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# This is Wärtsilä

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#### **CEO** review

2016 was a satisfactory year, considering the continued challenges in our end markets. Thanks to a good fourth quarter highlighted by successful delivery execution, growth in Services' revenues, and an improved project mix, we were able to meet our revised net sales and profitability targets for the year.

Our Services business, which in 2016 represented 46% of net sales, provides a good foundation for achieving our long-term target of profitable growth. Despite the headwinds we faced in the offshore segment, where weak market conditions caused customers to postpone equipment maintenance, our Services business performance continued to be resilient. Our growing installed base of medium-speed engines and propulsion equipment, as well as the shift to gas based technology, supports our long-term ambitions. We will continue to focus on developing our lifecycle service offering to provide enhanced value to our customers, and to explore opportunities beyond our installed base by expanding our business model to cover new market areas and multiple brands.

Activity improved in the power generation markets during 2016. This was mainly fuelled by demand from the emerging markets, where economic growth and energy infrastructure development drove interest in Wärtsilä's power plant solutions. Policy reforms and increasing investments in renewable energy sources also contributed to power plant investments globally. These trends, which favour Wärtsilä's flexible, clean, and efficient power plant solutions, are also expected to support positive market development in the coming year. During the year, Wärtsilä also entered the solar energy market with solar hybrid solutions, consisting of solar photo-voltaic (PV) plants and internal combustion engines. This decision will create new business opportunities as we find new ways to help our customers in their quest for less carbon-intensive energy systems.

In the marine markets, contracting activity fell to an exceptionally low level. The majority of the volume decline was seen in the shipping industry, where overcapacity and low earnings remain the key challenges. Low oil prices and reduced capital expenditures from oil companies continued to limit demand also in the offshore industry. For some years already, Wärtsilä has focused on developing an extensive offering and a wide market exposure. This positioning served us well in 2016, enabling us to capture opportunities in niche markets, such as cruise and ferry, where the demand for new vessels was unaffected by the general market weakness. Nevertheless, a certain pressure on order intake was unavoidable, and this meant that we had to react to the early signs of weakening markets by announcing in April additional efficiency improvement measures. Such measures, while unfortunate, are necessary for safeguarding our competitive position. Going forward, we will continue to pursue more cost-efficient and flexible ways of operating.

Marine environmental regulations took a step forward in 2016, with ratification of the ballast water convention in September. This was soon followed by the decision to implement the global sulphur cap in 2020, reducing the sulphur content of marine fuel to 0.5%. The investments we have made in developing our environmental portfolio will help us to support our customers as they evaluate means of complying with the upcoming regulations.

In order to secure our leading position in sustainable innovation, we must continuously look into new ways of developing our business. Wärtsilä's digital transformation is important in this context, as not only does it provide enhanced value to our customers in the form of new, data-analytics driven solutions, it also enables us to develop our internal processes through, for instance, the increased use of robotics in our manufacturing and testing processes. The appointment of our Chief Digital Officer will surely accelerate this transformation as our digital strategy is formulated, and the related organisation takes root. From an organisational development perspective, our Operational Excellence initiative is also important. Its aim is to establish a mentality of continuous improvement, and to enable us to share best practices that exist throughout our business areas and functions. In 2016, we launched what we call the Wärtsilä Operational Excellence Academy, in which we aim to provide a learning environment where our people can develop new ways of working and set new standards of performance.

While working constantly to improve performance, we at the same time endeavour to foster an inclusive corporate culture, by respecting diversity and emphasising high ethical standards. In this context, we are committed to supporting the UN Global Compact and its principles with respect to human rights, labour, the environment, and anti-corruption. Equally important is providing a safe working environment for our people. I am pleased that we have continued to move steadily closer to our ongoing target of zero lost-time injuries.

Looking into 2017, we expect our business environment to remain largely unchanged. We continue to be well positioned to benefit from the trends of increasing demand for efficiency and changing energy needs. This, together with our efforts to optimise internal operations as described above, will support us in reaching our long-term target for profitable growth.

I would like to take this opportunity to thank our shareholders for your confidence in Wärtsilä's future, our customers for your trust in our products and services, and the entire Wärtsilä personnel for your commitment towards reaching our common goals.

Jaakko Eskola President & CEO

#### **Key figures**

MEUR	2016	10-12/2016	7-9/2016	4-6/2016	1-3/2016	2015	2014
Net sales	4 801	1 559	1 079	1 196	967	5 029	4 779
Energy Solutions	943	414	177	220	132	1 126	1 138
Marine Solutions	1 667	509	390	433	335	1 720	1 702
Services	2 190	636	512	542	500	2 184	1 939
Depreciation, amortisation and impairment	-138	-34	-31	-42	-31	-124	-115
Comparable operating result <sup>1</sup>	583	253	123	122	84	612	569
Comparable operating result <sup>1</sup> , %	12.1	16.3	11.4	10.2	8.7	12.2	11.9
Profit before taxes	479	226	115	58	80	553	494
Earnings per share, EUR	1.79	0.87	0.43	0.19	0.30	2.25	1.76
Order intake	4 927	1 324	1 139	1 194	1 271	4 932	5 084

MEUR	2016	31.12.2016	30.9.2016	30.6.2016	31.3.2016	2015	2014
Balance sheet total	5 391	5 391	5 326	•	5 657	5 589	5 280
Interest-bearing liabilities, gross	629	629	735	881	1 088	724	666
Cash and cash equivalents	472	472	345	357	428	334	571
ROI, continuing operations, %	17.1	17.1	16.6	17.5	20.5	21.0	20.3
Gearing	0.07	0.07	0.18	0.25	0.32	0.17	0.05
Order book, end of period	4 696	4 696	5 024	5 083	5 103	4 882	4 530
Year-end market capitalisation	8 418	-	-	-	-	8 314	7 315
Personnel, number at end of period	18 011	18 011	18 337	18 428	18 427	18 856	17 717

<sup>&</sup>lt;sup>1</sup> Figures exclude items affecting comparability.

#### Wärtsilä in brief

Wärtsilä is a global leader in advanced technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers.

In 2016, Wärtsilä's net sales totalled EUR 4.8 billion with approximately 18,000 employees. The company has operations in over 200 locations in more than 70 countries around the world. Wärtsilä is listed on Nasdaq Helsinki.

#### **Energy Solutions**

Wärtsilä Energy Solutions is a leading global systems integrator offering a broad range of environmentally sound solutions. Wärtsilä supplies ultra-flexible internal combustion engine based power plants and utility-scale solar photovoltaic (PV) power plants, as well as liquefied natural gas (LNG) terminals and distribution systems. Its flexible and efficient solutions provide superior value to customers and enable a transition to a more sustainable and modern energy system. As of 2016, Wärtsilä had 63 GW of installed power plant capacity in 176 countries around the world.

#### **Marine Solutions**

Wärtsilä Marine Solutions enhances the business of its marine and oil & gas industry customers by providing innovative products and integrated solutions that are safe, environmentally sustainable, efficient, flexible, and economically sound. Being a technology leader, and through the experience, know-how, and dedication of our personnel, Wärtsilä is able to customise solutions that provide optimal benefits to its customers around the world.

#### **Services**

Wärtsilä Services supports its customers throughout the lifecycle of their installations by optimising efficiency and performance. The company's service network of approximately 11,000 professionals in 160 global locations is unmatched in the industry, delivering services to more than 12,000 customers every year. The portfolio of services – from spare parts to complete operational, maintenance, and optimisation services – is constantly being developed, not only to improve the availability of customers' installations, but to support them in growing their businesses. Wärtsilä is committed to providing high quality, expert support, and the availability of services in the most environmentally sound way possible, whenever, wherever.

## **Corporate strategy**

Wärtsilä aims at profitable growth by providing advanced technologies and lifecycle solutions to its marine and energy market customers.

Increasing environmental awareness and changing energy needs are affecting the way that our customers operate. With our integrated offering of services and products, we are well positioned today to respond to the need for energy efficient, innovative, and flexible solutions. We will meet the increasing demand for gas-based technologies with our industry-leading multiple fuel products and LNG solutions. Our objective is to leverage our project management and engineering competences to achieve growth by offering our customers new and innovative solutions. Our digital transformation will provide increased customer value and optimised performance. Our growth ambitions are supported by our superior global service network.

With our production and supply chain management, we constantly seek new ways to maintain high quality and cost efficiency – often in co-operation with leading industrial partners in our key growth markets. Our market driven investments in R&D and our focus on digitalisation create a strong foundation for securing and strengthening our position at the forefront of market innovation. This innovative culture, together with our constant emphasis on safety, diversity, and high ethical standards, attract skilled and committed people and provides the basis for a high performing organisation. Our entrepreneurial drive, customer focus, and passion for doing right not only create new opportunities and environmentally sustainable solutions, but also bring value to all our stakeholders.

#### **Sustainability**

Wärtsilä's aim is to meet shareholder expectations and contribute toward the well-being of society. This requires efficient, profitable, and competitive company operations. Good economic performance establishes a platform for the other aspects of sustainability – environmental and social responsibility.

Wärtsilä's overriding promise is to supply technologies and services that offer high efficiency with low environmental load. Our objective is to continuously improve the environmental performance of our products and services taking into account the lifecycle perspective, as well as to maintain technological leadership through R&D and by utilising new technologies and collaborating with our customers and other stakeholder groups. In doing this, we help our customers and society at large to meet the goals of the tightening global environmental regulations and guidelines.

Wärtsilä acts as a good corporate citizen wherever we are active. Our business operations and relations with our stakeholders are governed by our Code of Conduct. Wärtsilä is a responsible employer, and we seek to offer our employees an interesting and exciting workplace where openness, respect, trust, equal opportunities, and scope for personal development prevail. A further aim is to offer a hazard-free working environment to our employees and contractors, and to minimise the health and safety risks associated with the use of our products and services. Supply chain management and development are integral elements of our operations.

#### Vision, mission and values



#### Mission

We shape the marine and energy markets with advanced technologies and focus on lifecycle performance, to enhance our customers' business and benefit the environment.

#### Vision

We will be our customers' most valued business partner.

# **Financial targets**

### **NET SALES**

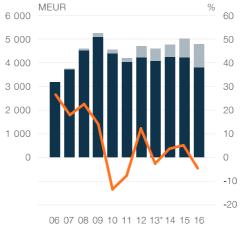
#### **TARGET**

Our target is to grow faster than global GDP.

#### **DEVELOPMENT**

In 2016, Wärtsilä's net sales decreased by 5% to EUR 4,801 million. Wärtsilä's CAGR 2006-2016 was 4.2%.

#### **Growth over the cycle**



-10

World nominal GDP growth 2006-2016 averages 3.8% USD denominated (source: IMF). \* Restated, figures include continuing operations.

Net sales Cumulative new acquisitions

Growth, % (incl. acquisitions)

#### **PROFITABILITY**

#### **TARGET**

Our operating profit margin (EBIT%) target is 14% at the peak of the cycle. At the trough of the cycle, our target is to keep the operating profit margin above 10%.

#### **DEVELOPMENT**

In 2016, our comparable operating result was EUR 583 million, 12.1% of net sales.

#### **Profitability**



Net sales

Comparable operating result, %

- \* Restated due to the revised IAS 19.
- \*\* Restated, figures include continuing operations.

### **CAPITAL STRUCTURE**

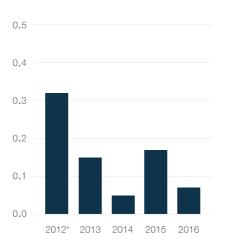
#### **TARGET**

Our target is to maintain gearing below 0.50.

#### DEVELOPMENT

In 2016, our gearing was 0.07.

#### Gearing



<sup>\*</sup> Restated due to the revised IAS 19.

### **DIVIDEND**

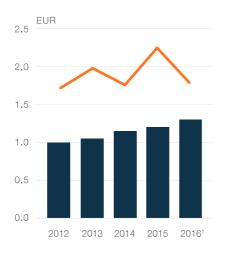
#### **TARGET**

Our target is to pay a dividend of at least 50% of earnings over the cycle.

#### **DEVELOPMENT**

The Board of Directors proposes that a dividend of 1.30 euro per share be paid for the financial year 2016, which represents 73% of operational earnings.

#### Earnings/share, dividend/share



Earnings/share

Dividend/share

<sup>1</sup> Proposal by the Board 2016.

