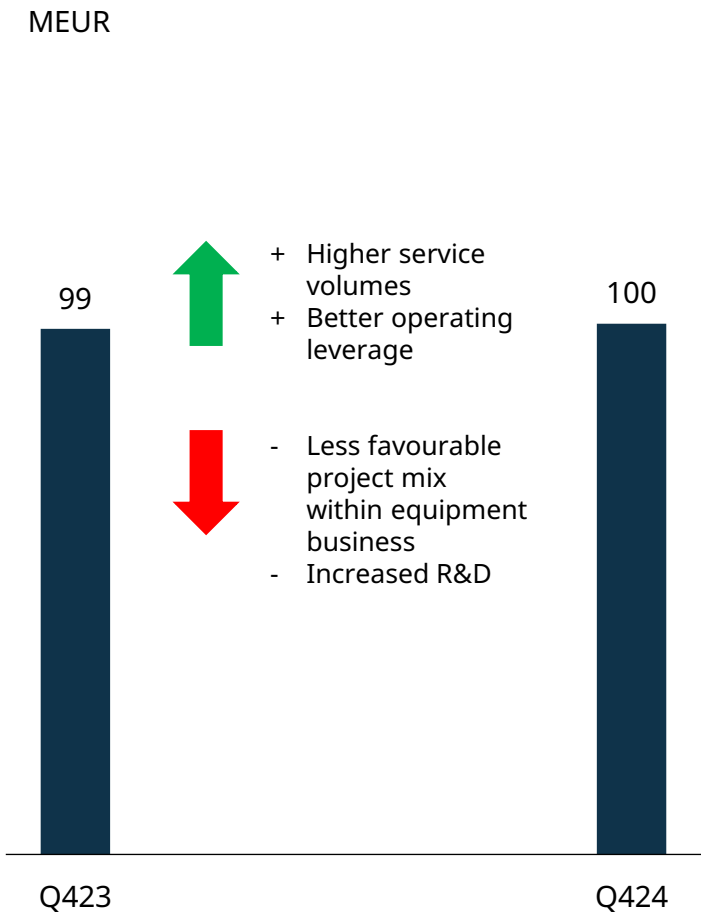
Order intake



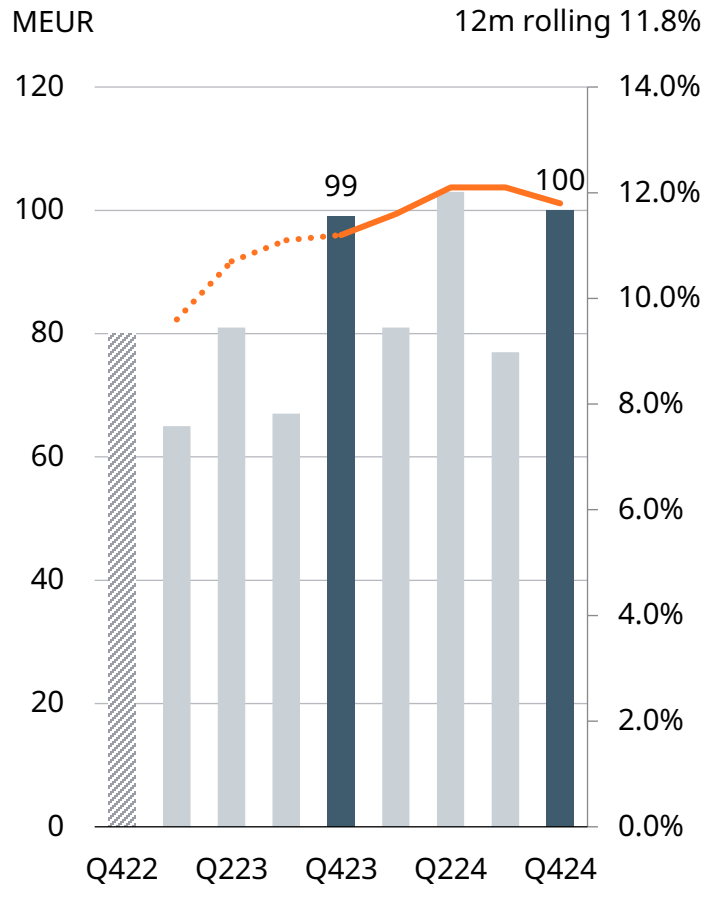
Net sales



Comparable operating result



Comparable operating result

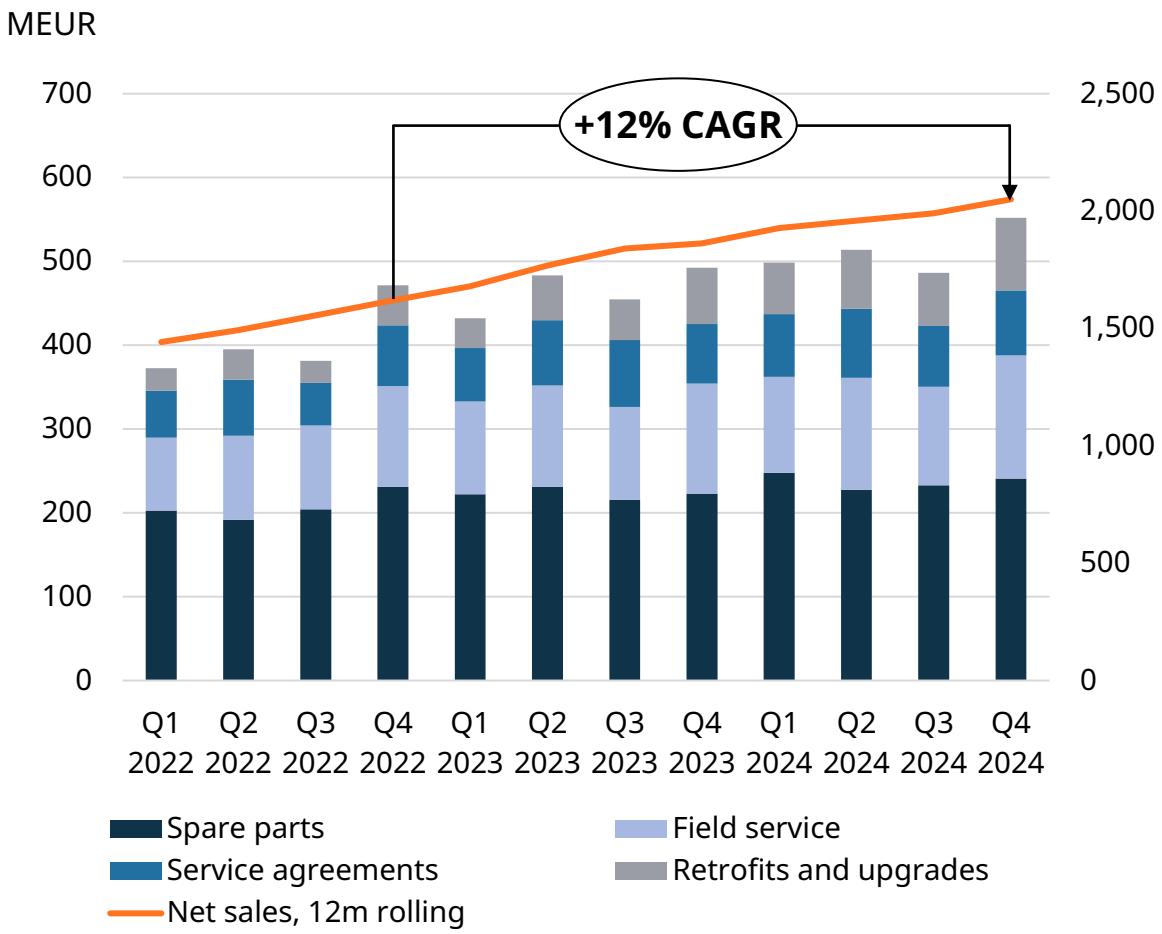


Financial figures for 2023 have been restated to reflect the redefined organisational structure after the discontinuation of Marine Systems as a reporting segment as of 1 January 2024. Exhaust Treatment and Shaft Line Solutions business units were moved from Marine Systems to Marine Power and consequently, Marine Power changed its name to Wärtsilä Marine.
Financial figures for 2022 have been restated to reflect the redefined organisational change considering the integration of Voyage into Marine Power and moving part of the Voyage business to the Portfolio Business.
As financial figures prior to 2023 have not been restated to account for the current organisational structure, the non-comparable figures are marked with dashed columns and a dashed line.