# **Sustainability targets**

Target	Schedule	Status
EFFICIENCY COMMITMENT: Reduce energy consumption by at least 10% in terms of absolute consumption (GWh) by 2016, compared to mean energy consumption in 2005.	2016	By the end of 2016, energy savings of 43 GWh were reached, which represents 92% of the final target.
ENERGY SAVINGS: Reduce energy consumption by at least 7% in terms of absolute consumption (GWh) by 2025, compared to the energy consumption in 2015.	2025	New target
ETHICAL BEHAVIOR: Ensure commitment to the Code of Conduct throughout the organisation (Code of Conduct training coverage 100%).	2020	Training records are continuously monitored. At the end of 2016, 14,182 employees, covering 79% of the total number of employees, successfully participated in the renewed Code of Conduct training programme.
OCCUPATIONAL SAFETY: Reach the long-term goal for zero injuries.	2020	In 2016, the positive trend in improving, consolidating, and spreading a safety culture within Wärtsilä continued. The corporate lost-time injury frequency rate target for the year was 2.50, and the result of

		2.59 was slightly above this. However, the result represents a 9% improvement compared to the previous year's result (2.85). As a highlight, proactive near miss and hazard reporting increased by 46% in 2016 compared to 2015.
CLIMATE CHANGE: Prepare an analysis of the impact of the Paris Climate Change Agreement on Wärtsilä.	2018	During 2016, a project plan was prepared and a steering committee for the project established. Additionally, an update on the Paris Agreement and an analysis of the greenhouse gas reduction ambitions of key nations was conducted.
SUSTAINABLE POWER SYSTEMS: Contribute to the development of an affordable, reliable, sustainable, and modern power system worldwide.	2020	New target
SMALL-MEDIUM SCALE LNG SOLUTIONS: Become a global actor in the LNG value chain that develops opportunities, creates solutions, and builds infrastructure for clean-burning LNG to replace liquid fuel.	2020	New target

SOLAR AND HYBRID SOLUTIONS: Solar and solar hybrid power plants for cleaner energy and fuel savings. Delivery of 200 MW solar power by the end of 2018.	2018	New target
CLIMATE CHANGE: Reduce greenhouse gas (GHG) emissions from gas engines by 15% from 2015 to 2020.	2020	New target
DECARBONISATION OF TRANSPORT: Contribute to the development of more sustainable transportation through gas based and other technologies.	2020	New target
CLIMATE CHANGE: Reduce over 300,000 tons of annual CO <sub>2</sub> from vessels with the help of Eniram solutions.	2020	New target
WELL-BEING AT WORK - CAREER: Balance between external and internal recruitments: More than 50% of the open vacancies filled from internal applicant pool, including promotions and lateral moves.	2020	In 2016, 58% of open vacancies were filled through internal selections for job level 3 and up, and 42% through external selections.
PERSONNEL DEVELOPMENT: Development discussion coverage 100%.	2020	By the end of 2016, altogether 96% of the company's employees had completed development discussions.
DIVERSITY: Increase the share of female employees to 20%.	2020	New target

SUPPLIER LIFECYCLE MANAGEMENT: Risk-based supplier assessment and management process in use by 2018: Phase I: new suppliers by 2017 Phase II: existing suppliers by 2018	2018	During 2016, an overall supplier assessment process was defined for new suppliers and supplier lifecycle management. A self-assessment questionnaire was prepared and requirements for it clarified.
SUPPLIER MONITORING: Reach the following rating coverage of suppliers: 96% of direct supplier spend rated 65% of indirect supplier spend rated 75% of local supplier spend rated.	2020	In 2016, the target of rating 96% of direct supplier spend was achieved. The rating coverage of indirect supplier spend was 62% and 71% of local supplier spend.

## **Innovating for sustainability**

As a global leader in complete lifecycle solutions for the marine and energy markets, Wärtsilä plays a key role in providing environmentally sound solutions and services that enable its customers to develop their businesses in a sustainable way. This approach is the basis of the company's sustainability work and is supported by its strong commitment to responsible business conduct.

The growth in the world's energy needs, combined with increasingly stringent environmental requirements and the scarcity of natural resources, create a challenging operating climate for the marine and power sectors. To secure its leading position at the forefront of sustainable innovation, Wärtsilä continuously invests in technology development. Wärtsilä focuses on improving the energy efficiency of its products, while simultaneously striving to reduce their emissions. As part of its sustainable innovation approach, Wärtsilä also assesses the benefits that its solutions bring to, for example, power systems.

Innovation in product development and the willingness to explore new technologies is essential in order to meet the current customer needs, to be prepared for future requirements, and to remain an industrial frontrunner. Wärtsilä strives to develop environmentally sound products and solutions across a wide front, including technologies related to efficiency improvement, the reduction of gaseous and liquid emissions, waste reduction, noise abatement, as well as effluent and ballast water treatment. The company's proactive approach to meeting future demand has resulted in the development of both primary and secondary abatement technologies, and has broadened the range of usable fuels. Wärtsilä's commitment to invest in

research and product development benefits both its customers as well as the environment - in the short-term and over a longer time span.

The key features of Wärtsilä's environmentally sound solutions include:

- Reliability, safety, and long lifetime
- Solutions to reduce emissions
- Alternatives to heavy fuel oil
- Flexibility in fuel use
- Solutions to maximise efficiency with the lowest lifecycle cost
- Solutions to minimise water consumption
- Optimisation of vessel design and operations

By combining the key features and through understanding the system level benefits of its offering, Wärtsilä is able to provide solutions that enable the development of sustainable shipping and power systems.

#### **Sustainable innovations 2016**

Sustainable Power Systems	Wärtsilä contracted to supply a Smart Power Generation propane power plant to Honduras     Wärtsilä enters the solar energy business with its first solar energy project in Jordan     Wärtsilä contracted to supply a 225 MW Smart Power Generation plant to the City of Denton, US, helping to integrate renewable energy     Wärtsilä contracted to supply a 101 MW Smart Power Generation plant to Argentina     Wärtsilä to supply a flexible 100 MW combined heat and power plant to Germany
Improved performance through environmental solutions	Wärtsilä launches a new ferry concept featuring zero or low local emissions running on batteries Wärtsilä Ballast Water Management System chosen for the first time for a newbuild crane ship Wärtsilä provides an environmental seal system to a hydro plant in Nebraska World's largest cruise ship Harmony of the Seas, featuring Wärtsilä hybrid scrubber systems, was delivered from the yard Wärtsilä introduces a new water lubricated seal to increase the reliability of workboats while posing no risk of polluting the marine environment Wärtsilä launches energy-saving Wärtsilä EnergoProFin propeller cap, which increases efficiency of controllable and fixed pitch propellers
Flexibility in fuel use	<ul> <li>Wärtsilä delivers the Nordic countries' largest biogas plant to provide fuel for buses</li> <li>Wärtsilä contracted to power the first UK dual-fuel newbuild vessel</li> <li>Wärtsilä to supply a 135 MW Flexicycle (combined cycle) power plant to Lombok, Indonesia</li> </ul>
Solutions for the LNG value chain	<ul> <li>Wärtsilä delivers complete gas solutions for two Canadian RoPax ferries to be converted for LNG operation</li> <li>Wärtsilä contracted to supply a new LNG satellite terminal in Raahe, Finland</li> <li>Wärtsilä contracted to power the Mediterranean's first LNG powered passenger ferry aiming to be an eco-efficient smartship</li> <li>Wärtsilä was contracted to supply a biohybrid (liquefied biogas (bioLNG) and LNG) production plant to a German energy company</li> </ul>

# **Sustainability highlights**

Q 1



#### 12.1.

Wärtsilä contracted to enhance performance and environmental efficiency of a Mexican Flexicycle power plant.



#### 12.1.

At the Finnish Sports Gala, Wärtsilä and the Finnish organisation Crisis Management Initiative (CMI) present a special Sports Philanthropist award to Wilson Kipketer.



#### 13.1.

Wärtsilä launches a new ferry concept utilising batteries for power featuring zero or near zero local emissions.



#### 15.1.

Wärtsilä design chosen to enable environmentally sustainable krill fishing in Antarctic waters.



#### 19.1.

Wärtsilä 20DF engine attains a milestone 100 deliveries.



#### 25.1.

Wärtsilä and Cavotec initiate a co-operative effort to increase safety by developing the world's first combined wireless charging and mooring concept.



#### 9.2.

Wärtsilä's Sustainability Report 2015 published as a part of the company's Annual Report.



#### 9.2.

Wärtsilä's Ballast Water Management System chosen for the first time for installation in a newbuild crane ship.



#### 10.2.

Wärtsilä dual-fuel engines ordered to power 16 Japanese gas carriers.









**Q2** 

#### 3.3.

Wärtsilä introduces Lifecycle solutions: an innovative, comprehensive offering that optimises the efficiency and performance of marine and offshore customers' assets.

#### 10.3.

Global Wärtsilä Safety Day 2016 with the theme 'Safe by Choice'.

#### 15.3.

Wärtsilä contracted to supply a Smart Power Generation propane fuelled power plant to Honduras.

#### 17.3.

Wärtsilä to deliver the Nordic countries' largest biogas plant to provide fuel for buses.











#### 11.4.

Wärtsilä to deliver complete gas solutions for converting two Canadian RoPax ferries to LNG operation.

#### 14.4.

The Wärtsilä 31 engine wins the European Marine Engineering Conference's Marine Engines Award.

#### 21.4.

Wärtsilä enters the solar energy business by offering utility-scale solar photo-voltaic (PV) solutions.

#### 9.5.

Wärtsilä contracted to power the UK's first dual-fuel newbuild vessels.

#### 10.5.

Wärtsilä participates in a shipping industry project to develop a concept for equipping future dry bulk carrier vessels with LNG propulsion.







**Q**3

#### 12.5.

The world's largest cruise ship, the Harmony of the Seas, featuring Wärtsilä hybrid scrubber systems, is delivered from the yard.

#### 27.5.

Wärtsilä donates an 8-cylinder Wärtsilä 20 engine to the Technology Department at Texas A&M University at Galveston.

#### 6.6.

Design and technical aspects of the world's first LNG-powered icebreaker Polaris presented at CIMAC, the International Council on Combustion Engines.

#### 10.6.

Wärtsilä to help in reducing lifecycle costs by providing an environmental seal system to a hydro plant in Nebraska, USA.









#### 1.7.

Wärtsilä enhances its digital offering by acquiring Eniram, a Finlandbased technology company providing the marine industry with energy management and analytics solutions.

#### 13.7.

Wärtsilä participates in the SEA/LNG coalition with other leading marine players to promote LNG as a marine fuel.

#### 22.7.

Renewed Wärtsilä Code of Conduct e-learning course launched for all employees.

#### 25.7.

The Great Place to Work® Institute elects Wärtsilä Brazil as one of the best companies to work for in Rio de Janeiro.

#### 26.8.

 $2\ \mbox{million}$  work hours without lost time injuries is achieved at the Musandam power plant in Oman.









#### 29.8.

Wärtsilä and Gasum sign a co-operation agreement aimed at developing future LNG markets.

#### 1.9.

Wärtsilä is contracted to supply a new LNG satellite terminal in Raahe, Finland.

#### **5.9.**

Wärtsilä donates EUR 1.3 million to Finnish universities.

#### 9.9.

Wärtsilä included in the Dow Jones Sustainability Index.

#### 21.9.

Wärtsilä contracted to supply a 225 MW Smart Power Generation plant to the City of Denton, USA, thus helping the city to integrate renewable energy into its energy system.





#### 28.9.

The world's first LNG-powered icebreaker Polaris delivered to customer, featuring Wärtsilä dual-fuel engines.

#### 29.9.

Wärtsilä donates a rainwater collection system to a primary school in South-Sudan through Finn Church Aid.





#### 14.10.

Wärtsilä contracted to power the Mediterranean's first LNG-powered eco-efficient passenger ferry.

#### 20.10.

Wärtsilä signs up to the IMO's initiative to support emission reduction efforts in the shipping industry.











#### 21.10.

Wärtsilä selected to the Ethibel PIONEER Investment Register.

#### 25.10.

Seals & Bearings Sweden goes over 1.000 days without lost-time injuries.

#### 31.10.

The Wärtsilä Sternguard In-Water Serviceable Seal triumphs at the Seatrade Maritime and Ship Efficiency Award ceremonies.

#### 3.11.

Wärtsilä and IDRO sign co-operation agreement to develop power generation in Iran.

#### 21.11.

Wärtsilä contracted to supply a 101 MW Smart Power Generation plant to Argentina.







#### 1.12.

Wärtsilä complements its range of environmental solutions by offering dry waste treatment for cruise ships.

#### 9.12.

Wärtsilä included in the Euronext Vigeo index Eurozone 120.

#### 20.12.

Wärtsilä contracted to supply Germany with groundbreaking biohybrid plant to produce both bioLNG and LNG.