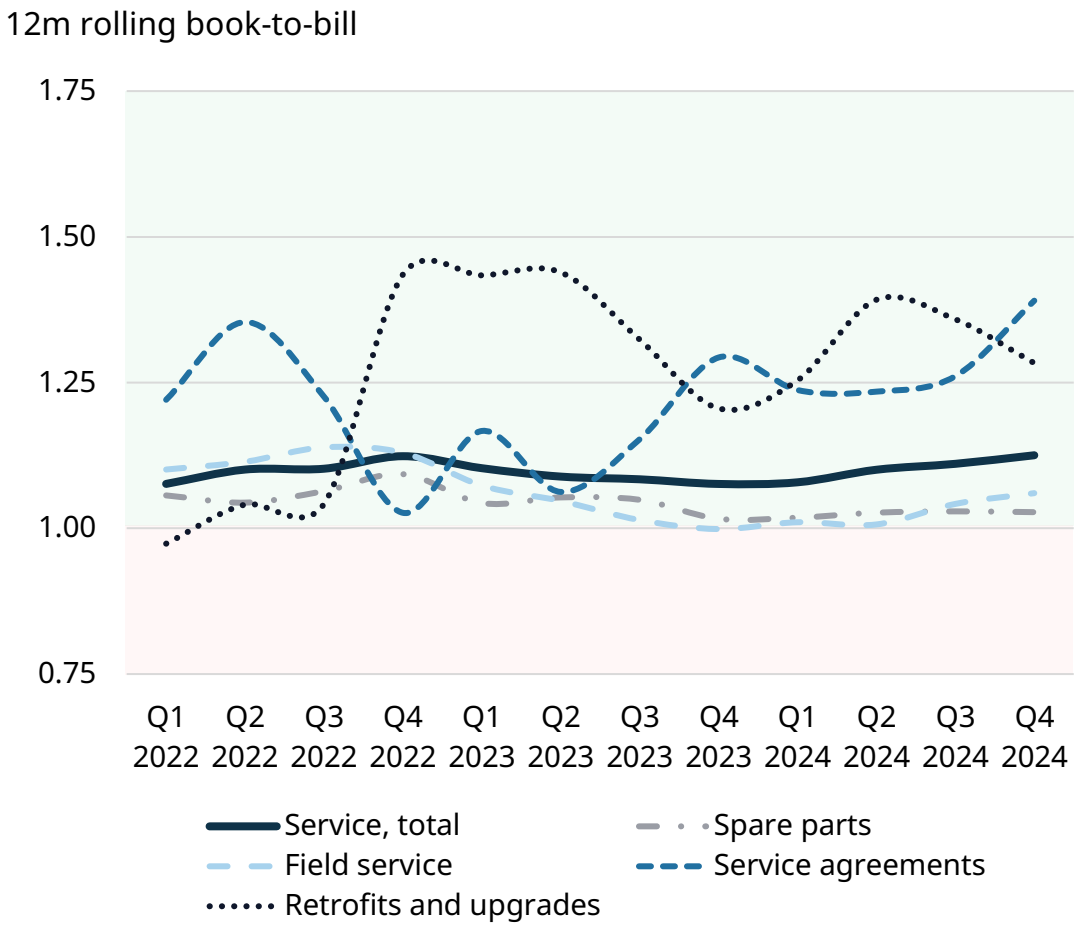
Good development in Marine service

Book-to-bill above 1 in all service revenue streams

Marine service, Net sales



Marine service, Book-to-bill

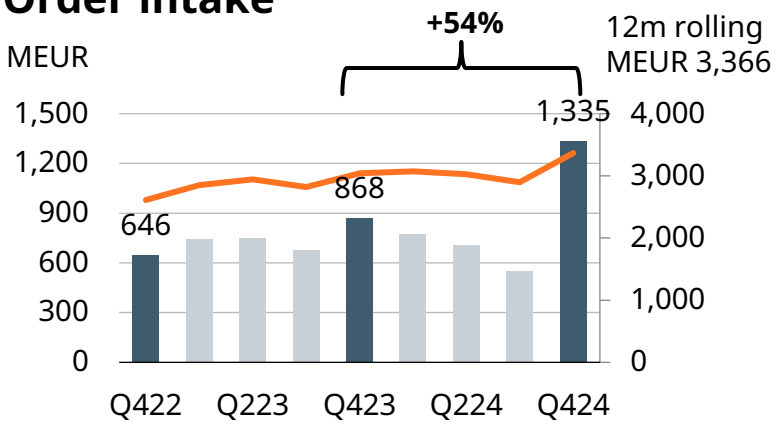


2023 data restated to reflect the redefined organisational structure as of 1 Jan 2024. Figures prior to 2023 are not fully comparable due to organisational changes.

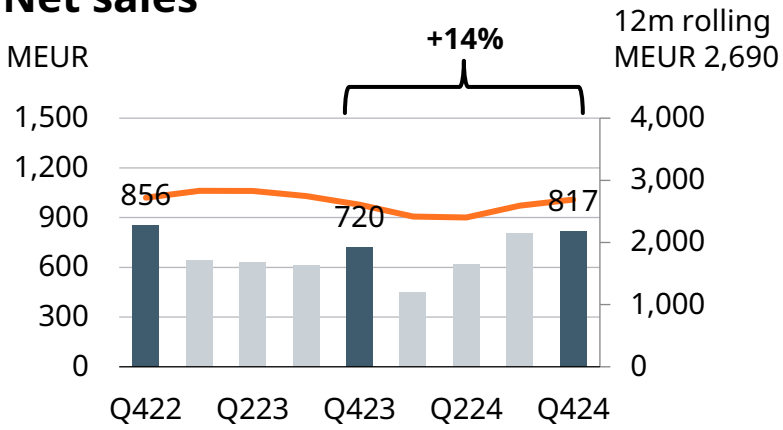
Energy: Comparable operating result increased

Strong growth in order intake both in Engine Power Plants and Energy Storage & Optimisation