# **Energy Solutions review**

Wärtsilä Energy Solutions is a leading global system integrator offering ultra-flexible internal combustion engine based power plants and utility-scale solar PV power plants, as well as LNG terminals and distribution systems. Its flexible, efficient and environmentally advanced solutions provide superior value to customers and enable a transition to a more sustainable and modern energy system.

#### Wärtsilä serves three main customer segments

Wärtsilä's three main customer segments are Utilities, Independent Power Producers (IPPs), and Industrial customers.

Utilities supply electricity and gas to residential, commercial, and industrial end users. They invest in gas infrastructure projects and various types of power plants to ensure adequate load coverage and the right palette of cost-effective and reliable products and services for their customers.

IPP's are financial investors investing in the gas infrastructure, power plants, and in selling the generated power to utilities. Their investments are return driven, and as with utilities, their technical requirements are dependent on the type of application.

Industrial customers are mainly private companies with energy intensive production operations, such as cement or mining facilities. By investing in captive power, they can achieve lower energy costs and compensate for any grid reliability problems so as to ensure security of supply. Wärtsilä serves the top end of this customer group, i.e. large industries requiring a relatively high electrical load.

#### Focus on flexibility

Wärtsilä's engine based power plants are used for a wide variety of applications. These include base load generation, capacity for grid stability, peaking and load-following generation, and back-up power for the integration of wind and solar energy.

Wärtsilä's power plant solutions are tailored according to the specific requirements of its customers, utilising modular products and services. The delivery scope ranges from equipment deliveries to complete turnkey power plants, all of which are supported by Wärtsilä's superior project management capabilities. Wärtsilä also provides financial services to help customers arrange financing and assemble complex projects, as well as a broad offering of services to support them through the lifecycle of their installations.

The fuel flexibility of Wärtsilä's solutions enables the choice and utilisation of the most feasible fuels, including natural gas and many other gases, as well as most fuel oils. The customer can also choose to run their plant on multiple fuels.

The increasing level of renewable energy sources in many power systems has created a rapidly growing need for greater flexibility. Gas fuelled power plants are the most flexible and environmentally sound alternative for balancing the variability of these renewable sources. Smart Power Generation power plants provide the best means of support to the power system by offering the highest degree of flexibility, by enabling major savings, and by creating an optimised response to rapid changes in variable generation.

#### Growth through LNG, solar and system integration

The replacement of carbon-intensive energy sources with low carbon fuels, such as natural gas and renewable source solutions, presents Wärtsilä with many opportunities for growth.

As a forerunner in gas and multi-fuel engines, fuel systems, technology and services, Wärtsilä also participates in the global shift to gas with LNG infrastructure projects. The company provides a full range of

project and lifecycle support services, from small and medium scale LNG liquefaction plants and terminals, to the delivery of complete Equipment, Procurement and Construction (EPC) projects worldwide. Wärtsilä has the capability, in partnership with its customers, to develop the entire LNG value chain. When providing a complete turnkey solution, an LNG terminal can be integrated with a Smart Power Generation power plant, thereby utilising gas as fuel in places where gas was not earlier available.

Responding to customer interest in increasing the share of renewables within the energy mix, in early 2016 Wärtsilä became the first company in the world to offer utility-scale hybrid power plants that unite large fuel-based power stations with utility-scale solar PV power plants. Wärtsilä's hybrid solutions are provided on an EPC basis, with solar PV modules sourced from leading module suppliers. Engine-solar hybrids are all about saving fuel, which results in lifecycle cost savings and environmental benefits. The two assets are optimised in such a way that solar energy is automatically utilised to the maximum, with the engines providing a secondary source of generation. The solar hybrid plant can be either a new build or retrofit project. For new build projects, the Smart Power Generation power plant and the adjacent solar asset are integrated and optimised, in terms of both the investment and lifecycle points of view. Thus, more customer value is provided as compared to building two separate power plants. In a retrofit project, solar modules are combined with an existing plant delivered by Wärtsilä.

Co-operating with leading energy storage software and integration service providers has enabled Wärtsilä to further strengthen its energy system integration capabilities. As a combined solution, Wärtsilä's Smart Power Generation, solar PV and energy storage, together with its integration capabilities, decades-long experience in delivering complex turnkey engine power plants and a wide palette of services, will provide sustainable, reliable, and affordable power — particularly in countries and regions with isolated or weak electricity grids.

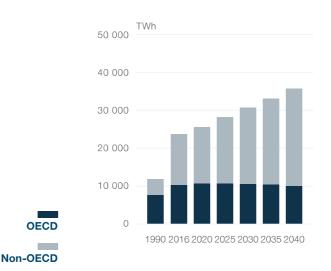
## **Energy Solutions' operating environment**

The main drivers for Wärtsilä's Energy Solutions business are:

- Economic growth, electrification and improving standards of living
- · Growth in sustainable energy, reducing carbon emissions
- Rapid growth of intermittent renewable generation and escalating demand fluctuation
- Replacement of other fossil fuels with natural gas
- Ageing installed capacity driving investments in new technologies

Economic growth, improving standards of living, and consequential electrification are jointly resulting in an increase in electricity consumption in non-OECD countries. The demand for flexible base load power plants, as well as for industrial self-generation, is being driven by the price of electricity purchased from the grid, and by fuel price developments. With the introduction of gas supply networks to the emerging markets, the demand for gas and dual-fuel driven power plants is increasing, and Wärtsilä has a leading position in these markets.

#### Final electricity generation by region

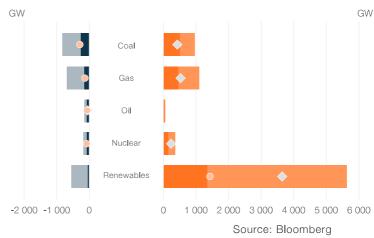


Source: Bloomberg New Energy Outlook 2016

In the OECD countries, tightening emissions legislation is forcing the closure of ageing capacity, which in turn drives the demand for new investments. Another driver is the political emphasis towards low carbon power systems, which is resulting in rapidly increasing levels of renewable generation. This has already created a substantial need to add flexibility to power systems. Wärtsilä's Smart Power Generation power plants represent the most efficient solution for providing back-up support to variable renewable generation, and enabling the transition to a sustainable, reliable, and affordable low carbon power system.

#### Global power generation capacity, retirements and additions





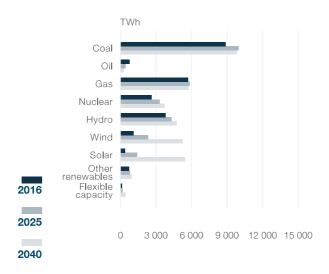
Source: Bloomberg New Energy Outlook 2016

#### Share of renewables in electricity generation by region



Source: Bloomberg New Energy Outlook 2016

#### World electricity generation by type



Source: Bloomberg New Energy Outlook 2016

#### **Energy Solutions' competition**

In larger gas-fired projects, Wärtsilä is facing competition from gas turbine manufacturers, such as GE and Siemens. In smaller gas power plant projects, and in the heavy fuel oil power plant market, the competitors are mainly other combustion engine suppliers, such as MAN Diesel & Turbo, GE Jenbacher, Caterpillar (MAK), and Rolls-Royce.

When competing against gas turbines, Wärtsilä's combination of competitive efficiency, greater fuel flexibility, and superior operational flexibility enables the presentation of better value propositions and business cases to many customer projects. Wärtsilä's systematic market development is shaping the energy sector by utilising a value based market approach, which builds on monetising the benefits of Smart Power Generation.

Wärtsilä's advanced gas and dual-fuel engine technology, optimised modular power plants, superior project management capabilities, and the global service support provided throughout the lifecycle of installations, have led to Wärtsilä's market leading position in the gas and liquid fuel combustion engine power plant markets.

In the utility scale solar PV business, independent, regional, and local EPC companies are the main competitors. The competition in LNG infrastructure projects comes mainly from contracting companies.

#### Wärtsilä is well positioned in the gas and liquid fuelled power generation market

1-9/2016 market <500MW 17.4 GW (17.0)

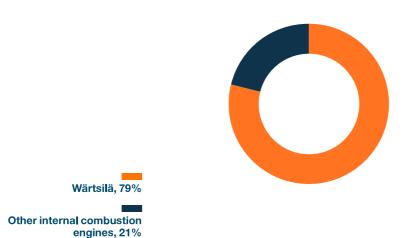




Market data includes all Wärtsilä power plants and other manufacturers' gas and liquid fueled turbine based power plants with prime movers above 5MW, as well as the estimated output of steam turbines for combined cycles. The data is gathered from the McCoy Power Report. Other combustion engines not included. In engine technology Wärtsilä has a leading position.

#### Wärtsilä is the market leader in engine power plants

3.084 MW in 2015



# **Energy Solutions' strategy**

Wärtsilä Energy Solutions' mission is to provide superior value to its customers with distributed, flexible, efficient, and environmentally advanced energy solutions, which enable a global transition to a more sustainable and modern energy infrastructure. The aim is that customers recognise Wärtsilä as being the world's best energy solution provider.

Wärtsilä is focused on capturing growth through global system integrator capabilities by offering solutions in the following segments:

- Engine Power Plants Power generation solutions with a unique combination of energy efficiency, fuel flexibility and operational flexibility
- · LNG Solutions Small and medium sized LNG terminals and liquefaction solutions with EPC delivery
- Solar Power Plants Solar PV, energy storage and hybrid solutions

In the Engine Power Plants segment, Wärtsilä aims at becoming a globally recognised leader in liquid fuel and gas power plants by offering Smart Power Generation solutions to customers in the utility, IPP, and industrial segments. Value propositions will continue to be enhanced by developing new solutions emphasising energy efficiency, fuel flexibility and operational flexibility.

In the LNG solutions segment, Wärtsilä seeks growth in small to medium scale LNG terminals and liquefaction solutions by introducing new value propositions to selected markets. By entering the solar PV power plant segment, Wärtsilä will provide customers with turnkey solar PV solutions. The company's hybrid solutions provide an integrated solution for balancing variable solar power production.

Wärtsilä's value propositions are based on customised solutions with guaranteed performance, one-stop-shop project services, and lifecycle commitment through long-term operation and maintenance agreements. Modularity and repeatability are key enablers for ensuring cost competitive solutions.

## **Energy Solutions and sustainability**

The development of a more sustainable energy infrastructure is being driven by climate policies, energy security, and economics. Carbon-intensive energy sources are being replaced by low carbon fuels, such as natural gas and renewable source solutions. Energy savings and efficiency improvements are encouraged, and even legally enforced, at every level. This development is evident on a global scale, even though short-term actions can vary in different regions.

In line with its commitment to sustainability and responsible business conduct, Wärtsilä has taken an active role in the development of markets and solutions. This includes advising national decision makers on changes in the power markets and on relevant technical and commercial norms. In this way, Wärtsilä helps and enables the transition to more sustainable power systems. Wärtsilä strives to maintain a deep understanding of market requirements and drivers, and to develop its solutions in a way that enables them to contribute effectively to improved energy system performance in the various regions of the world.

Wärtsilä's solutions for the energy sector offer a unique combination of flexibility, high efficiency, and low emissions. Many different fuels, including bio-fuels, can be used efficiently, which helps reduce greenhouse gas emissions. Wärtsilä's Smart Power Generation technology enables the development of a reliable energy infrastructure, wherein most of the sustainable characteristics are already known. Moreover, integrating more wind and solar energy with flexible back-up capacity has great potential for reducing carbon emissions.

#### **Towards sustainable power systems**

The effects of climate change require a dramatic decrease in coal based power generation and a major increase in low carbon power generation, including wind, solar, and natural gas fired plants. In modern power systems, the majority of the electricity generated will be from wind and solar power, while thermal power generation will be increasingly used for system balancing and back-up. The inherent variability of renewable energy generation requires the balancing and back-up power to be flexible and dynamic. Current and earlier power systems were not designed for this purpose, and in order to meet the required capacity, new flexible power generation assets need to be added to the system. Such flexible capacity is based on three elements: operational flexibility, energy efficiency, and fuel flexibility.

**Operational flexibility** is needed for reacting to the rapid changes in wind and solar output and for sudden power system disturbances. Power plant requirements include the following features:

- Frequent and fast starts and stops without negative wear and tear consequences
- Cyclic operation with high up and down ramp rates
- High full and part load efficiency
- A broad load range
- Minimal CO<sub>2</sub> emissions.

**Energy efficiency** means that less fuel is needed to generate electricity. In combined heat and power generation, energy efficiency can be significantly improved. Lower fuel consumption results in lower CO<sub>2</sub> levels in power generation.

**Fuel flexibility** enables the transition to more sustainable fuels whenever they become available. This feature becomes increasingly important when investing in new power capacity, because the plant is not fixed to any particular fuel where more sustainable fuels may be available in the future.

These three elements form the cornerstones of the Smart Power Generation technology. It enables maximised utilisation of valuable renewable power, the smooth operation of non-flexible base load thermal power plants and, according to the results from future power system modelling, also enables dramatic reductions in system level CO<sub>2</sub> emissions.

- Wärtsilä's Smart Power Generation power plants allow true operational optimisation of the entire energy system in an affordable, reliable, and sustainable way, and offer benefits that include:
  - The achievement of extremely low carbon emissions from the entire power system
  - Enabling of the highest penetration of wind and solar power capacity without related balancing problems
  - Enabling baseload plants to operate at high output and efficiency, thereby lowering CO<sub>2</sub> levels
  - Enabling wind curtailment to be minimised while helping to avoid negative price developments
  - · Reducing the amount of spinning reserve required
  - Enabling the efficient use of bio gas- and liquid bio-fuel resources.
- By allowing the entire system to operate in the most cost effective way they:
  - Remove the abusive cyclic load from plants that are not designed for it, thereby enabling them to operate in their most cost-effective way
  - Provide high efficiency over a wide load range, thus enabling flexible power plants to operate in the most cost effective way.
- They ensure system reliability, even during extreme conditions, such as wind variations and contingency situations.
- They enable decentralisation of the intermediate and peak load capacity with:
  - Flexible plant sizing that facilitates later expansions to match local needs
  - The installation of generating capacity in load pockets to reduce grid losses while helping to avoid investments in new high voltage grid expansions
  - Fast track delivery that enables local capacity deficits to be rapidly overcome.

### **Marine Solutions review**

Wärtsilä Marine Solutions has a strong position in the marine and oil & gas industries, providing solutions that are optimised, and environmentally and economically sound to enhance the business of its customers. Wärtsilä's reputation is based on an in-depth understanding of its customers' businesses, its design capabilities, a broad product portfolio, and technological leadership. The organisation is structured into end-to-end business lines with full control over sales, R&D, engineering, procurement, and manufacturing. This enables increased flexibility, fast decision-making, and the optimal utilisation of resources to provide superior customer service.

#### Serving both shipyards and ship owners

Wärtsilä's marine customers comprise both shipyards and ship owners; the needs and demands of which differ significantly. The decision-making process of shipyard customers is typically affected by product prices, delivery times and reliability, project management, ease of installation, and the supplier's ability to manage large delivery scopes. Ship owners, on the other hand, require safe and efficient operations, reliability and support, as well as the availability of services. Their decision-making is also impacted by freight rates, interest rates, and the capital and operating costs of the ship. Furthermore, both ship owners and operators are increasingly considering other factors, such as environmental compliance and fuel flexibility in their decision-making.

Wärtsilä is committed to meeting the needs of both customer groups. Success is achieved through a comprehensive understanding of their businesses, operating models, and requirements. This understanding is backed by an extensive network, a broad product portfolio, and the ability to be involved in the life of the vessel as early as the design process. This enables Wärtsilä to support its customers throughout the lifecycle of their installations with products and solutions that best serve their business interests.

#### The broadest offering in the industry

Wärtsilä Marine Solutions is active in all the main vessel segments with a broad range of products, services, and solutions. The company understands the particular needs and requirements related to each of these segments – from the initial vessel design choices to everyday operations throughout the vessel's lifecycle. Wärtsilä's portfolio also covers gas systems for land-based installations, such as gas terminals. Innovative and competitive products, delivered efficiently and with high quality, form the basis of Wärtsilä's offering, which consists of:

- · Medium-speed diesel and dual-fuel engines
- Propulsion systems and gears
- Seals and bearings
- · Navigation and automation systems
- Entertainment systems
- Communication and control systems
- Power distribution and management systems
- Electrical design for complex vessels
- Energy management system and hybrid solutions
- · Environmental solutions, including e.g. exhaust gas cleaning and ballast water management systems
- Pumps and valves
- Gas systems, including LNG and LPG handling, inert gas systems, compressors, liquefaction, regasification, and equipment for small-to-medium scale onshore gas installations
- Ship design.

The ability to combine the products offered into larger systems and solutions supports Wärtsilä's strategy of being the main solutions provider to its customers. This strategy provides added value to both shipyards and

ship owners. Shipyard customers can focus on their areas of expertise and benefit from reduced risks of product interface problems, while ship owners can rely on operational and maintenance benefits.

Segment	Vessel type	Main offering
Merchant	Gas carriers	4-stroke dual-fuel engines, auxiliary engines, controllable pitch propellers (CPP), gearboxes, tunnel thrusters, environmental solutions
	Tankers, containers, bulkers	Auxiliary engines, fixed pitch propellers (FPP), tunnel thrusters, 4-stroke engines for smaller vessels, navigation and automation systems, electric power distribution, environmental solutions
	Other: cargo, RoRo, car carriers	All of the above
Offshore	Floating exploration: drillships, semi-submersibles, etc.	4-stroke engines, steerable thrusters, tunnel thrusters, vessel automation systems, electric power distribution, gearboxes, environmental solutions
	Floating production units: FPSO's, FSO's, floating LNG, etc.	4-stroke engines, steerable thrusters, tunnel thrusters, CPP, vessel automation systems, electric power distribution, gearboxes, environmental solutions
	Service/Supply vessels: OSV's, PSV's, AHTS, AHS	4-stroke engines, steerable thrusters, tunnel thrusters, CPP, electrical propulsion systems, ship design, automation systems, gearboxes, environmental solutions
	Other: crane vessels, pipelayers, accommodation vessels	All of the above
Cruise and Ferry	Cruise vessels	4-stroke engines, FPP, tunnel thrusters, navigation, entertainment and automation systems, electric propulsion and power distribution, environmental solutions
	Ferries	4-stroke engines, CPP, FPP, steerable thrusters, tunnel thrusters, navigation, entertainment and automation systems, electric propulsion and power distribution, environmental solutions
	Other: ro-pax, yachts	All of the above
Special vessels	Tugs	4-stroke engines, FPP, steerable thrusters, tunnel thrusters, vessel automation systems, ship design, environmental solutions

	Dredgers	4-stroke engines, CPP, FPP, steerable thrusters, tunnel thrusters, vessel automation systems, environmental solutions
	Other: fishing vessels, ice breakers, research vessels, work boats, inland waterway vessels	All of the above
Navy	Frigates, corvettes, patrol vessels, aircraft carriers, destroyers, submarines, support vessels	Waterjets, seals and bearings, tunnel thrusters, 4-stroke engines, navigation and automation systems, electric propulsion and power distribution, underwater communication, sonar systems, environmental solutions

#### Growth through gas, environmental solutions, and vessel efficiency

Wärtsilä Marine Solutions is uniquely positioned for growth driven by the increasing availability and use of gas as a marine fuel, the introduction of new environmental regulations, and the increased demand for more efficient vessels.

Stricter environmental regulations are driving the interest in gas as a marine fuel, as well as in emissions abatement technologies, such as exhaust gas cleaning and ballast water treatment systems. Marine Solutions offers its customers alternative solutions for meeting these requirements in a way that best meets the needs of their businesses and operating models, both as part of new build projects and as retrofits to vessels already in operation.

Wärtsilä has a strong position in exhaust gas cleaning systems, with the most extensive reference list on the market. Today, the portfolio of SO<sub>X</sub> scrubber systems is the broadest in the industry and consists of closed loop systems for fresh water use, open loop systems for seawater use, and a combination of the two, i.e. the hybrid system. Wärtsilä was the first manufacturer to have been awarded the International Maritime Organisation's certificate for exhaust gas cleaning systems by the classification societies Det Norske Veritas, Germanischer Lloyd, and Bureau Veritas. During 2016, the Singapore flag state authorities approved Wärtsilä's exhaust gas cleaning systems, making it the first systems to be approved by an Asian flag authority. For NO<sub>X</sub> reduction and IMO Tier III compliance, Wärtsilä provides its customers with products based on selective catalytic reduction (SCR) technology. For ballast water treatment, customers can select systems utilising the two most common technologies: ultraviolet treatment and electro-chlorination. Both BWMS systems are IMO Type Approved, are available for both safe and hazardous area installation, and have US Coast Guard (USCG) AMS status. Full USCG Type Approval will follow in 2017 and, together with the Wärtsilä global lifecycle support network, this offering makes Wärtsilä a partner of choice for all BWMS needs.

Wärtsilä was also the first company to introduce dual-fuel engines to the shipping sector, thereby facilitating the use of liquefied natural gas (LNG) as a marine fuel. Since LNG contains no sulphur, there is an increasing trend towards the use of LNG fuel as a viable means of complying with the sulphur cap requirements.

Efficiency has become one of the top concerns for ship owners and operators. Wärtsilä's in-depth expertise and system skills help to optimise the efficiency of vessels, and make it possible for customers to achieve the performance, cost, and environmental compliance parameters that specifically match their operating profile.

## Marine Solutions' operating environment

Wärtsilä Marine Solutions serves the marine and oil & gas industries. The main vessel segments covered in the marine industry are traditional merchant vessels, gas carriers, cruise & ferry, navy, and special vessels. In the oil & gas industry, Wärtsilä is active in serving offshore installations and related industry vessels, as well as land-based gas installations.

### General shipbuilding and shipping market drivers

The global demand for new vessels in the shipbuilding and shipping industries is mainly driven by developments within the global economy and the resulting impact on trade and transportation capacity requirements. The global economy also influences fuel prices, which in turn have both a direct and an indirect impact on the marine and oil & gas industries. The price, availability, and demand drives development in the oil & gas industry, while in the general shipping industry, fuel costs increase the demand for more efficient vessels. Other factors, such as shipyard capacity, newbuild prices, decommissioning and scrapping, as well as interest and freight rates, also affect these industries. Another important driver is the development of environmental regulations and their impact on the demand for optimised vessel efficiency, environmental solutions, and gas as a marine fuel.

### Main drivers for Wärtsilä's Marine Solutions business

- Developments in the global economy
- Development of world trade and needed transportation capacity
- · Global energy demand growth
- · Development of oil and gas prices
- Development of oil & gas fields and infrastructures
- Environmental regulations
- Technological developments and innovations

### **Competitors and market position**

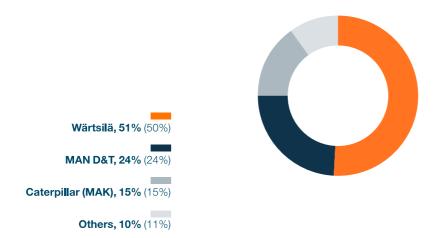
Wärtsilä Marine Solutions has continuously broadened its portfolio, which today ranges from engines and propulsion equipment to electrical equipment, automation, ship design, environmental solutions, gas systems, and pumps and valves. This is backed by the capability to build environmentally sound solutions, and by superior service support throughout the lifecycle of the product. Wärtsilä's competitive advantage lies in having the industry's broadest marine focused offering comprised of leading, innovative products, integrated systems, and engineering, which is supported by a unique sales and service network in touch with customers globally.

The field of competitors is extensive. It includes engine companies, such as MAN D&T and Caterpillar, propeller makers such as Schottel and Thrustmaster, and environmental and auxiliary equipment providers like Alfa Laval. It also includes electrical and automation houses, notably Siemens, GE, ABB, and Kongsberg, pump and gas system providers, such as TGE Marine and Framo, and companies with broad offerings such as Rolls-Royce. Wärtsilä is recognised as a proven supplier of innovative and sustainable technologies across its portfolio serving the marine and oil & gas markets.

Wärtsilä's offering	Main application	Main competition	Wärtsilä's market position
4-stroke main engines	Small merchant vessels, offshore, special vessels	MAN D&T, MAK (CAT)	51% of the market (in kW) is controlled by Wärtsilä.
4-stroke auxiliary generating sets	All vessel types	The market is highly fragmented, price sensitive, and with heavy competition. The main competitors are MAN D&T and its local license manufacturers, Yanmar and HiMSEN. High-speed engines also compete in the auxiliary engine market.	Wärtsilä's market share is 18%.
<ul> <li>Propulsion</li> <li>Controllable Pitch Propellers (CPP)</li> <li>Fixed Pitch Propellers (FPP)</li> <li>Steerable thrusters</li> <li>Tunnel thrusters</li> </ul>	All vessel types	Rolls-Royce, Schottel, Voith, Mecklenburger Metallguss, Thrustmaster, Brunvoll, Kawasaki, Caterpillar (Berg Propulsion)	CPP & FPP: fragmented market, in which Wärtsilä is among the top players. Steerable thrusters: Wärtsilä is among the top players. Tunnel thrusters: a highly fragmented market in which Wärtsilä is a market challenger.
Electrical & Automation  Ship automation systems  Navigation and electrical systems  Dynamic positioning technology  Integrated bridge solutions  Entertainment systems  Electric propulsion  Power distribution  Sonar systems  Underwater communication	Cruise, cargo, offshore, special vessels, navy	ABB, Siemens, Kongsberg, Rolls-Royce, GE	Navigation and automation leader in the cruise and large cargo segments, and an established position in the offshore markets.
Ship design	OSV's, merchant vessels, specialised vessels, fishing vessels	Skipsteknisk, Marinteknikk, MMC, Rolls-Royce, Ulstein, Vard	Among the leading independent ship design houses.