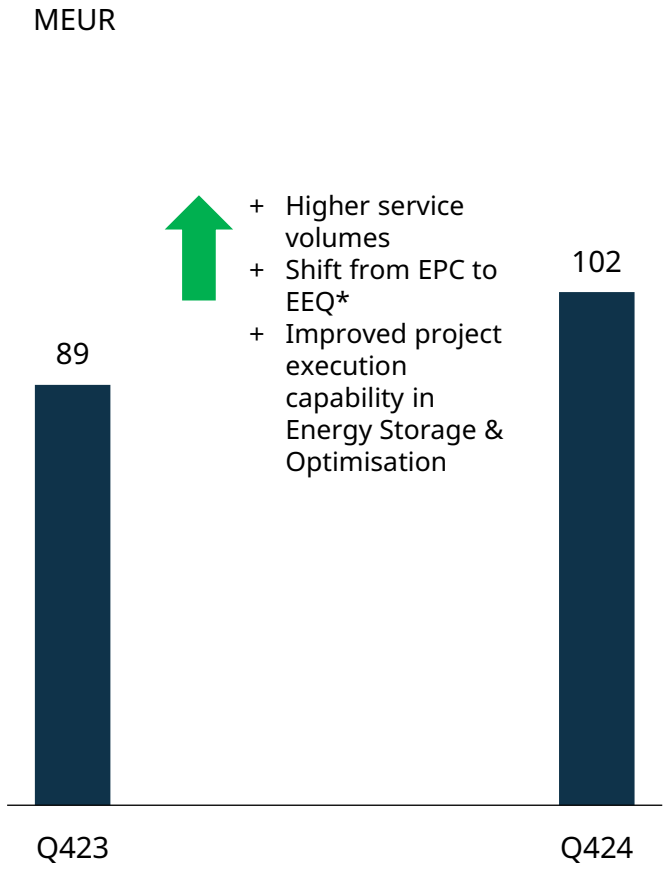
Order intake



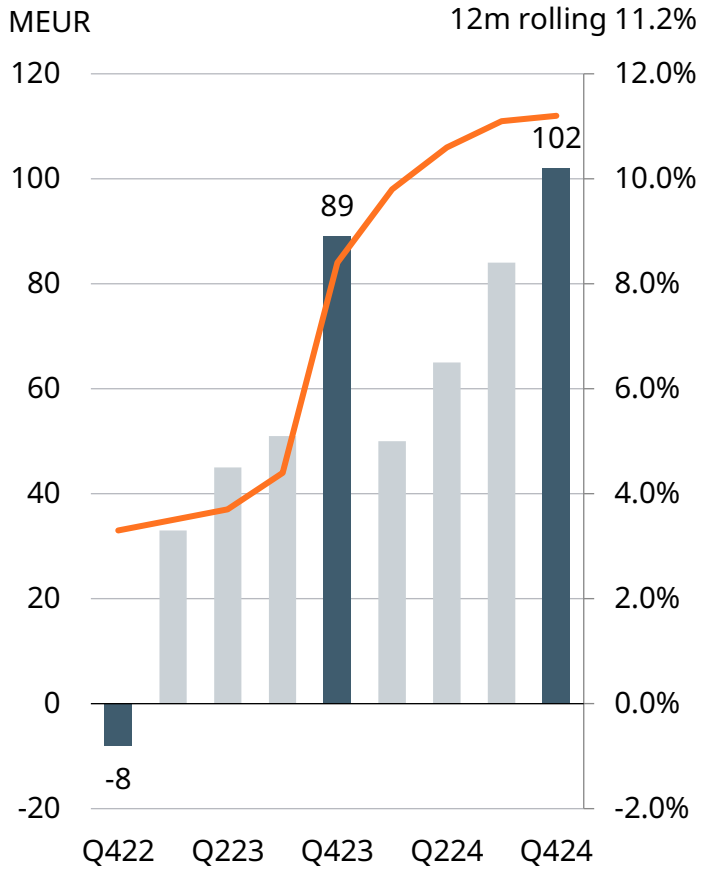
Net sales



Comparable operating result



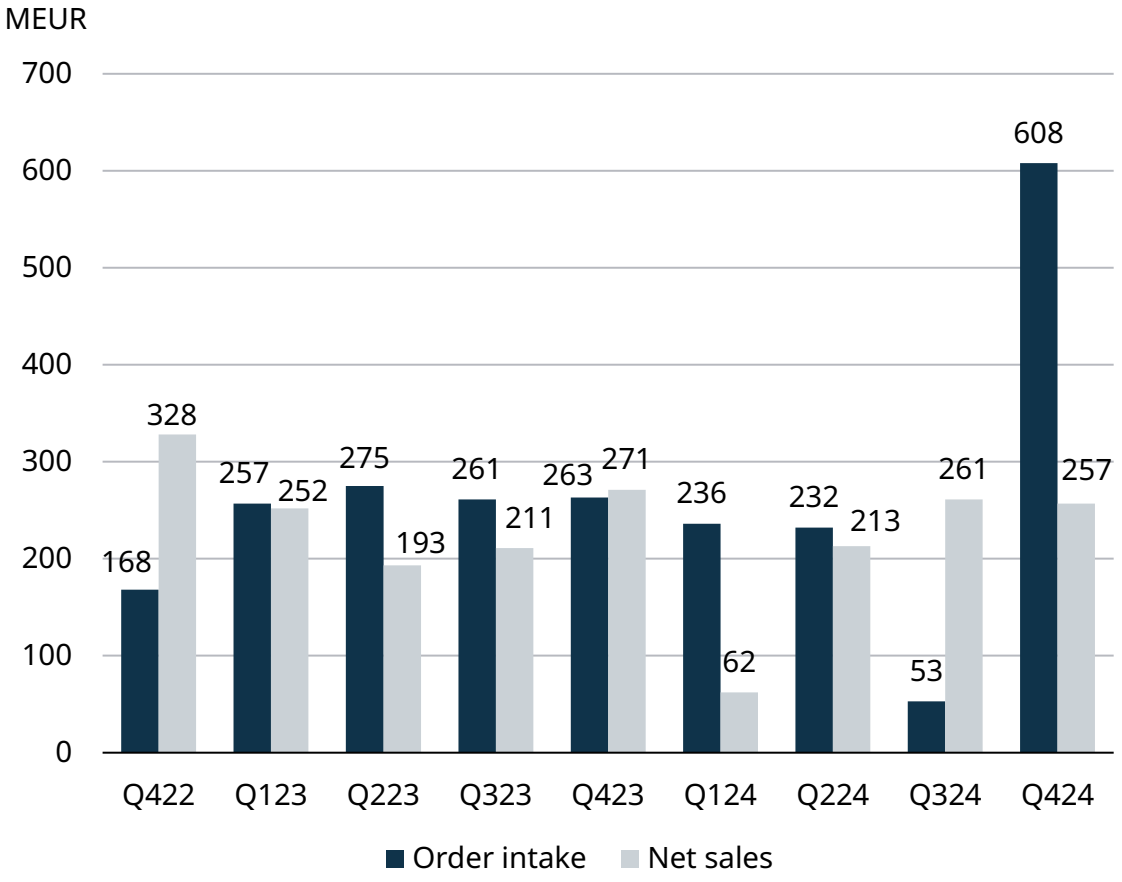
Comparable operating result



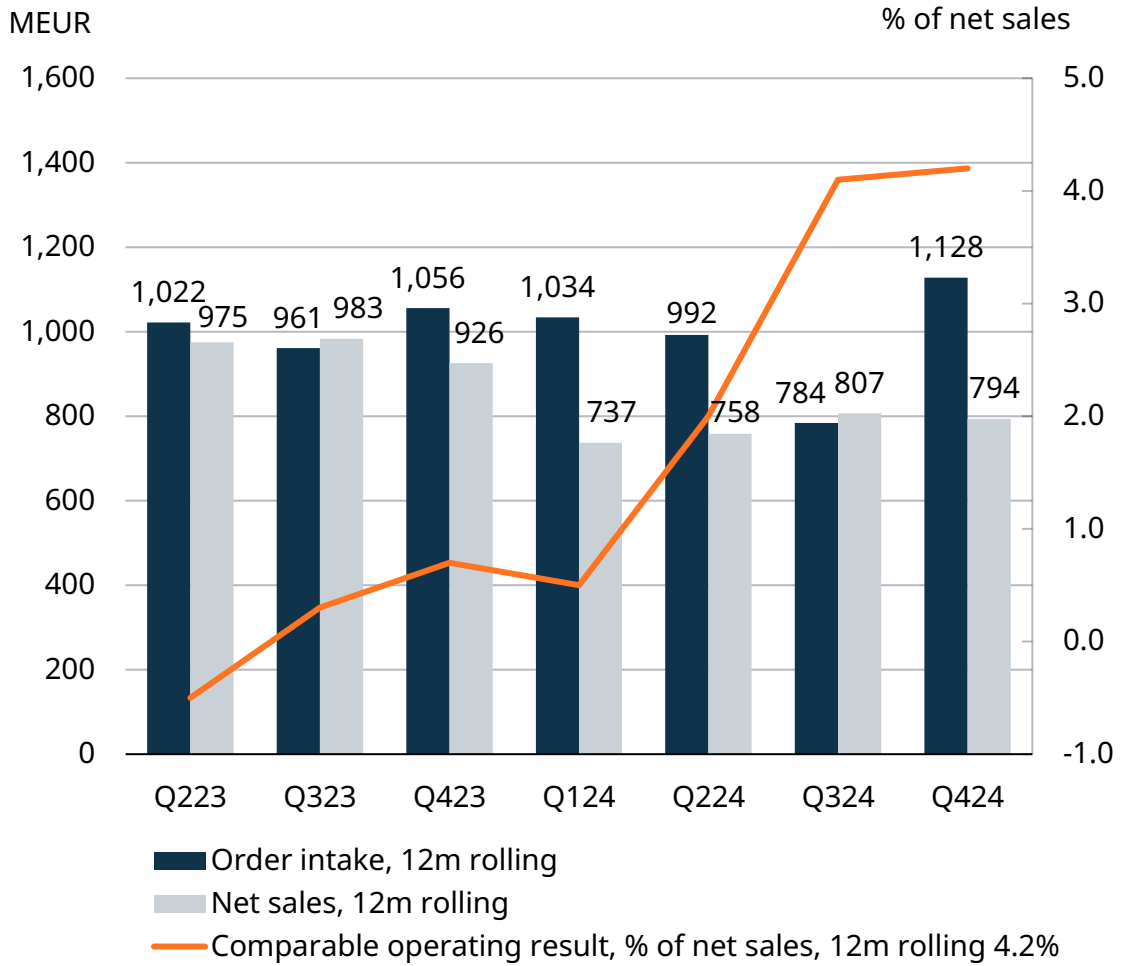
* EPC: Engineering Procurement and Construction, EEQ: Extended Equipment Supply

Energy Storage & Optimization: Comparable operating result margin (12m rolling) continued to improve