<ul> <li>Oil &amp; Gas systems</li> <li>Mobile LNG (barge) offering</li> <li>Regasification systems</li> <li>Gas reliquefaction systems</li> <li>Onshore gas liquefaction systems</li> <li>Gas recovery systems</li> <li>Oil separation systems</li> <li>Fuel gas systems</li> </ul>	Offshore gas processing & storage vessels, LNG/ LEG/LPG carriers, floating production systems, industry applications, fuel gas systems for all vessel types	TGE Marine, Linde, Babcock LGE, Daewoo Shipbuilding & Marine Engineering, Samsung Heavy Industries, Cryonorm, John Zink, Air Liquide	Wärtsilä is among the top players.
Pumps and valves     Deepwell cargo pumps     Pump room systems     Engine room pumps     Fire-fighting systems     Valves	All vessel types, on- and offshore oil & gas facilities	Marflex, Framo, Hyundai Heavy Industries, Shinko, Allweiler, Desmi, Ellehammer	Wärtsilä is among the top players.
Environmental solutions  Exhaust gas cleaning  Ballast water management systems  Inert gas systems  Water production systems  Water treatment systems	All vessel types	Alfa Laval, Yara, Techcross, Panasia, Evac, GEA Westfalia, Hug Engineering	Wärtsilä is among the top players.

### Market position of medium-speed main engines



Wärtsilä's market shares are calculated on a 12-month rolling basis, numbers in brackets are from the end of the previous quarter. The calculation is based on Wärtsilä's own data portal.

## **Marine Solutions' strategy**

The strategic goal of Wärtsilä Marine Solutions is to be the leading provider of innovative products and integrated solutions to the marine and oil & gas industries. To achieve this, the aim is to build on a deep understanding of the customers' needs and:

- Solidify Wärtsilä's leading position in solutions for gas fuelled vessels, environmental compliance, and efficiency optimisation
- Further develop Wärtsilä's position as the shipbuilding industry's leading systems integrator
- Provide a competitive offering of products for the growing needs of the marine and oil & gas markets
- Seek further growth through the ability to offer customers the most efficient lifecycle solutions.

Wärtsilä is uniquely positioned as the industry's only true provider of a total marine offering. The extensive range of products is supported by world-class ship design, engineering, and project delivery capabilities, all of which facilitate the provision of solutions that optimise the lifecycle value of customer installations. As a solutions provider, Wärtsilä is ready to deliver everything from a single product to complete lifecycle support of complex systems for powering ships; from concept development to operational use.

Important mid-term growth opportunities are envisioned in solutions for gas-fuelled vessels, environmental compliance, and efficiency optimisation. Wärtsilä is well positioned in these areas, having the most extensive experience and an unrivalled track record in delivering gas engines, a unique portfolio of products for emissions control and abatement, and a holistic approach to ship-level efficiency optimisation through the company's engineering and ship design capabilities.

Wärtsilä Marine Solutions seeks organic growth that will be supported by targeted acquisitions and partnerships. The offering of innovative and competitive products is developed and delivered based on the requirements of the various customer segments and the operating profiles of their vessels. Together with the Services business, Wärtsilä Marine Solutions offers ship owners and operators integrated lifecycle solutions with guaranteed performance and availability. Wärtsilä will maintain its position as the shipbuilding industry's leading systems integrator, and will further strengthen its already strong foothold in the oil & gas business.

Finally, the company will invest further in strengthening its presence and maximising the efficiency of its supply chain, engineering and sales, especially in the key shipbuilding areas, notably China and South Korea.

### **Marine Solutions' strengths**

- The broadest portfolio of reliable and high performing products and solutions in the marine and offshore oil & gas industries, supported by the industry's strongest global service network
- An unmatched track record in providing gas fuelled vessels with dual-fuel technology and gas systems
- The most comprehensive selection of options for meeting the needs of customers concerning fuel flexibility, efficiency, and environmental requirements
- A strong position and good customer understanding in navigation and automation systems for cruise and large cargo vessels
- A unique synergy between ship design and engineering capabilities enabling the maximisation of a vessel's
  efficiency throughout its lifecycle
- A strong presence in all the major marine and offshore oil & gas segments, thereby allowing shipbuilding cycles to be navigated.

## **Marine Solutions and sustainability**

The marine and oil & gas industries are at the centre of converging megatrends, namely a move towards a more diverse and cleaner energy mix, decarbonisation, increased transparency and accountability with regards to environmental performance, and a need to improve economic performance despite uncertainties in the global economy. For Wärtsilä it is clear that improved sustainability is central to addressing all these trends.

Wärtsilä is committed to becoming the most valued business partner to its customers. Thus, it is essential for Marine Solutions to have sustainability at the very core of its product and solutions development. The company's R&D and business development activities are based on a deep understanding of how these megatrends affect customers. The expansion and development of Wärtsilä's offering to the marine and oil & gas industries over the years demonstrates the response made to the needs of its customers. Gas, environmental compliance, and efficiency are the three pillars on which Marine Solutions builds its offering.

### The shift towards natural gas

The global energy landscape is shifting towards a more diverse and sustainable energy mix, and natural gas – the cleanest fossil fuel – has a key role to play in this transition. During recent years, along with the increase in supply of natural gas, the oil & gas industry has seen a dramatic rise in demand. The marine industry is also affected by this transition, with interest in the use of gas as a marine fuel rising sharply.

Wärtsilä develops products and services that enable the safe use, handling, and distribution of natural gas for the marine and oil & gas industries. Wärtsilä is the marine industry's undisputed leader when it comes to gasfuelled propulsion, with dual-fuel medium-speed engines ordered for more than 300 vessels, and more than 19,000,000 running hours having been accumulated in both land-based and marine applications. These milestones represent achievements that cannot be matched today by any other engine manufacturer. Thanks to a strong and safe track record in the use of gas as a marine fuel for LNG carriers, the industry is increasingly keen on expanding the use of LNG to other vessel types.

The benefits of using Wärtsilä's well proven low-pressure dual-fuel technology are many:

- Emission reductions (when operating in gas mode): 85% less NO<sub>X</sub>, 99% less SO<sub>X</sub>, up to 99% reduction in particulates, 20-30% less CO<sub>2</sub> emissions, and no smoke
- Fuel flexibility to enhance operational security and competitiveness, with the use of heavy fuel oil, marine diesel oil, bio fuels, and crude oil possible

- Capital expenditure reductions of 15-20%, since the use of low pressure technology means simpler (lower cost) gas handling systems, and no need for further exhaust gas cleaning systems
- Reduced waste streams (liquid waste)
- No need to use secondary emission reduction systems (and hence no consumption of reagents)
- · Redundancy and safety
- Stable operation on gas fuel across the entire load range, with no need to switch to diesel fuel at low loads
- Lower consumption of pilot fuel (just 1% of the total fuel used).

Enabling the use of gas as a marine fuel means much more than merely applying a proven technology to gas engines. For Wärtsilä, it also means maintaining its leading position in the design of gas-fuelled vessels, and offering reliable and competitive gas storage and handling systems. Wärtsilä also supports the development of the broader gas value chain in the oil & gas industry with, for instance, its liquefaction and regasification solutions.

### **Environmental compliance**

The marine industry is undergoing the implementation of changes needed in order to comply with existing environmental regulations, while at the same time evaluating the possibilities for complying with upcoming regulations. Emissions to air (CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, particulate matter, volatile organic compounds (VOC), and others) and water are under scrutiny. Similarly, regulations relating to safe and clean operations are becoming stricter, especially for the oil & gas industry.

Wärtsilä offers a broad set of options for compliance with environmental regulations. All include working technologies, fast installation, and support throughout the company's global network. Wärtsilä is committed to providing its customers and society at large with reliable and safe technologies for environmental compliance, which will be available for use as new regulations come into force. The company can also assist customers in evaluating the best options for compliance so as to adopt a solution that meets their specific operational needs.

In the marine industry, Wärtsilä's offering for environmental compliance covers the following:

- For SO<sub>X</sub> and NO<sub>X</sub> compliance: gas propulsion, conversions to gas propulsion, NO<sub>X</sub> reducers, SO<sub>X</sub> scrubber systems, and retrofit services
- For ballast water compliance: products based on ultraviolet treatment and electro-chlorination technologies, and retrofit services
- For Energy Efficient Design Index (EEDI) compliance: improved efficiency of individual products and ship design
- For emissions to water compliance: waste water, bilge water, scrubber water, and sealing systems.

In addition to these, Wärtsilä's offering to the oil & gas industry includes the following solutions to facilitate safe and clean operations:

- VOC recovery
- Flare gas recovery
- Inert gas and nitrogen systems
- Oil separation
- · Waste water systems
- Oily and slop water cleaning
- Fresh water generation
- High pressure compressors.

### Focus on efficiency

The global economic downturn has put enormous pressure on the cost structure of the marine industry in particular, while the oil & gas industry is also deeply affected by low oil prices. In the marine industry especially, the cost of fuel is a key driver for upgrading equipment, rethinking operational profiles, and for new vessel designs. Investments in improved energy efficiency have both economic and improved environmental performance benefits.

Wärtsilä strives to optimise the lifecycle cost of installations. This is done because it makes economic sense to customers, and because of the company's in-house understanding of the pressure for reducing operating costs. Hence, Wärtsilä is committed to investing in developing products and solutions that will help achieve significant savings for its customers. Furthermore, improved efficiency results in better environmental performance.

## Services review

Wärtsilä Services supports its customers by offering the most comprehensive portfolio of services in the industry, thereby optimising operational and lifecycle performance. Wärtsilä Services offers expertise, local availability, responsiveness, and the most environmentally sound solutions for all customers. The Services offering builds strongly on digitalisation in order to utilise the opportunities created by real-time data and related analytics. Customers recognise Wärtsilä as being a reliable service partner; namely competitive, trusted, and easy to deal with.

### Improving lifecycle efficiency

Longer term strategies are aimed at improving business efficiency. Optimising performance of installations reduces operational expenses and improves uptime.

Environmental legislation and energy efficiency are major concerns for our customers. Sustainable solution options enable a reduced environmental impact and improved operational efficiency.



Reliable, continuous performance is essential. Planning the operational reliability through smart maintenance and access to highest quality of technologies, services and competences ensures smooth and safe operations.

### The service offering

Wärtsilä Services develops close relationships with its customers, thus enabling an in-depth understanding of their business so as to extend the offering accordingly. Services provides complete support for its customers operating in the marine, energy and oil & gas industries, as well as a comprehensive package of seals, bearings, and associated solutions for hydropower installations and industrial plants worldwide. While this support is based primarily on equipment sold and designed by Wärtsilä, Wärtsilä Services has the capability to retrofit and service equipment by other brands as well, thereby offering customers the most comprehensive support.

A comprehensive knowledge of the customer's business and operational challenges, combined with technical expertise, forms the basis for being able to offer different levels of support:

- Spare parts for equipment, with an emphasis on excellent delivery performance and the availability of a broad range
  of parts
- Full maintenance and performance monitoring, utilising both spare parts and services (field services, condition based maintenance, dynamic maintenance planning)
- Optimising customers' businesses via analytics, proactive recommendations, efficiency improvements (e.g. fuel cost savings), and shared performance targets for the operation and maintenance of their equipment
- · Guarantees of operational reliability, performance and uptime of customer assets.

### Areas of expertise include:

### **Engine services**

A full range of services for medium- and low-speed diesel, gas, dual- and multiple-fuel engines, and other related systems. The broad extent of the offering ranges from standard engine overhauls, to optimisation retrofits that improve the performance of mature engine designs.

### **Propulsion services**

A complete range of services to maintain performance throughout the lifecycle of propulsion systems. Parts, repairs, maintenance, modernisation solutions, and efficiency upgrades are also provided in order to keep propulsion systems running powerfully and efficiently.