Quarterly development



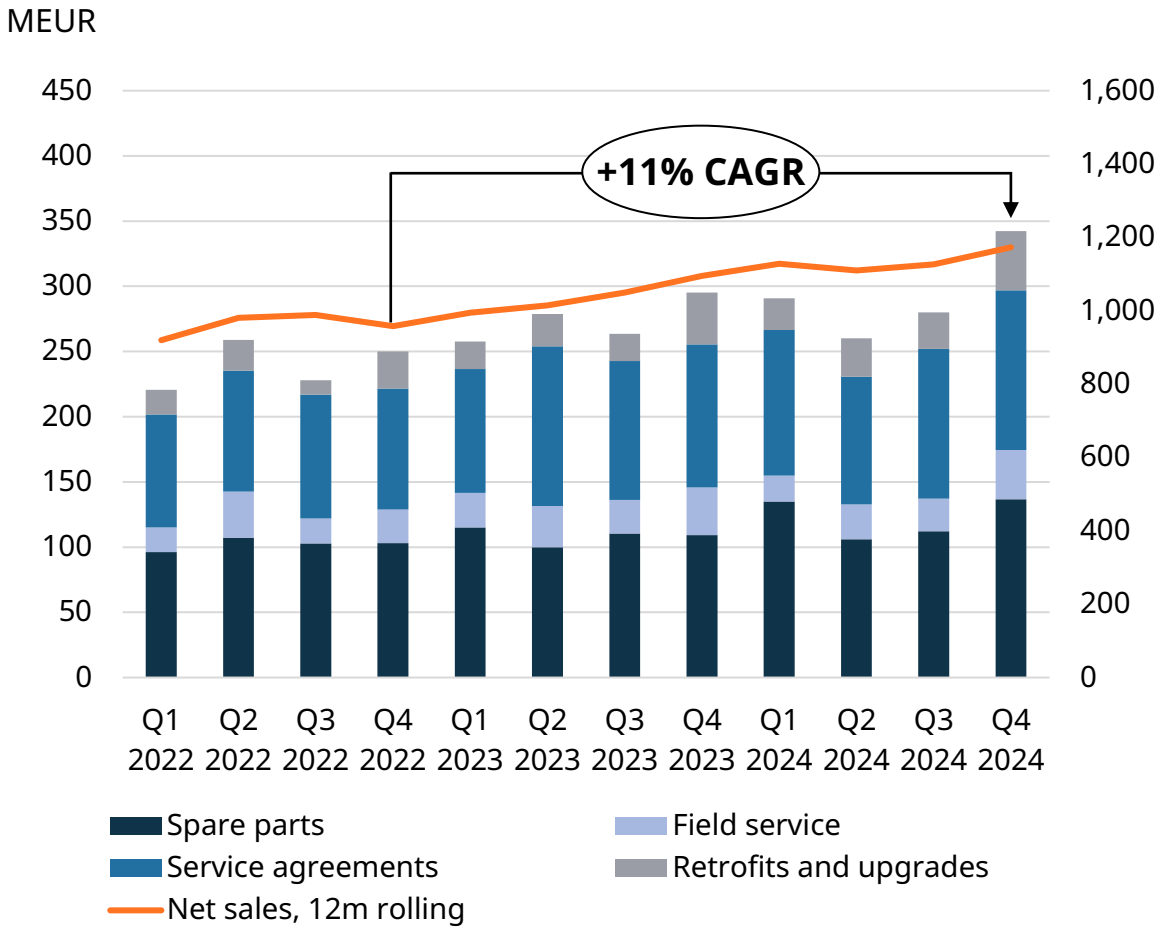
Rolling 12 months development



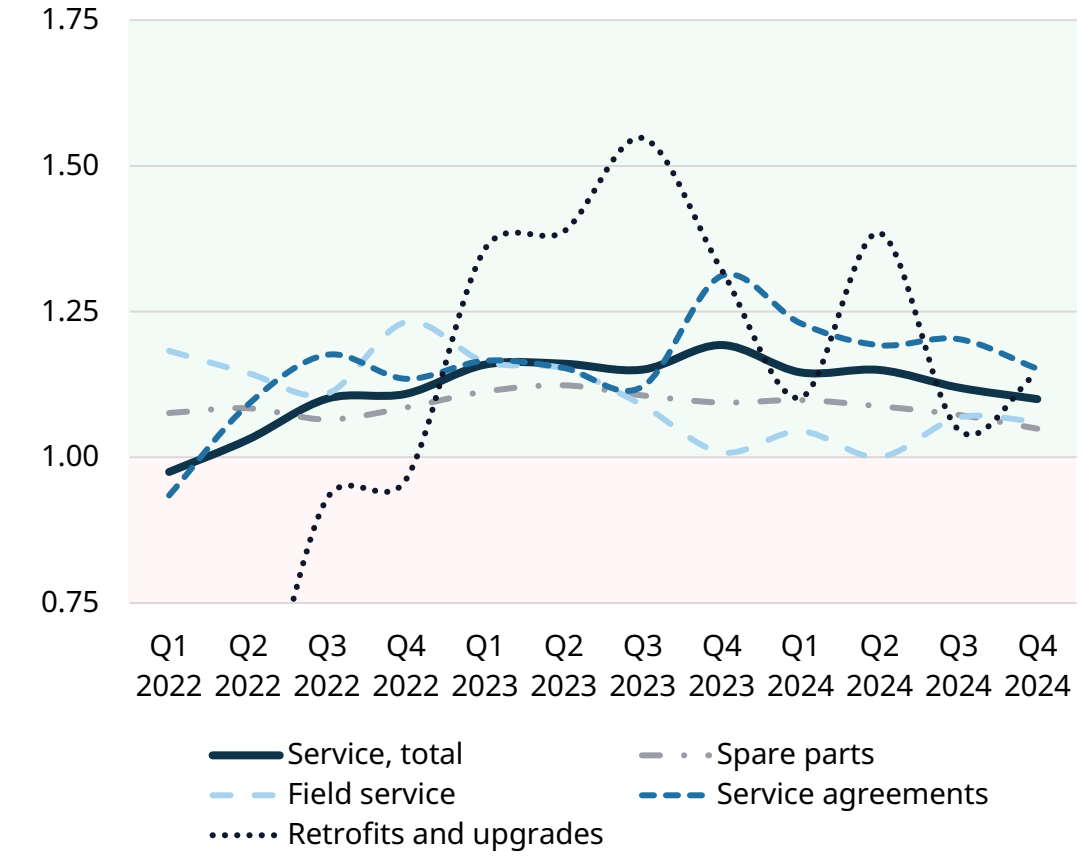
Good development in Energy service

Book-to-bill above 1 in all service revenue streams

Energy service, Net sales

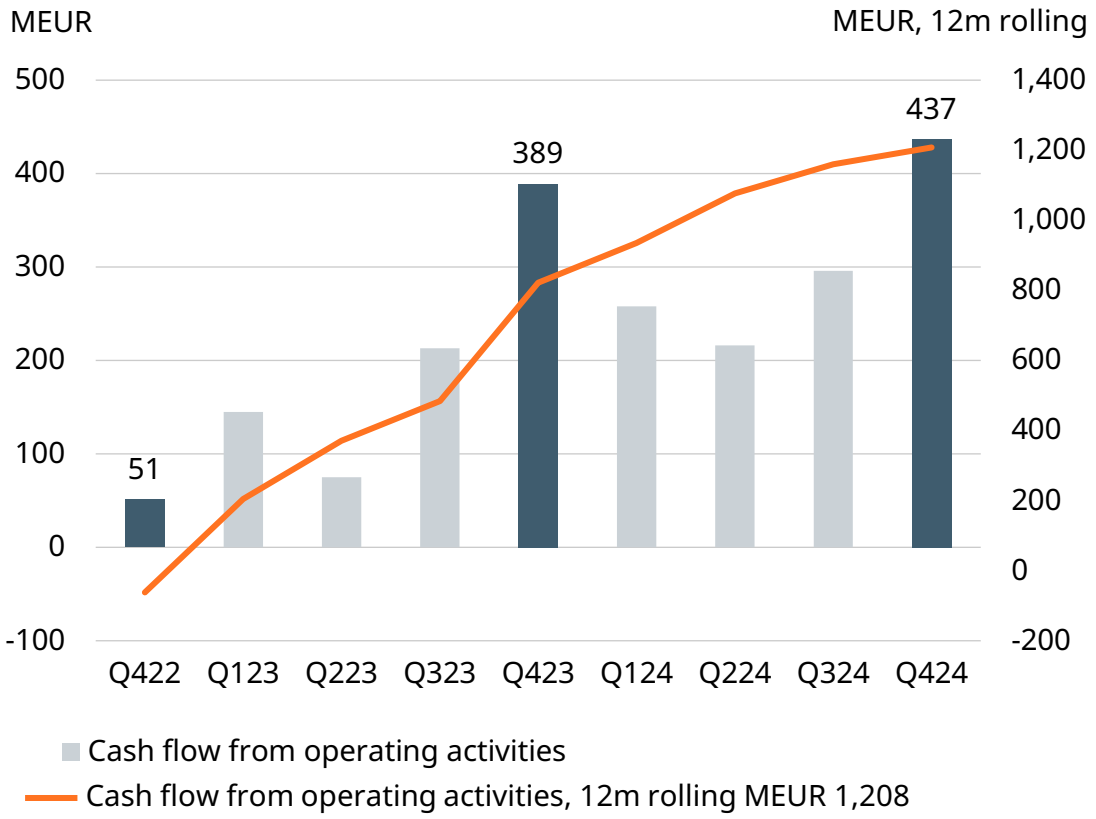


Energy service, Book-to-bill

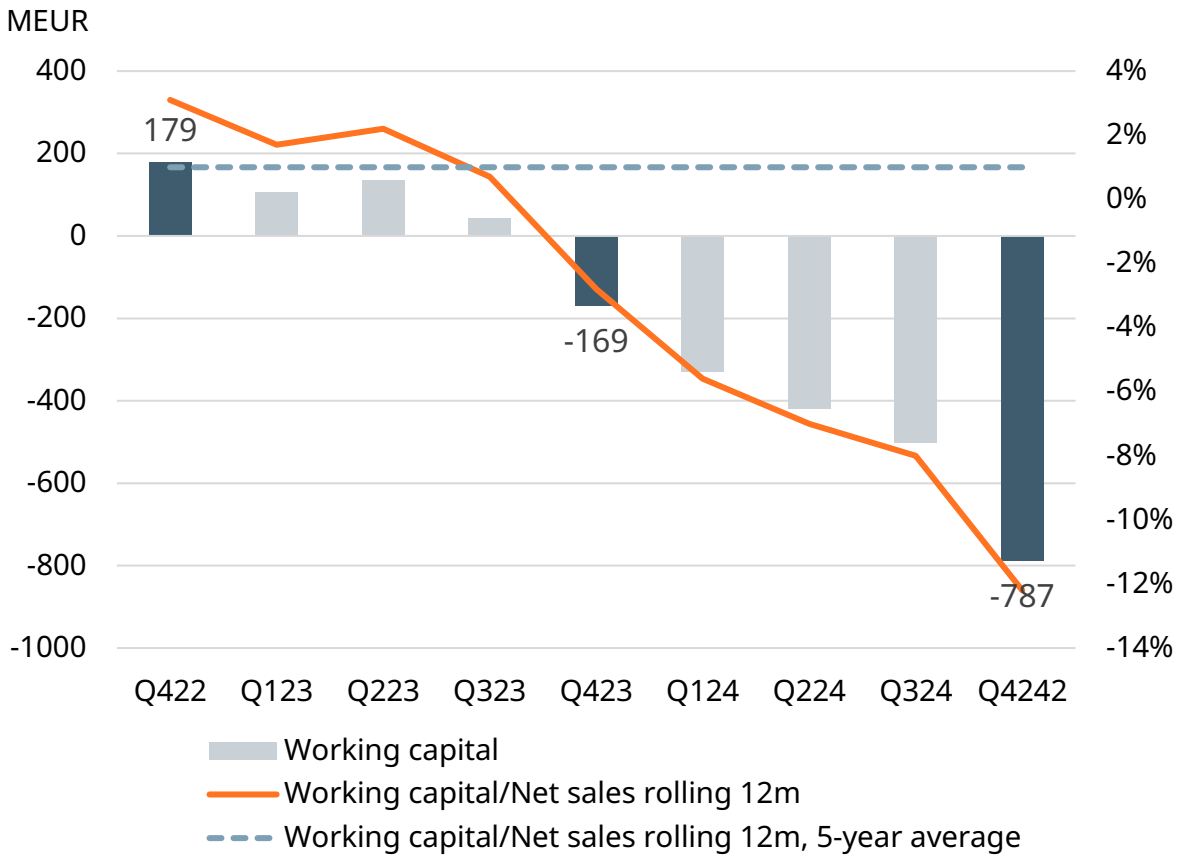


Strong cash flow from operating activities

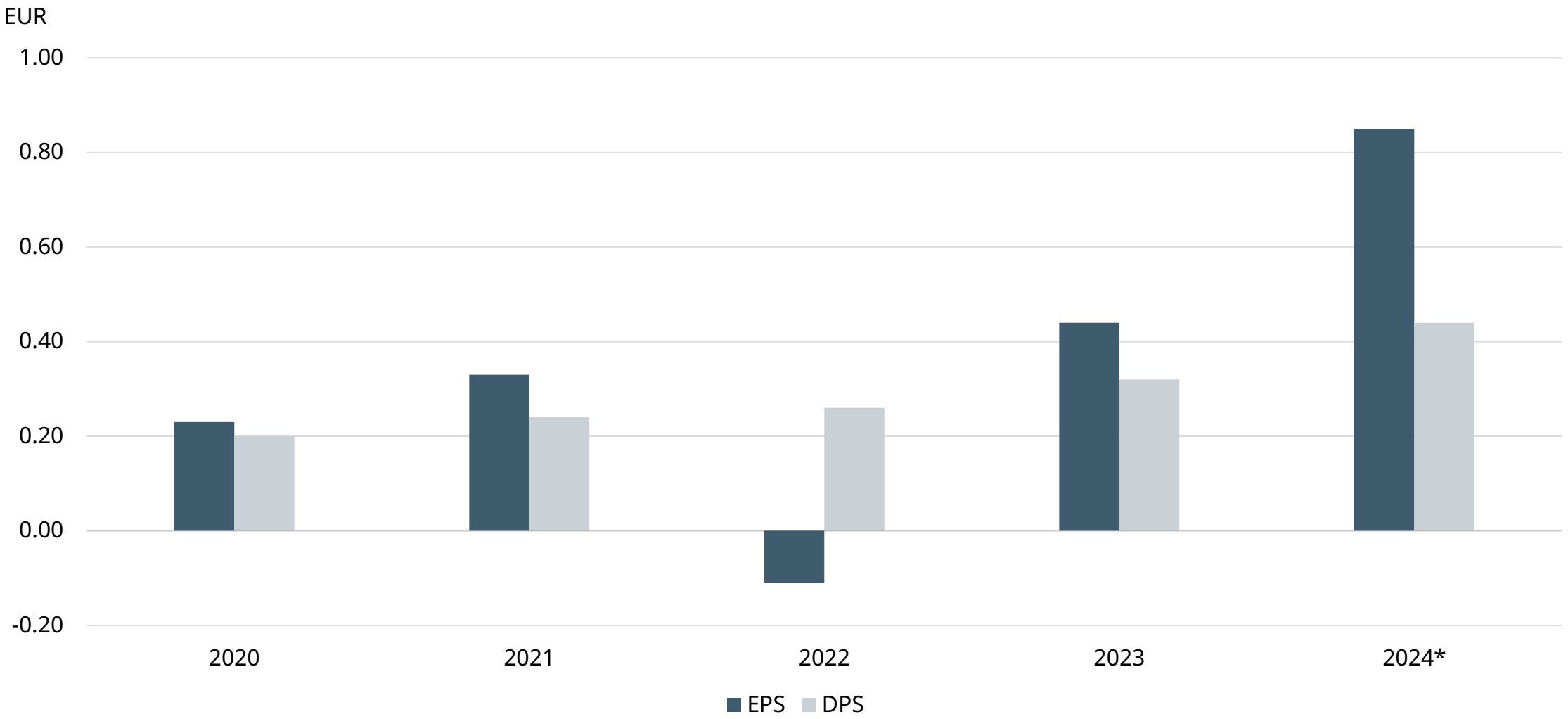
Cash flow from operating activities



Working capital to net sales ratio



Earnings and dividend per share



*Proposal of the Board

Prospects

Marine

- Wärtsilä expects the demand environment for the next 12 months (Q1/2025–Q4/2025) to be better than that of the comparison period.

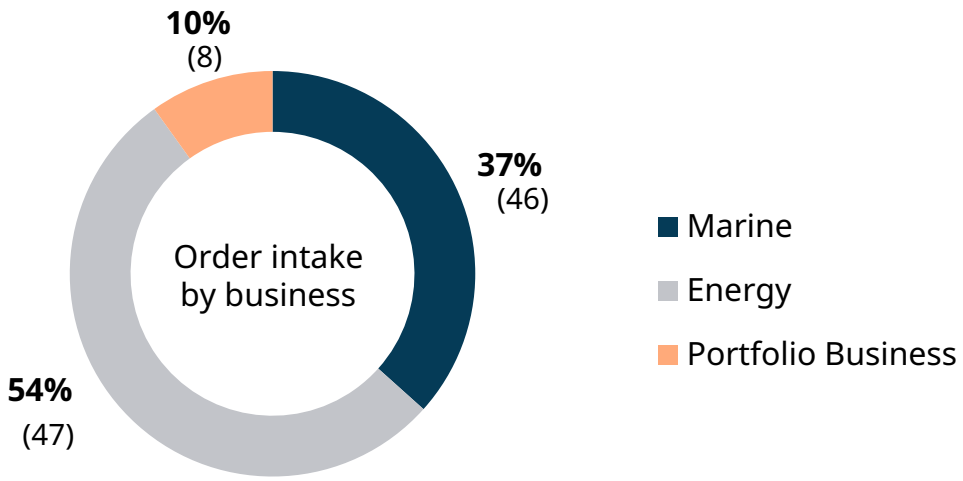
Energy

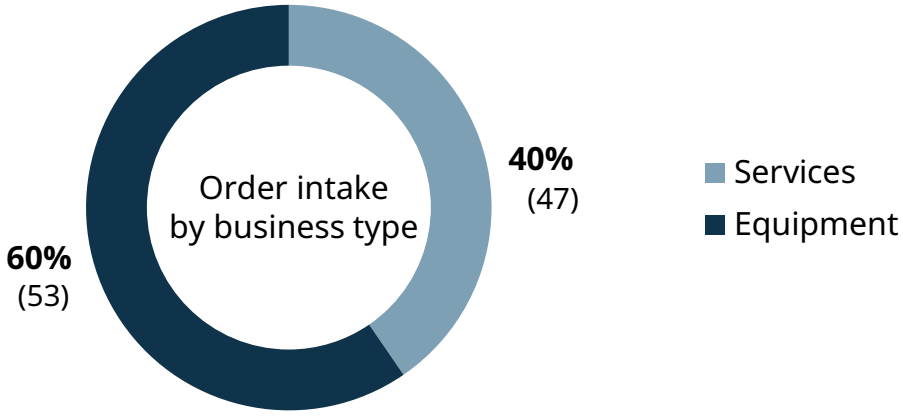
- Wärtsilä expects the demand environment for the next 12 months (Q1/2025–Q4/2025) to be better than that of the comparison period.

However, Wärtsilä underlines that the current high external uncertainties make forward looking statements challenging.