### **Seals & Bearings services**

A wide range of sealing, bearing, and sterntube solutions in the form of integrated systems, packages, and products. These services provide marine and industrial customers with increased efficiency, reduced running costs, and operational longevity.

### **Hydro & Industrial services**

The offering includes seals, bearings, and associated equipment for hydro and industrial installations (e.g. in mining, paper, and oil & gas), including hydropower, tidal power, and offshore wind installations. These are complemented with a comprehensive array of services, ranging from repairs and fabrications to underwater services, retrofits, component reconditioning, and refurbishments.

### **Environmental services**

An extensive set of services aimed at improving efficiency and minimising emissions for energy and marine installations. These solutions include fuel conversions, low NO<sub>X</sub> solutions, and propulsion efficiency services. Furthermore, Wärtsilä's field service organisation supports the marine retrofit market in the installation and commissioning of environmental solutions.

### Lifecycle solutions

Wärtsilä Services' lifecycle solutions offer measurable and guaranteed benefits in a safe, reliable and environmentally friendly way. These include improved availability and performance, productivity gains and cost benefits, as well as maximised installation life.

Wärtsilä tailors these lifecycle solutions to enable customers to choose from different levels of partnership agreements. *Optimised maintenance* solutions include provisions for regular inspections, monthly reporting, and exchange programmes for spare parts. Solutions for *optimised operations* focus on energy efficiency, real-time monitoring and advisory services, maximised uptime and performance improvement plans. *Guaranteed asset performance* solutions can cover complete operational, management, and maintenance services, as well as installation performance guarantees.

### **Service projects**

Project management capabilities enable Wärtsilä to optimise the performance of its customers' installations through upgrades, modernisations, fuel conversions, and safety solutions.

### **Training services**

Training services cover all aspects of management, operational, maintenance, and safety issues, and range from traditional hands-on training to advanced remote training systems and e-learning opportunities.

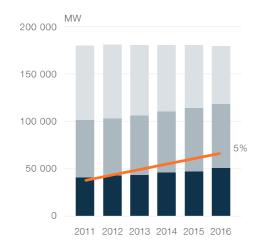
## Services operating environment

Wärtsilä Services supports customers in the marine, energy, oil & gas industries, as well as in hydro and industrial related businesses. In 2016, Wärtsilä further strengthened its hydro & industrial offering by acquiring American Hydro, a leading supplier and installer of large equipment upgrades, and a provider of servicing for the hydroelectric and water distribution industries, specialising in consultancy, design, and precision performance enhancements for hydro-turbines and pumps.

Marine customers are generally ship owners, operators, or charterers operating in the merchant shipping, cruise and ferry, navy, or other special vessels segments. Oil & gas customers are typically those either operating ships in the offshore segment or having land based oil and gas installations. Hydro & industrial customers are companies operating in the hydropower, ocean energy, and offshore wind sectors, and customers with specific installations in industrial applications.

The main driver for the Services business is the size and development of Wärtsilä's installed equipment base. However, the offering and competences are constantly being developed in order to extend the capabilities to multiple brands of equipment.

### Installed base by business



Energy Solutions, 4-stroke

Marine Solutions, 4-stroke

Marine Solutions, 2-stroke

4-stroke CAGR

The market conditions faced by Wärtsilä's end customers have a direct impact on the utilisation rate of installations in operation, and dictate the need for services relating to maintenance, lay-down, or redeployments. Throughout the lifecycle of any installation, there are various maintenance requirements, as well as possible needs for upgrades or life-extension services. Wärtsilä's customers may also face the need for retrofits and upgrades of their equipment based on structural changes to their operating environments, such as changes in the availability or pricing of fuels, the implementation of regulations, or increased safety requirements. The outsourcing of power plant operations and management to a reliable partner is normal practice in the energy industry, and interest for lifecycle solutions in the form of partnership agreements is increasing also in the marine and oil & gas service markets. This is because such agreements further the optimisation of both maintenance and performance, thereby improving operational efficiency, reducing costs, and creating business growth.

### **Competition and market position**

Wärtsilä has a strong position in servicing equipment sold and designed by Wärtsilä. The key differentiators are a truly global presence and the capability to provide support throughout the lifecycle of the installation. Only a few other players are able to provide such a broad services offering globally; these being other Original Equipment Manufacturers (OEM) focusing on their own equipment brands, and service companies with a global or more typically local presence.

Competition is, therefore, mainly local, consisting of parts traders, repair yards, local workshops, component suppliers for spare parts (non-OEM), and field service businesses. The number of local players is quite large; consequently competition is rather fragmented and focused on a limited offering scope. Wärtsilä is constantly developing its global footprint and local operations in order to serve its customers with superior quality, while at the same time meeting the increased demands for a speedy response.

The competition for lifecycle solutions for operating power plants comes from a few regional players capable of offering plant operational services. In the marine market, the competition for lifecycle solutions is even more fragmented with some ship management companies serving this segment. Wärtsilä Services offers a broad variety of options to ensure the best solution for the end user.

## Services' strategy

Wärtsilä Services strives to be recognised as a reliable service partner; namely competitive, trusted, and easy to deal with. Wärtsilä is committed to growing its service business by:

- Developing closer partnerships with existing customers through superior customer service
- Developing and digitalising the offering to create new competitive advantages
- Exploring opportunities within new customer segments by leveraging on current competences
- · Acquiring businesses in growing markets.

Services continuously develops its global footprint and operations in order to meet and exceed customer expectations. This is the basis upon which business with existing customers will grow. Further growth is sought by strengthening our service offering in response to our customers' increased interest in lifecycle solutions, thereby providing them with both lower costs and improved operational efficiency.

An important growth area is the digitalisation of the existing offering and the development of a new digital offering to further increase revenue potential, transparency, availability, and performance. Wärtsilä Genius services enable the real-time optimisation of customers' assets, improved predictability, and help in the solving of issues with digital solutions. Other examples of the increased transparency and availability made possible through digital innovations are the Wärtsilä Online Services platform for spare parts ordering and tracking and technical support, as well as remote service concepts, such as the Virtual Service Engineer. In 2016, Wärtsilä's digitalisation capabilities were enhanced with the acquisition of Eniram, a Finland-based clean technology company providing the marine industry with energy management and analytics solutions. The acquisition of Eniram will enable Wärtsilä to grow and strengthen its in-house know-how, and expand its offering from asset performance optimisation to operations optimisation.

Wärtsilä's current competences and capabilities within, for instance, in-situ machining, reconditioning, and field services, place the company in a unique position to provide services to new customer segments, such as Hydro and Industrial, and to extend the offering to customers who operate a variety of equipment – regardless of the manufacturer.

### Services' strengths

• Long-term relationships with customers and an in-depth understanding of their operations and needs

- A complete lifecycle offering
- The broadest service portfolio in the industry
- An unmatched global service network
- Operations and asset performance optimisation enabled by holistic business understanding and extensive customer legacy
- State-of-the-art digital solutions for enhancing customers' businesses based on optimising, predicting and solving, utilising benefits of real-time data, and data analytics.

## Services and sustainability

Environmental legislation, the need for energy efficiency, and safety requirements are currently the main drivers for customers' actions towards developing their businesses in a more sustainable way.

Wärtsilä Services strives to be a leader in supporting its customers' efforts to meet and exceed current and future business and sustainability demands. This is the essence of Wärtsilä Services' role as regards sustainability: we continuously develop the offering in order to provide customers with solutions that will enable them to run their businesses and grow in the most sustainable way.

Furthermore, Wärtsilä conducts its business in a responsible way, including providing services from locations in close proximity to the customers' installations, and by investing and offering employment opportunities in local communities.

### **Energy efficiency and emissions**

The increasing availability of alternative liquid fuels and gas, together with stricter environmental and safety requirements, creates opportunities for the Services business to improve the operational efficiency of customer installations, while at the same time reducing their environmental impact. Wärtsilä develops and provides services, such as upgrades, reconditioning projects, fuel conversions, and retrofit solutions, which improve both fuel efficiency and environmental performance. This enables compliance with stringent environmental legislation while extending the operational lifetime of the application.

For existing installations, a set of primary upgrading solutions are available, including:

- Engine, propulsion, or electrical & automation system efficiency upgrade packages that reduce fuel and/or lube-oil
  consumption, thereby contributing to lower emissions and the generation of economic benefits.
- Low NO<sub>X</sub> solutions that combine various engine modifications designed to find the ideal combination of compression ratio, injection timing, and injection rate. The concept has been developed so as to achieve the best possible trade-off between NO<sub>X</sub> reduction and fuel consumption.
- The conversion of propeller shaft sealing systems to an anti-pollution version that eliminates the risk of water pollution.
- Diesel to gas conversions that considerably reduce emissions from the installation. The conversion of heavy fuel oil or marine diesel oil installations to operate on natural gas offers extended benefits.

For new and existing installations, secondary methods are available to integrate additional emissions abatement equipment. Wärtsilä Services provides unparalleled environmental solutions, as well as the field experts needed for their installation and commissioning.

### Optimising the environmental efficiency of customer operations

Wärtsilä's offering goes beyond retrofits, upgrades, conversions, and field service expertise. Solutions supporting the lifecycle approach allow Wärtsilä to offer customers guarantees for reduced fuel consumption, and hence have a direct impact on reducing emissions. Furthermore, the Wärtsilä Genius and Eniram

optimisation services enable increased competitiveness and effectiveness in daily operations with real-time efficiency and emissions abatement improvements. To name just a few concrete examples:

- Engine efficiency monitoring: the bridge/dashboard monitor indicates specific fuel oil consumption to create awareness of fuel usage, and to enable a vessel's crew to make the necessary operational adjustments to optimise the consumption. Measuring fuel consumption online, visualising it, and comparing it to other performance data over time is the first step towards energy efficiency monitoring plan services for ships.
- *Trim optimisation*: provides an indication to the bridge/dashboard of the optimal vessel trim. Real-time optimisation of the ship's trim provides significant fuel savings, thereby contributing to lower levels of emissions.
- Hull and propeller cleaning interval optimisation: calculates the optimal cleaning dates for the hull and propeller. This
  service results in the avoidance of substantial fuel consumption increases caused by surface roughness, and hence
  enables emissions optimisation.
- Fleet optimisation: combining Wärtsilä's data intelligence and analytics with the seafaring experience of the ships' crews enables the optimisation of the energy efficiency and overall performance level of entire fleets.

## Research and development

Wärtsilä is strongly committed to research and development. The aim of its R&D activities is to continuously strengthen the company's technology leadership position, and to further improve its competitive edge in the global marine and energy markets. This is achieved by developing products and services that are based on reliable, efficient, and cost-competitive technologies, and which address customer needs.

The focus of Wärtsilä's R&D activities is on digitalisation, new products, and solutions that are flexible, efficient, reliable, safe, cost-efficient to operate, and that have a minimal environmental footprint throughout their lifecycles. A substantial proportion of the company's investments in product development is targeted at securing environmental compliancy and providing short- and long-term benefits for the company's customers.

By focusing on the initial stages of the development process and by utilising modularity, simulation, virtual testing, and validation, Wärtsilä is able to reduce the lead time for new solutions securing without compromising quality, reliability, and safety aspects.

Validation testing on site with existing installations, in co-operation with the customers, is an important element in furthering the improved performance of existing solutions. It also assists in finding new and better solutions while, at the same time, gaining long-term experience under real field conditions. A field installation also provides an opportunity to gain valuable learning and insight regarding new technologies and solutions.

When the product has successfully passed all the validation process steps, both in the laboratory and in the field, and its performance meets Wärtsilä's high standards, it can be delivered to the market.

Wärtsilä protects innovation and competitiveness through close attention to Intellectual Asset Management and the continuous development of internal key competences. Networks and clusters are formed to further extend the company's know-how, skills, and capabilities by committing to long-term relationships with suppliers, engineering companies, university partners, and with licensees and other Original Equipment Manufacturers.

### Research and development expenditure



R&D expenditure

Percent of net sales

\* Restated, figures include continuing operations.

### Minimising environmental footprint through R&D

### Improvements in efficiency

### TOTAL SHIP EFFICIENCY:

An efficient and low emission system for the entire vessel is achieved by combining optimised ship design with Wärtsilä's knowledge of automation, machinery, propulsion, and control systems. Wärtsilä has developed numerous efficiency concepts, such as Low Loss Concept (LLC) and Low Loss Hybrid (LLH).

### ENGINE EFFICIENCY IMPROVEMENTS:

A long-term focus on improving engine efficiency has resulted in Wärtsilä engines having the highest efficiency ratings among existing prime movers. A key success factor has been the development of integrated engine functionalities that enable low emissions and high engine efficiency. The new Wärtsilä 31 has the best 4-stroke engine fuel economy in the world.

### PROPELLER EFFICIENCY UPGRADES:

Propulsion products incorporate environmental features and are critical for the overall environmental impact of the vessel. The new generation propulsion units from Wärtsilä result in significant fuel efficiency improvements (5–12%) that also result in fewer emissions.

### Reducing emissions to air

### **GREENHOUSE GASES (GHG):**

Wärtsilä focuses on the development of technologies that reduce GHG emissions and improve engine efficiency.

### SO, EMISSIONS:

Wartsilä's technology development supports solutions that enable the use of fuels with different sulphur contents, as well as systems that clean sulphur from the exhaust gas, and enable alternative fuels, e.g. natural gas. Wartsila's scrubber systems reduce SO<sub>2</sub> emissions, but also particulate matter (PM) and black carbon.

### NO, EMISSIONS:

All Wartsilä engine portfolio products are IMO NO $_{\rm X}$  Tier II compliant. Wartsilä solutions for IMO NO $_{\rm X}$  Tier III are:

- Selective Catalytic Reduction (SCR)
- Gas engine (dual-fuel in gas mode)

### Reducing emissions to water

### BALLAST WATER MANAGEMENTS SYSTEMS:

Wärtsilä's Aquarius® range of Ballast Water Management Systems offer solutions to limit the spread of ballast water-related invasive species and prevent their introduction to aquatic ecosystems.

### WASTE WATER CLEANING:

Wärtsilä solutions are designed to facilitate the management and treatment of both grey and black wastewater, and to monitor discharges to the sea.

### **OILY WATER SEPARATORS:**

The Wärtsilä Oily Water Separator (OWS) handles bilge water with a separating process, which sorts out oil traces even from complicated emulsions.

### The HERCULES programme and sustainable innovation through partnerships

The long-term HERCULES R&D programme was conceived in 2002, and has been set up within the context of the EU's sixth and seventh Framework programmes. Sharing a joint vision, the major low- and medium-speed engine manufacturers, Wärtsilä, Winterthur Gas & Diesel, and MAN Diesel & Turbo, are collaborating with universities, research institutions, and other industrial partners to develop new technologies for marine engines and related systems. The fourth phase kicked off in 2015 in the form of the HERCULES-2 project that aims at creating fuel flexible large marine engines that are optimally adaptive to their operating environment.

The project HERCULES-2 comprises four R&D Work Package Groups:

- I: Fuel Flexible Engine
- II: New Materials (Applications in engines)
- III: Adaptive Powerplant for Lifetime Performance
- IV: Near-Zero Emissions Engine

The HERCULES-2 consortium comprises 32 partners of which 30% are Industrial and 70% are Universities or Research Institutes. HERCULES-2 is planned to run for three years, from 2015 to 2018, with a total budget of EUR 25 million. The project was made possible by a EUR 20 million funding through the European Commission Horizon 2020 Innovation Programme and a contribution from the Swiss government.

2016 saw the completion of the Future Flexible Energy Systems (FLEXe) research programme, which was started on 1 May 2015. FLEXe is a consortium in Finland gathering 27 organisations covering the entire value network of energy systems. FLEXe combines smartness, flexibility, environmental performance, and economic success with customer acceptance and engagement.

In 2016, Wärtsilä defined joint future research roadmaps with many leading universities in and outside of Finland. These roadmaps contain shared visions on activities to be performed at these universities with varying levels of support from Wärtsilä. Wärtsilä strived to further grow the number of key universities it collaborates with, making these roadmaps into the foundation of a sustainable collaboration.

## **Manufacturing**

Wärtsilä's manufacturing is focused mainly on the assembly, testing, and finishing of products and key strategic components. The company's business model, which is strongly connected to a broad network of suppliers, guarantees flexibility in capacity. Being close to the customer is important, as is the focus on quality and the continuous emphasis placed on technology leadership in the company's R&D activities.

Wärtsilä provides products and systems that are reliable, cost efficient, environmentally compatible, and technologically advanced. They are capable of being integrated into overall solutions or delivered as standalone equipment.

### **Manufacturing footprint**

Wärtsilä's manufacturing footprint is global and continuously optimised for competence, availability, customer presence, and efficiency. As structural changes continue in the end markets, the focus remains on strengthening the company's presence in key markets, notably China. This enables better service to customers locally, and allows savings to be achieved in both production and transportation costs.

Wärtsilä currently has five joint ventures globally. In Korea, dual-fuel engines are manufactured for the LNG carrier markets in partnership with Hyundai Heavy Industries Co. In China, engines are produced for local markets in three joint ventures. The Wärtsilä Qiyao Diesel Company Ltd joint venture manufactures medium-speed auxiliary engines, while the Wärtsilä Yuchai Engine Co. Ltd joint venture manufactures medium-speed auxiliary and main engines. The CSSC Wärtsilä Engine Company Ltd began its manufacturing of medium and large bore medium-speed diesel and dual-fuel engines in December 2016. The Wärtsilä CME Zhenjiang Propeller Co. Ltd. joint venture, also located in China, produces fixed pitch and controllable pitch propellers.

### Wärtsilä's global supplier network supports flexibility in manufacturing

Through close co-operation, excellent relations, and the sharing of information with suppliers, the supply of components and market-conform lead times are secured. Wärtsilä has approximately 1,100 suppliers globally. The sourcing strategy is to focus on carefully selected suppliers, with a strong emphasis on performance, innovation, and a presence close to Wärtsilä's manufacturing units and joint ventures. The aim is to

continuously develop and strengthen the company's global supply chain with a strong emphasis on quality and cost competitiveness.

### rk R&D Suzhou, China WHEC (Mokpo. South Koreal Elmenhorst, German Emden, Germany i**go, Spain** eals & bearings Wärtsilä CME Wuxi, China Propulsion, seals & (Zhenjiang, China Santander, Spain bearings Miami, USA Taizhou, China Trieste, Italy WQDC (Shanghai, Diano d'Alba, Italy Khopoli, India Auxiliary module CWEC (Shanghai, China) Singapore 4-stroke engines WYEC (Zhuhai, China) 4-stroke engines pump room syste and Fi-Fi pumps Fully owned Sites with R&D Acu Superport, Brazil E&A systems Joint venture sites

### Wärtsilä's production and R&D globally

## Why invest in Wärtsilä

Our strengths are our technological leadership, our integrated services and solutions offering, our close and long-standing customer relationships, and our unparalleled global presence.

### Supporting our customers with lifecycle solutions

Our Services business, representing nearly 50% of Wärtsilä's total net sales, offsets the cyclicality of our end-markets, while supporting our aim for faster than market profitable growth over the long term.

The growth of our installed equipment base and increasing technological complexity supports the demand for our services, while digitalisation provides further opportunities to develop our value-adding offering and customer loyalty. We also seek growth beyond our installed base by expanding our business model to cover new market areas and multiple brands.

### A leader in advanced technology for the marine and energy markets

The demand for our services and solutions is driven by megatrends, such as global transportation needs, the growing demand for energy, and increasing environmental awareness. As a frontrunner in our field, we are well positioned to respond to the need for innovative, energy efficient, and environmentally advanced solutions. Our presence in two different end markets with a global spread, together with our wide portfolio of products and solutions, offsets cyclical developments and reduces market risk exposure. Continuously investing in research and development is vital for ensuring the competitiveness of our product portfolio, and for securing a leading position in sustainable innovation.

### A capital-light business model focused on increasing efficiency

Our business model is focused on lifecycle services of high-tech equipment. Wärtsilä's facilities comprise asset-light assembly lines, with shared production and R&D. This creates flexibility in aligning our operations to market conditions, and synergies in our innovation processes, thereby supporting stability in earnings over the cycle and enhancing our future competitiveness.

Achieving operational excellence by focusing on continuous process improvement throughout the organisation, and driving the benefits of a business line based organisation with decentralised accountability are key enablers for reaching our long-term targets.

### Investing in technological leadership and providing shareholder returns

Our financial position enables us to develop our business by expanding our offering of services and solutions through research and development activities and acquisitions. It also enables us to offer solid dividends to our shareholders.

### **Dividend**





### Q&A:

### What is your outlook for Wärtsilä's end markets going into 2017?

The demand in our service markets is expected to be solid, and we continue to see growth opportunities in selected regions and segments. Our sizeable installed base and opportunities in new market areas, as well as the interest our customers express in long-term service agreements, support our long-term ambitions for the Services business.

Demand in the energy markets is expected to be solid. Our systematic market development efforts have positively impacted our position in the energy market. Therefore, we consider ourselves well positioned to capture opportunities related to the growth in electricity demand in the emerging markets, the global shift towards renewable energy sources, and the need for distributed, flexible power production.

We expect the marine markets to remain soft. Although the outlook for the cruise and ferry segment is positive, the merchant, gas carrier, and offshore segments continue to suffer from overcapacity, slow trade growth, and customer financial constraints. Our exposure to all the main marine segments and the breadth of our offering continues to position us relatively well in a challenging market.

### Why is digitalisation important for Wärtsilä?

We have a clear appetite for development within the field of digitalisation. Not only does this provide enhanced value to our customers in the form of new, data-analytics driven solutions, it also enables us to develop our internal processes through, for instance, the increased use of robotics in our manufacturing, and mathematic modelling in our testing processes. During the year, we strengthened our digital foundation with the appointment of a Chief Digital Officer to the Board of Management, as well as with the acquisition of Eniram. We are also currently in the process of finalising a new digital organisation, with the aim of accelerating Wärtsilä's digital transformation.

### How far are you in terms of rolling out Operational Excellence?

Operational Excellence is one of the building blocks for reaching our 14% profitability target and its aim is to achieve gradual, continuous improvement. Although not fully rolled out, we have already seen certain benefits in terms of, for example, improved inventory management and optimised production flow.

### Is there scope for acquisitions going forward?

At the end of 2016, our net debt was EUR 150 million and our gearing was 0.07. Our ambition is to find good investment opportunities for our owners and we have a number of potential acquisitions on our target list. We look for asset light companies with a high services content and strong technological capabilities.

## **Sustainability**

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## Wärtsilä's sustainability approach

Our commitment to sustainability and responsible business is based on our mission, vision, and strategy, which along with our sustainable development objectives create the framework for developing the company's activities and products. Wärtsilä's strategy is based on three key growth areas, energy efficient solutions, gas based technology, and innovative solutions, all of which contribute to a more sustainable future in both the energy and the marine industry.

Our strength is our technological leadership and therefore technology plays a central role in our sustainability work. Wärtsilä Energy Solutions and Marine Solutions businesses focus on developing and providing sustainable solutions for the industries in which they operate, whereas Wärtsilä Services has a key role in supporting our solutions and providing the latest technologies for existing installations through upgrades and modernisation packages.

Wärtsilä identifies and assesses its <u>sustainability risks</u> on an annual basis. Based on the current assessment, the sustainability risks are considered to be at a moderate level. Generally speaking sustainability can be seen as an <u>opportunity</u> for Wärtsilä.

### Wärtsilä's sustainability approach



Wärtsilä's sustainable development is based on three closely interrelated pillars: economic, environmental, and social performance. In the field of sustainable development, Wärtsilä's overriding focus is on the following:

- Economic: profitability
- Environment: environmentally sound products and services
- Social: responsible business conduct

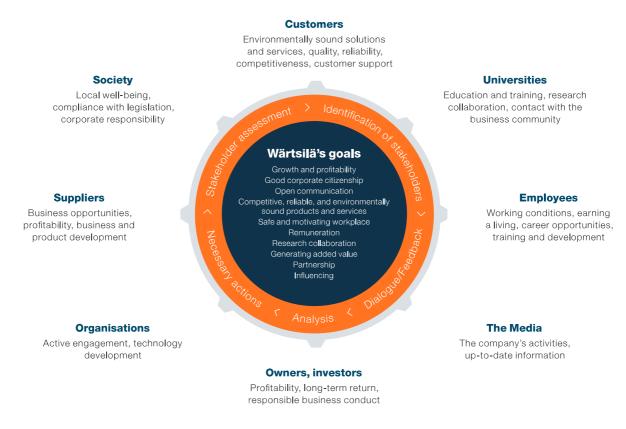
For the sustainability reporting purposes Wärtsilä has identified the following aspects as material: Environmental impacts of Wärtsilä's products and services, compliance with laws and regulations, economic impacts to stakeholders, personnel skills and development, anti-corruption and -bribery, and occupational health and safety.

The overall management approach of sustainability is presented in the picture Wärtsilä's sustainability approach. Wärtsilä's strategy for environmental and social responsibility is presented in the <u>Strategy section</u>. Wärtsilä sets corporate level <u>sustainability targets</u> for the core areas.