Order intake

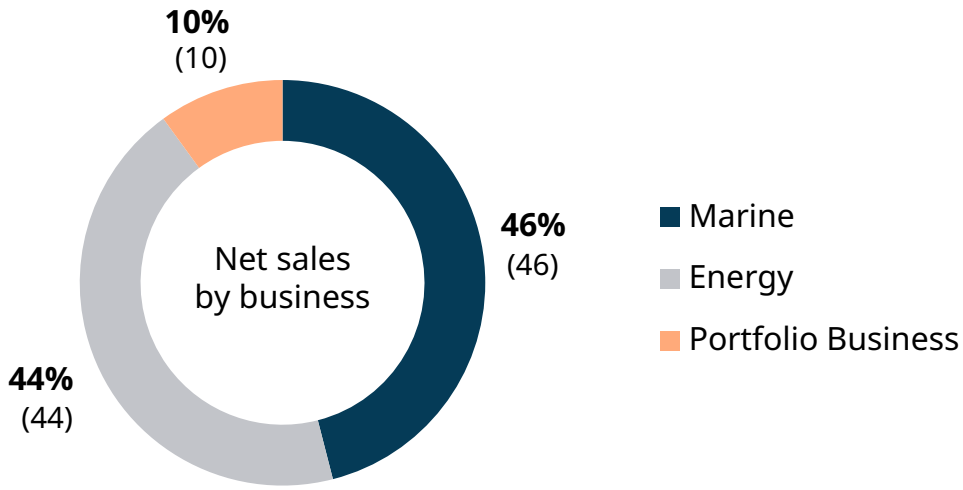
Fourth quarter development

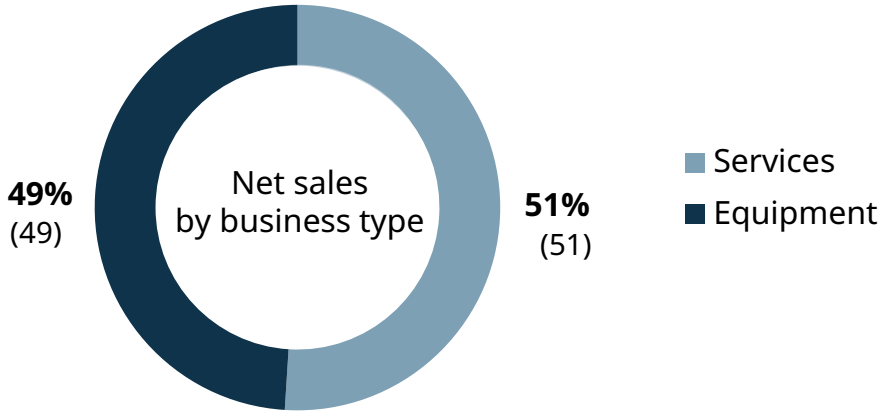




Net sales

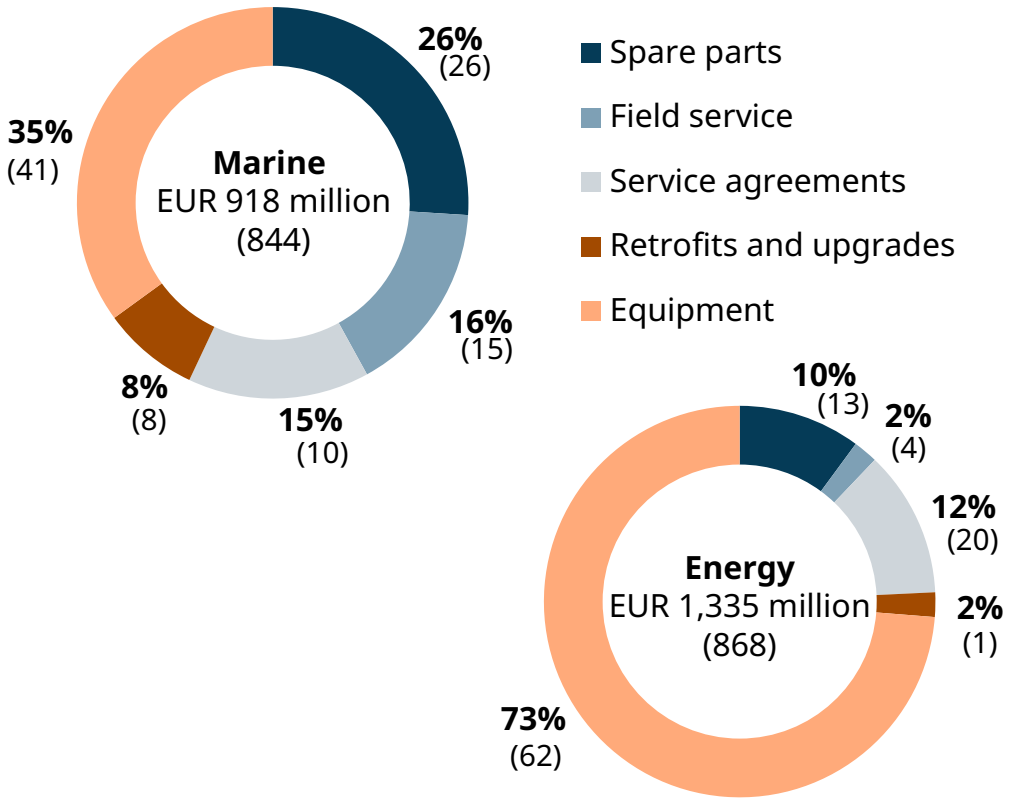
Fourth quarter development



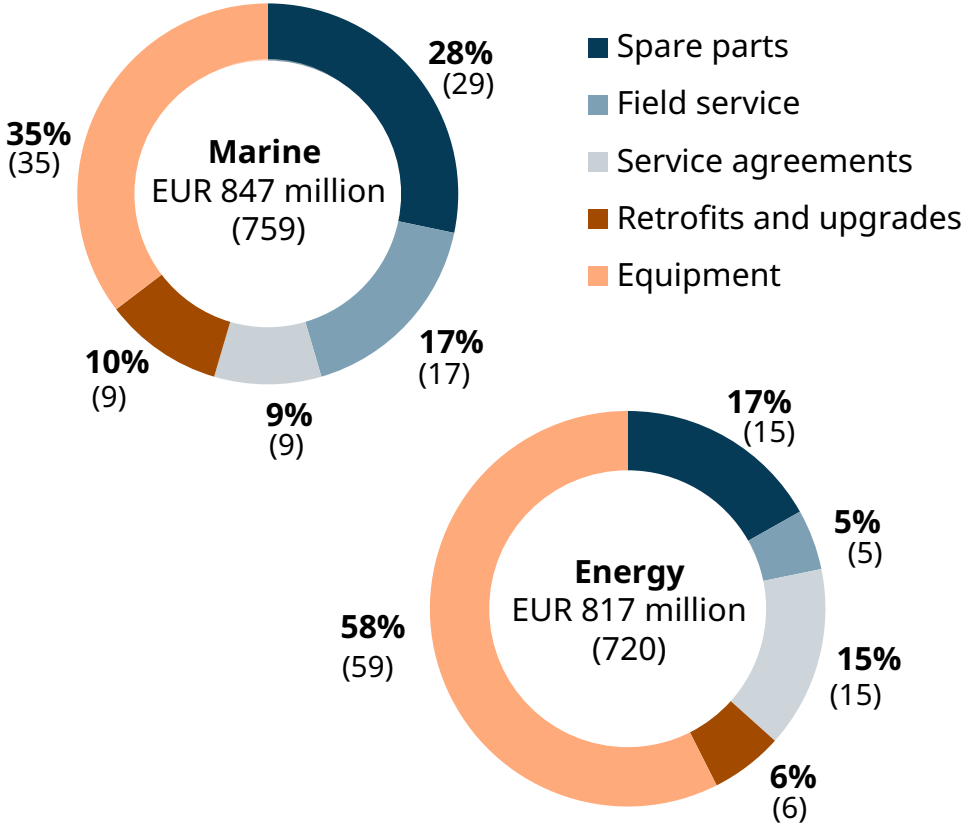


Fourth quarter development by business type

Order intake



Net sales

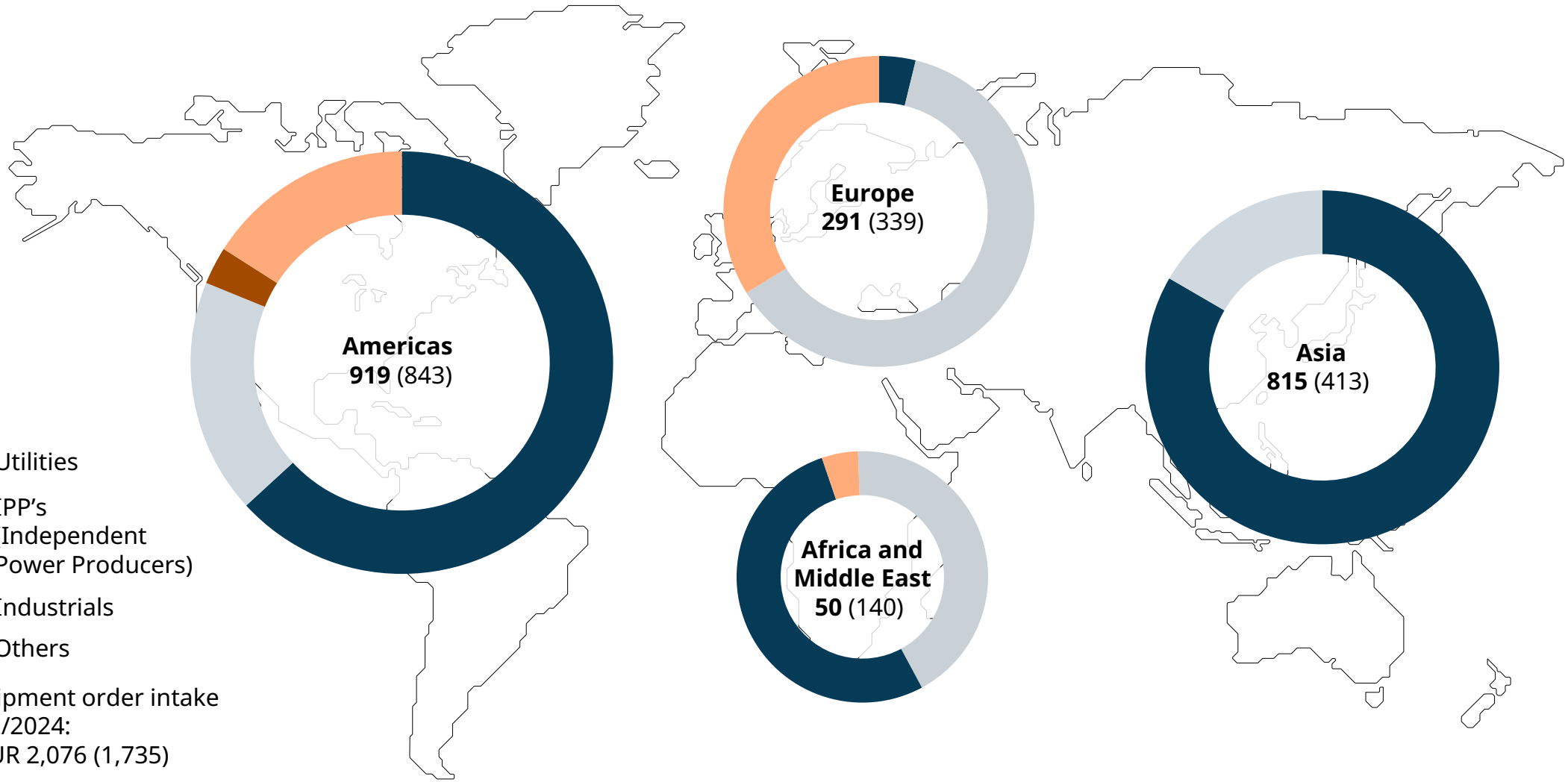


January–December order intake by customer segment

Marine	Gas carriers	Cruise & ferry	Offshore	Navy	Special vessels	Merchant	Other
Equipment	7% (11)	30% (22)	5% (6)	6% (8)	10% (5)	37% (44)	5% (4)
Services	12% (14)	24% (22)	16% (17)	11% (8)	11% (11)	25% (26)	1% (1)
Total	**10% (13)**	**26% (22)**	**12% (13)**	**9% (8)**	**10% (9)**	**29% (32)**	**3% (3)**

Energy	Utilities	Independent Power Producers	Industrials	Other
Equipment	63% (48)	24% (38)	1% (8)	12% (6)
Services	34% (32)	32% (33)	24% (25)	11% (10)
Total	**34% (32)**	**32% (33)**	**24% (25)**	**11% (10)**

Orders received for Energy equipment globally



Equipment order intake
1-12/2024:
MEUR 2,076 (1,735)

Sustainability

We are delivering towards our sustainability targets

On track for our 2030 decarbonisation targets

- ✓ To become **carbon neutral in own operations**
- ✓ To provide a **product portfolio ready for zero carbon fuels**

Improving safety, wellbeing and employee engagement

- ✓ **Positive trend in safety indicators**
- ✓ **Wellbeing behaviours & toolkit launched** to support teams
- ✓ **Improving trend in employee engagement**

Strengthening thought leadership and being a responsible company

- ✓ Developing **industry ecosystems** and **co-operation with academia**
- ✓ Continued focus on **ethical compliance**
- ✓ Listed by TIME magazine as **TIME100 most influential companies in 2023**

Strong presence in sustainable development indices

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA

S&P Europe 350 ESG Index

2021 MSCI ESG Leaders Indexes Constituent

Corporate Responsibility Prime
RATED BY ISS ESG

ECPI Sense in sustainability

OMXSUSTAIN INDEX
NASDAQ OMX
OMX GES SUSTAINABILITY FINLAND

Sustainability Yearbook
Member 2021

S&P Global

STOXX

Member 2020/2021 ESG Leaders Indices

NASDAQ ESG TRANSPARENCY PARTNER · Nasdaq

FTSE4Good

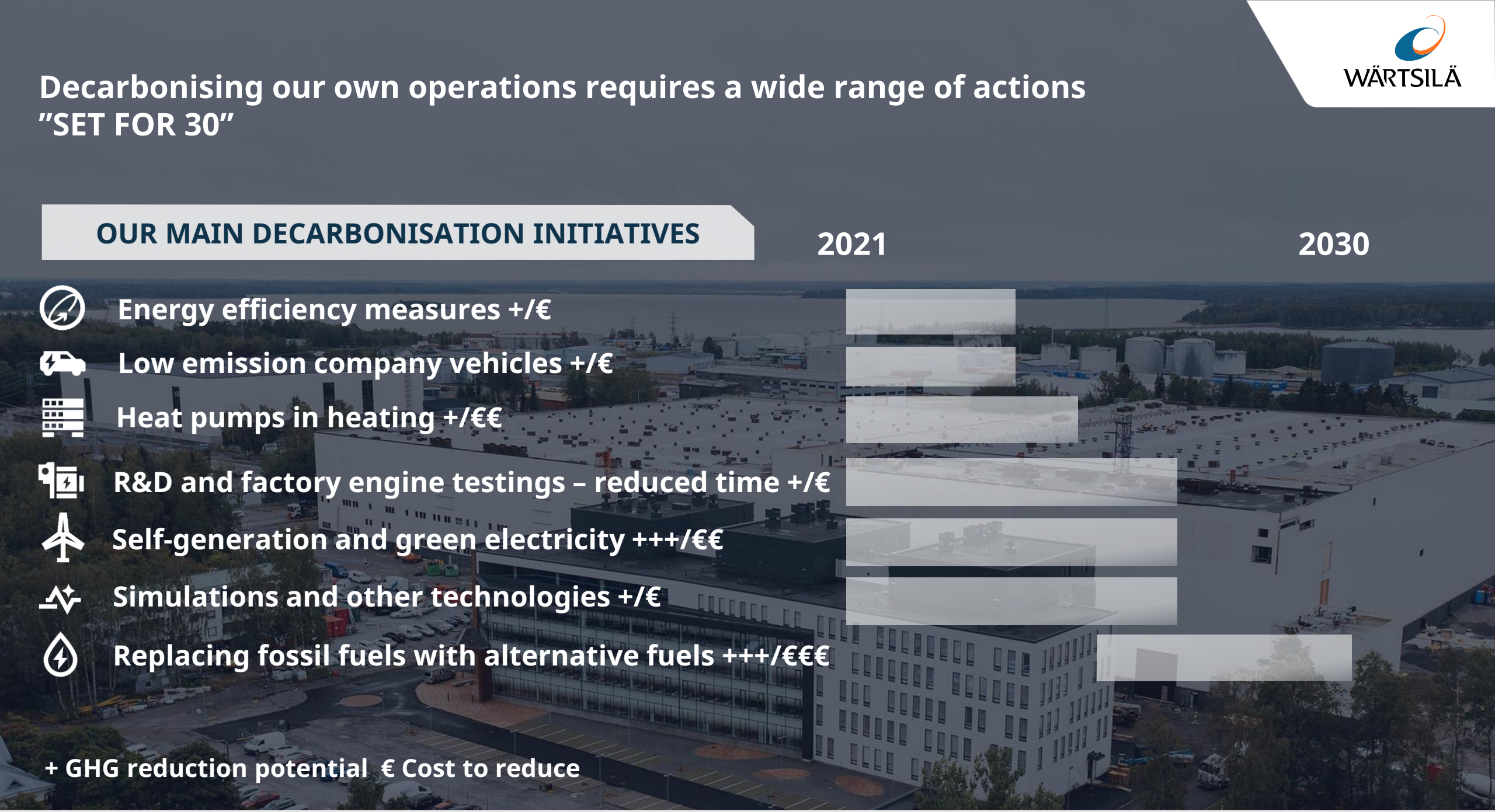
included in ETHIBEL SUSTAINABILITY INDEX EXCELLENCE Europe

Decarbonising our own operations requires a wide range of actions ”SET FOR 30”

OUR MAIN DECARBONISATION INITIATIVES

2021 2030

- Energy efficiency measures +/€
- Low emission company vehicles +/€
- Heat pumps in heating +/€€
- R&D and factory engine testings – reduced time +/€
- Self-generation and green electricity +++/€€
- Simulations and other technologies +/€
- Replacing fossil fuels with alternative fuels +++/€€€



+ GHG reduction potential € Cost to reduce

Governance

Board of Management

Håkan Agnevall, President & CEO

Arjen Berends, Chief Financial Officer

Tamara de Gruyter, President, Wärtsilä Portfolio Business

Kari Hietanen, Corporate Relations and Legal Affairs

Roger Holm, President, Wärtsilä Marine

Anders Lindberg, President, Wärtsilä Energy

Teija Sarajärvi, Human Resources

Anu Sirkiä, Marketing and Communications

Board of Directors

Tom Johnstone CBE, Chair of the Board, President and CEO of AB SKF 2003–2014

Mika Vehviläinen, Deputy Chair of the Board, President & CEO of Cargotec Oyj 2013-2023

Karen Bomba, President of Smiths Interconnect 2017–2020

Morten H. Engelstoft, CEO & EVP of A.P. Møller - Mærsk A/S, APM Terminals 2016–2022

Karin Falk, President, Husqvarna Construction Division

Johan Forssell, President and CEO of Investor AB

Mats Rahmström, President & CEO of Atlas Copco AB

Tiina Tuomela, CFO, Fortum Corporation

Largest shareholders January 2024 (CMi2i quarterly update)

#	Name	Shares	Share %
1	Invaw Invest AB	104,711,363	17.70
2	Keskinäinen Työeläkevakuutusyhtiö Varma	25,159,960	4.25
3	BlackRock Fund Advisors	21,293,179	3.60
4	The Vanguard Group, Inc.	18,668,374	3.15
5	Keskinäinen Eläkevakuutusyhtiö Ilmarinen	18,068,037	3.05
6	Amundi Asset Management SA (Investment Management)	10,201,418	1.72
7	Keskinäinen Työeläkevakuutusyhtiö Elo	8,856,000	1.50
8	BlackRock Investment Management (UK) Ltd.	7,842,952	1.33
9	SSgA Funds Management, Inc.	7,172,253	1.21
10	BlackRock Advisors (UK) Ltd.	7,018,870	1.19
11	Acadian Asset Management LLC	6,243,050	1.06
12	Marathon Asset Management Ltd.	5,702,189	0.96
13	Legal & General Investment Management Ltd.	5,529,144	0.93
14	Arrowstreet Capital LP	5,443,392	0.92
15	The State Pension Fund	4,700,000	0.79
	Retail Investors (Finland)	121,154,264	20.47
	Total Top 15	**256,610,181**	**43.36%**

For more information, visit our Investors page

Next upcoming IR events

- 17.-21.2. Citi's Global Industrial Tech and Mobility Conference in Miami
- 19.2. Annual Report 2024
- 20.2. Barclays Industrial Select Conference in Miami
- 26.2. CEO strategy call
- 6.3. Carnegie Capital Goods Conference in Stockholm
- 11.3. Morgan Stanley Industrials Day in Paris
- 13.3. Annual General Meeting

Wärtsilä Investor Relations

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Samu Heikkilä, Senior Manager, Investor Relations
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Maija Hongas, Senior Manager, Investor Relations
tel. +358 10 709 3178, email: maija.hongas@wartsila.com

Noora Suni, Investor Relations Specialist
tel. +358 10 709 1101, email: noora.suni@wartsila.com

Meeting requests

Janine Tourneur, Executive Assistant
tel. +358 10 709 5645, e-mail: janine.tourneur@wartsila.com

Appendix

Main competitors

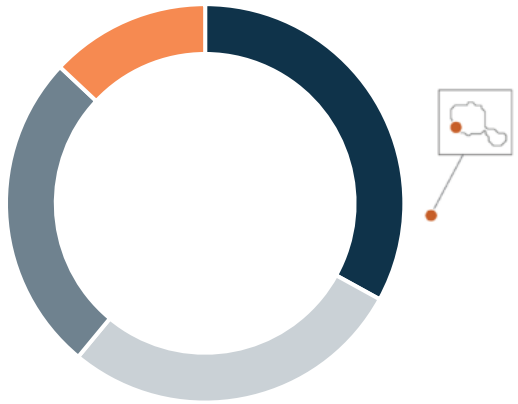
Engines	Other marine solutions	Other energy solutions
MAN Himsen Rolls-Royce	Kongsberg Alfa Laval GE Siemens Schottel	GE Siemens Tesla Fluence Sungrow

Customer base

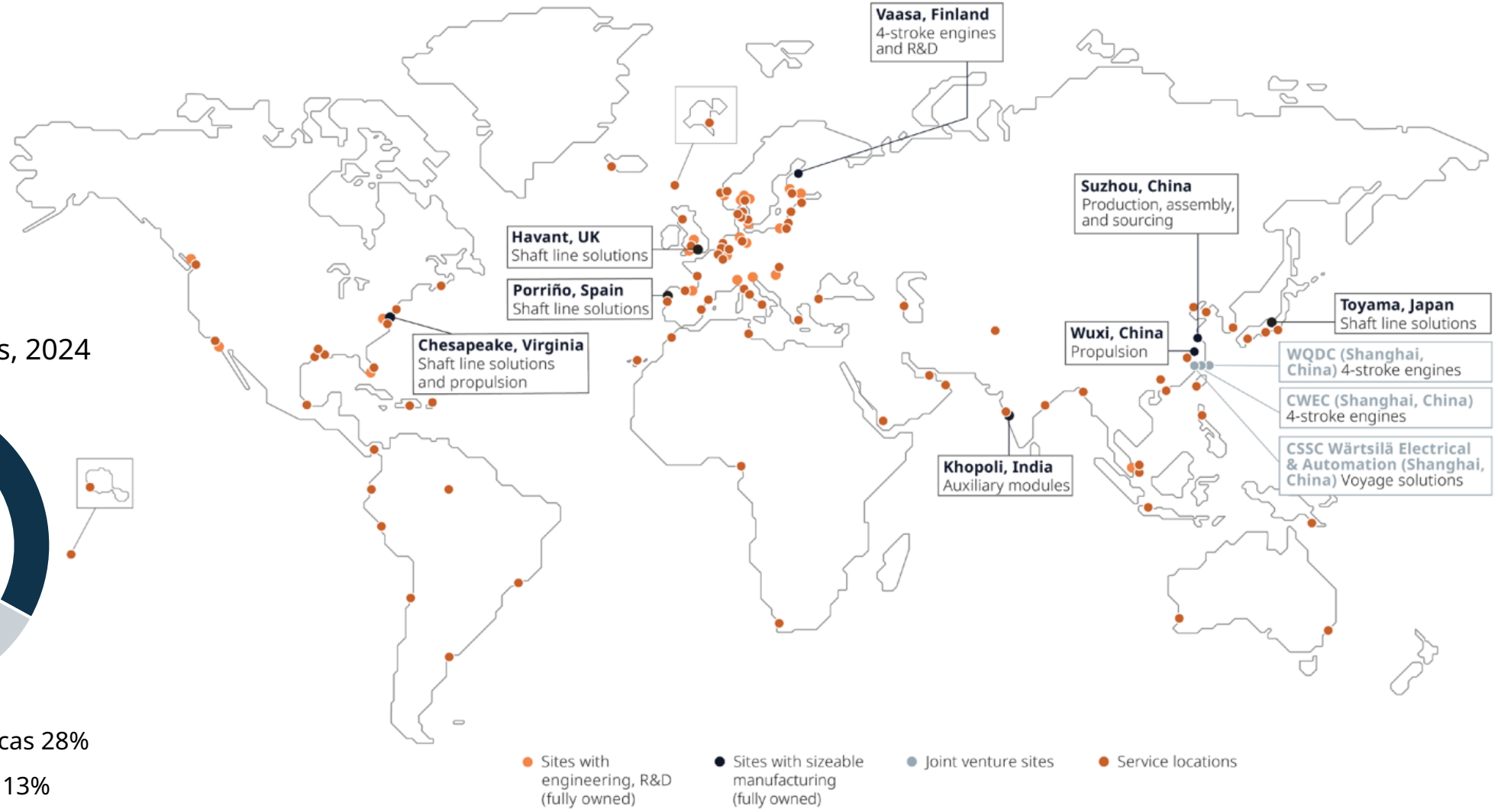
Marine businesses	Energy
Ship owners Ship operators Ship management companies Charterers Shipyards Port authorities	Utilities Independent Power Producers (IPPs) Industrial customers

Wärtsilä's position as a global company is reflected in the geographical breakdown of our net sales

Geographical net sales, 2024



- Europe 33%
- Americas 28%
- Asia 26%
- Other 13%

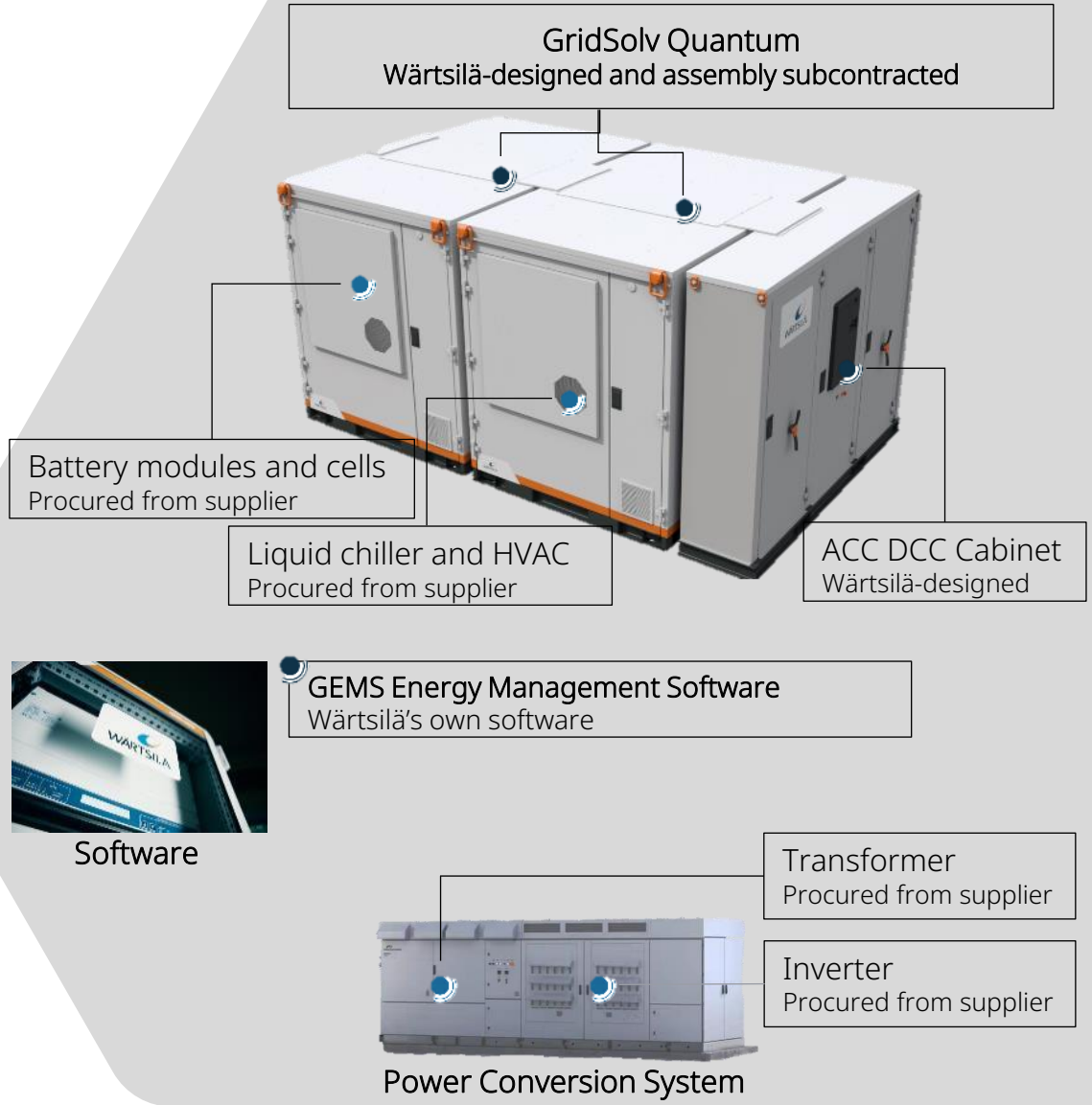


Wärtsilä Energy Storage offering

Our role in the value chain

- Our **core offering** consists of 1) battery energy storage hardware, 2) GEMS Digital Energy Platform, and 3) lifecycle services,
- We are an energy storage **system integrator**, adding value to our customers by providing fully-engineered, end-to-end storage solutions:

1. **Wärtsilä's energy storage hardware** integrates battery modules, Battery Management System and Power Conversion System to a Wärtsilä-designed GridSolv enclosure to offer a complete energy storage system (ESS) to our customers.
2. Our project execution team manages **full installation and integration** at the customer's site(s).
3. Wärtsilä's **GEMS Digital Energy Platform** monitors, controls and optimises storage and other energy assets in the system
4. Our **Service+ lifecycle solutions** include Expertise Center support, planned maintenance, performance guarantees and software maintenance



Wärtsilä Energy Storage competitive advantages

Our key differentiators

- **Integration and scalability**: Wärtsilä's GridSolv Quantum is a fully-integrated energy storage solution. Its modular and scalable design enables ease of deployment and optimisation. It integrates storage to other energy assets and to the electricity grid to ensure full utilisation of storage benefits.
- **Reliability and maturity**: Wärtsilä combines 15+ years of proprietary software leadership, top-tier battery energy storage systems, and extensive power sector experience in project execution in all key markets. We are a leading player in storage integrator space globally, with a wide services network and +3.6 GW/+9.1 GWh of deployed and contracted projects to-date.
- **Safety:** Wärtsilä's ESS is designed to meet meet stringent safety and quality standards (including UL certification for fire safety)
- **GEMS and bankability:** With smart optimisation software and complex renewables and grid integration capabilities, our solution ensures the lowest lifecycle costs, the smallest system footprint and new revenue opportunities for our customers – to fully optimise on industry price volatility and demanding transitions in energy.

Key figures in 2024

KEY FIGURES 2024

Order intake
8,072 MEUR

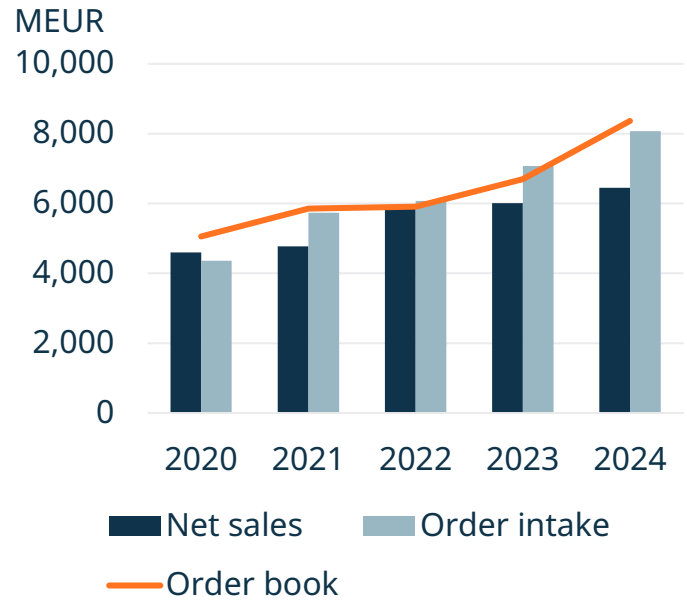
Net sales
6,449 MEUR

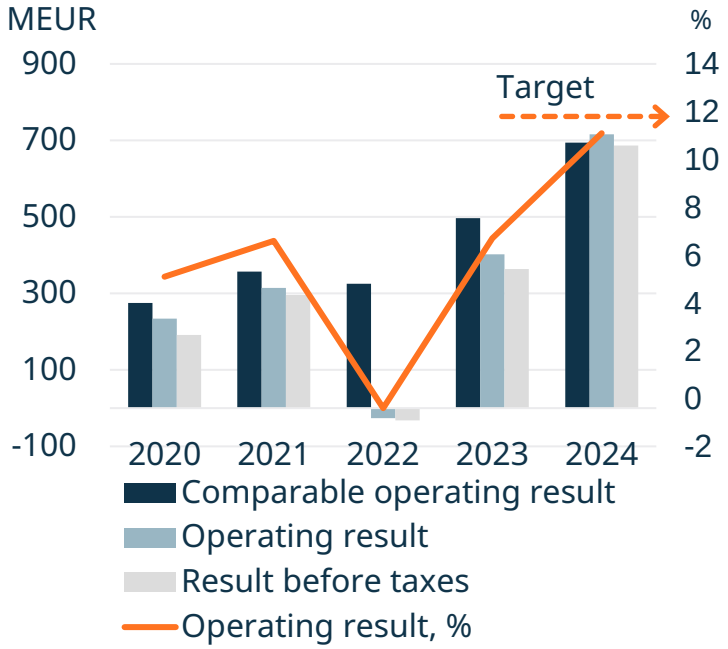
Comparable operating result
694 MEUR
10.8% of net sales

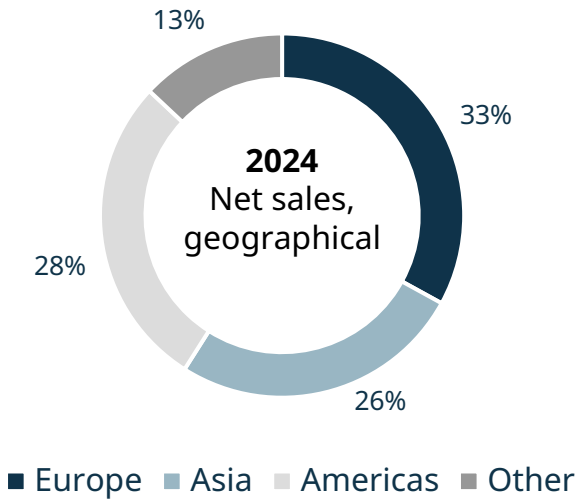
Operating result
716 MEUR
11.1% of net sales

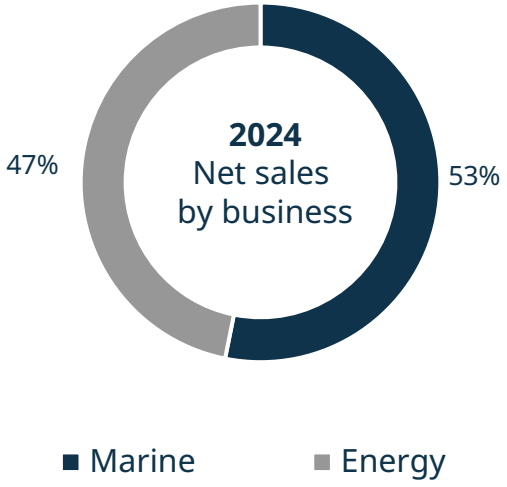
Cash flow from operating activities
1,208 MEUR

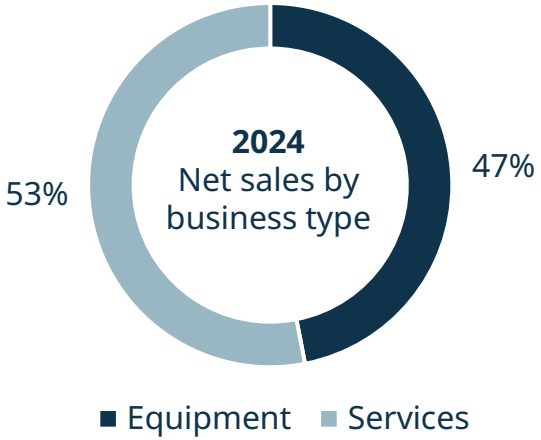
Personnel
18,300











Wärtsilä Marine – Leading the path towards decarbonisation by developing state of the art technology and enabling adoption of clean fuels

Key figures in 2024

Order intake

3,637 MEUR

Net sales

3,053 MEUR

Comparable operating result

360 MEUR

11.8% of net sales

Share of total net sales in 2024

Net sales by business type in 2024

Offering

- Multi-fuel 4-stroke engines
- Propulsion systems
- Catalyst systems
- Fuel gas supply systems
- Hybrid and electrification solutions
- Voyage and fleet optimisation
- Exhaust treatment
- Shaft line solutions
- Services
  - Spare parts and maintenance services
  - Performance based agreements
  - Retrofits and upgrades

Key customer segments

- Gas carriers
- Cruise & ferry
- Offshore
- Navy
- Special vessels
- Merchant

* Financial figures for 2023 have been restated to reflect the redefined organisational structure after discontinuation of Marine Systems as a reporting segment as of 1 January 2024. Exhaust Treatment and Shaft Line Solutions business units were moved from Marine Systems to Marine Power and consequently, Marine Power changed its name to Wärtsilä Marine as of 1 January, 2024.

Wärtsilä Energy – Towards a 100% renewable energy future

Key figures in 2024

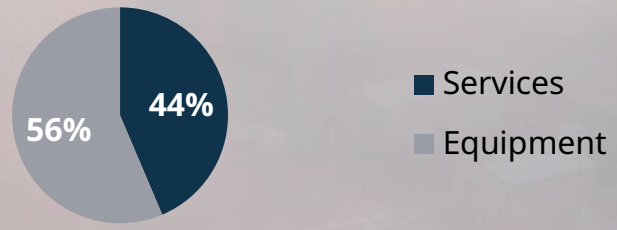
Order intake
3,366 MEUR

Net sales
2,690 MEUR

Comparable operating profit
302 MEUR
11.2% of net sales

Share of total net sales in 2024

Net sales by business type in 2024



Offering

- Future-fuel enabled grid balancing power plants
- Hybrid solutions
- Energy storage and optimisation technology, including the GEMS Digital Energy Platform
- Lifecycle services

Key customer segments

- Utilities
- Independent Power Producers (IPPs)
- Industrial customers


WÄRTSILÄ