## Stakeholder relations

Wärtsilä takes active care of its relations with stakeholders by engaging with them in an open and constructive dialogue. Wärtsilä considers this approach as essential when developing operations, products, and services. At the corporate level, Wärtsilä has defined its most important stakeholders to be its customers, owners, suppliers, employees, and society in general. Wärtsilä's subsidiaries define their own primary stakeholders, which, in addition to the ones mentioned above, include local residents close to production plants, educational institutes, and public authorities. Wärtsilä's Code of Conduct provides the foundation for the management of stakeholder relations. The priorities in managing stakeholder relations vary within Wärtsilä from one subsidiary to another.

### Main expectations of Wärtsilä's stakeholders and Wärtsilä's goals



In order to facilitate active dialogue with its customers, Wärtsilä arranges Customer Days for existing and potential customers at locations in various parts of the world. During these events, subjects of topical interest from both local and global perspectives are reviewed, and existing and future needs and challenges are discussed.

In addition to Customer Days, the Marine Solutions and Energy Solutions businesses arranged or participated in 230 industry-related events globally during 2016 including international and national seminars, exhibitions, and conferences. These events were attended by customers, potential customers, and other stakeholders, such as investors, consultants, suppliers, students, and other interested parties.

Long-term research programmes are an important means of enhancing open dialogue and co-operation with key industry players and important research institutions. Wärtsilä has actively initiated and participated in the development and work of common research programmes, both locally and internationally.

Dialogue with employees takes place in many formats. More information about the procedures and processes to support active and engaging dialogue with Wärtsilä employees is described in the section covering Consultation and information procedures in Group companies.

Wärtsilä engages in an active and open dialogue also with local and international public authorities and officials. The aim is to share information, provide expertise and support authorities to improve the quality of regulation. Wärtsilä participates in public consultations in areas that are of importance to the company.

### **Channels of dialogue**

Stakeholder	Channel of dialogue	Assessments (Frequency)
Customers	Regular contact with customers, lifecycle support for products, customer events and seminars, Customer Days, customer magazines, the internet, conferences and exhibitions, product documentation, customer feedback system	System for measuring customer satisfaction and quality (Continual)
Employees	Open and continuous communication between management and employees, annual development discussions, information meetings and internal communications (intranet), employee magazines, training events, national statutory employee bodies and European Works Council, occupational health and safety committees, suggestion system, Continuous Improvement Process (CIP), Technology and Innovation Award, Customer Care Award	Employee satisfaction surveys - MyVoice (Biennial)
Owners, investors	Management meetings with investors, financiers, and analysts, stakeholder magazines, general meetings, information meetings, stock exchange and press releases, annual and interim reports, capital markets days, the internet, investor relations surveys, sustainability questionnaires	Investor relations surveys, sustainability surveys and indices (Annual)
Suppliers	Open and active dialogue between the sourcing organisation and suppliers, supplier portal, supplier development, supplier management system, Supplier Days, Supplier Award	Supplier assessments (Continual)
Society	Reporting to, and co-operation with, public officials on issues such as the environment and occupational health and safety, meetings with decision makers, position papers, Open Doors days, sustainability report, corporate presentations, local communications, the internet	Stakeholder feedback (Continual), corporate image surveys (Annual)

Organisations	Membership, regular contact, participation in activities of local trade and industrial organisations, active role in working groups, contact with various public bodies, for example through ministries, reports	
Universities	Opportunities for practical training and degrees, R&D projects, participation in recruitment fairs and seminars, sponsorship of student activities, lectures	Preferred employer surveys (Annual)
Media	National and international business media and journals, trade publications, interviews and press releases, main annual publications, meetings, visits, factory tours	Surveys conducted among business journalists, media surveys, reporting comparisons (Annual)

### **Activities in organisations**

In 2016, Wärtsilä participated in several relevant activities organised by various national and international organisations and associations. The key organisations for Wärtsilä and the nature of Wärtsilä's activities are shown in the table below.

Stakeholder	Organisation	Nature of activity
Interest groups	Confederation of Finnish Industries (EK), Federation of Finnish Technology Industries, Finland Chamber of Commerce, International Chamber of Commerce (ICC), ICC Finland	Membership and participation in activities.
Industrial organisations	Association of Singapore Marine Industries (ASMI), Brazilian Institute of Oil and Gas (IBP), Brazilian Thermoelectric Generators Association (ABRAGET), Cogen Europe, Confederation of Indian Industry (CII), Cruise Line International Association (CLIA), BIMCO, EnergyVaasa, Engine Manufacturers Association (EMA), European Association of Engine Manufacturers (Euromot), European Engine Power Plants Association (EUGINE), Exhaust Gas Cleaning System Association (EGCSA), Hong Kong Shipowners Association, Indian Diesel Engine Manufacturers Association (IDEMA), International Council on Combustion Engines (CIMAC),	Board membership and participation in activities of specific working groups (CII, CIMAC, Cogen Europe, EMA, Euromot, EUGINE, VDMA, WaterBorne TP).  Membership and participation in activities (ABRAGET, ASMI, BIMCO, CLIA, EGCSA, EURELECTRIC, EnergyVaasa, Hong Kong Shipowners Association, IBP, IDEMA, SGMF, SolarPower Europe).

	Society for Gas as a Marine Fuel(SGMF), Union of the Electricity Industry (EURELECTRIC), Verband Deutscher Maschinen- und Anlagenbau (VDMA), WaterBorne TP, SolarPower Europe	
Standardisation organisations	European Committee for Standardisation (CEN), International Organisation for Standardisation (ISO)	Participation in activities.
International organisations	European Sustainable Shipping Forum (ESSF), International Maritime Organisation (IMO), Global Compact Nordic Network (GCNN)	Participation in activities through national delegations (IMO). Participation in activities (ESSF, GCNN).
Other	Cleantech Finland, Finnish Business & Society (FIBS), European Energy Forum (EEF), Global Reporting Initiative (GRI), Sustainable Shipping Initiative (SSI)	Participation in activities.

## **Sustainability management**

Wärtsilä's sustainability approach is systematically managed through the Group-wide guiding principles and management systems in place for material sustainability aspects and impacts. Wärtsilä's global guiding principles together with the company's values ensure a harmonised way of working towards sustainable development. Wärtsilä's Corporate Manual includes a description of the company's operating procedures, responsibilities, and the management system structure that are applicable for the entire company. Wärtsilä's governance and risk management principles are described in the <u>Governance section</u>.

The key elements of Wärtsilä's sustainability management are described in the table below. The guiding principles lay the foundations for uniform management practices. The management approach covers procedures, processes, and systems to manage and monitor material aspects.

Guiding principles	Management approach	Material aspect
<ul> <li>Code of Conduct</li> <li>QEHS Policy</li> <li>Employee practices</li> <li>Other policies and guidelines</li> </ul>	<ul> <li>People management</li> <li>Product design principles</li> <li>Environmental management</li> <li>Occupational health and safety management</li> <li>Responsible business conduct</li> <li>Supply chain management</li> </ul>	<ul> <li>Personnel skills and development</li> <li>Environmental impacts of Wärtsilä's products and services</li> <li>Occupational health and safety</li> <li>Compliance with laws and regulations</li> <li>Anti-corruption and -bribery</li> <li>Economic impacts to stakeholders</li> </ul>

## **Guiding principles**

Wärtsilä Code of Conduct defines common rules for all our employees, and provides guidance on Wärtsilä's approach to responsible business practices. Key areas of Wärtsilä Code of Conduct include: compliance with laws, transparency and continuous stakeholder dialogue, respect for human and labour rights, fair employment practices, anti-corruption, anti-fraud, and data privacy.

Wärtsilä takes an active approach to the application of the Code of Conduct and promotes its implementation through the effective communication of its contents to its employees. Wärtsilä monitors the application of the Code internally. Suppliers and business partners are an important and integral part of the total value chain of the products and services of Wärtsilä. They are expected to conduct their businesses in compliance with the same high legal and ethical standards and business practices as Wärtsilä. Wärtsilä also promotes the application of the Code of Conduct by monitoring the actions of its suppliers and business partners.

### **Code of Conduct implementation**

#### CODE OF CONDUCT

### **POLICIES**

- · Quality, Environmental, and Health & Safety
- Equal opportunities and fair employment practices
- · Compliance reporting
- · Broker Directive
- Accounting Manual
- Intellectual Property
- Competition law compliance Wärtsilä Sourcing and Purchasing
- Trade Compliance

## COMMUNICATION AND TRAINING

Group-wide policies complement the Code of Conduct and the commitment to maintain the highest legal and ethical standards in everything we do. Wärtsilä's Quality, Environmental, Health and Safety Policy set principles for managing the environmental impacts of Wärtsilä's products and services. Wärtsilä's corporate policy on equal opportunities and fair employment practices creates a common framework for employee practices in all Wärtsilä companies and covers the following issues: equal opportunities, human and labour rights, well-being at work, non-harassment, and remuneration. Wärtsilä's Corporate Manual includes also other policies, such as anti-corruption, compliance reporting, and Wärtsilä sourcing and purchasing policies, the purpose of which is to safeguard compliance with relevant legislation and provide more guidance on daily business conduct.

### **Voluntary commitments**

Wärtsilä signed the UN Global Compact initiative in 2009. Wärtsilä supports the ten principles of the Global Compact with respect to human rights, labour, environment, and anti-corruption. Wärtsilä is committed to align the strategy, culture, and day-to-day operations with the principles, and to engage in collaborative

projects which advance sustainable development. Wärtsilä's Code of Conduct and sustainability programmes are the practical tools to progress the principles in our sphere of influence.

Wärtsilä participates in the Sustainable Shipping Initiative (SSI). The initiative brings together some of the biggest companies in the maritime sector with the aim of creating a sustainable and successful shipping industry by 2040.

Wärtsilä participates in the Sustainable Marine Biofuel Initiative, the purpose of which is to accelerate the development of reliable combustion engines for sustainable, scalable, and affordable marine bio-fuels.

Wärtsilä has signed the Finnish Business and Society's (FIBS) Diversity Charter. Wärtsilä has also signed an agreement in 2008, whereby the Finnish industry voluntarily endeavours to use energy more efficiently. Wärtsilä North America Inc. has joined the Customs Trade Partnership Against Terrorism (C-TPAT) agreement, signed in 2003.

## Wärtsilä Code of Conduct

### Introduction

Wärtsilä is committed to carrying out its business in a sustainable way. In order to promote the long-term interests of Wärtsilä and its stakeholders, the company strives to maintain the highest legal and ethical standards in all its business practices. Each employee is expected to act responsibly and with integrity and honesty, and to comply with this code and its underlying policies and instructions.

### **Compliance with laws**

All business and other activities of Wärtsilä shall be carried out strictly in compliance with all applicable laws and under the principles of good corporate citizenship in each country where such activities take place.

Each employee is expected to comply with the requirements of those laws and regulations that apply to Wärtsilä's operations and to his/her job and with the Wärtsilä principles of good corporate citizenship.

### **Openness**

Wärtsilä promotes openness and transparency as well as continuous dialogue with its stakeholders, including customers and other business partners, shareholders, personnel, authorities, local communities, and the media. Stock exchange rules and competitive considerations may, however, in some cases restrict such openness and transparency.

Wärtsilä strives to be honest and accurate when communicating with its stakeholders, and also Wärtsilä employees shall make their statements in accordance with this principle.

### Respect for human and labour rights

Wärtsilä supports and respects the protection of human rights as defined in the United Nation's Universal Declaration on Human Rights. No employee is allowed to take any action that violates these human rights principles, either directly or indirectly.

Wärtsilä supports basic labour rights as defined by the International Labour Organization. In this respect, Wärtsilä upholds the freedom of association and the effective recognition of the right to collective bargaining. In the case that these rights are restricted by local law, Wärtsilä endeavours to offer its employees alternative means to present their views. Wärtsilä does not accept any form of forced or compulsory labour, or the use of child labour.

### Fair employment practices

Wärtsilä promotes freedom from discrimination based on race, ethnic or national origin, colour, gender, family status, sexual orientation, creed, disability, age, political beliefs or other characteristics protected by law. Wärtsilä fosters equal opportunity and our employees are selected and treated on the basis of their abilities and merits.

Wärtsilä does not accept any form of discrimination, harassment or bullying from its employees.

### **Occupational health and safety**

Wärtsilä endeavours to create hazard-free workplaces for its employees, contractors and others working in various locations by applying high standards of occupational health and safety. Wärtsilä strives to assure the safety of its products and solutions through its world-class product and solution development processes.

Each employee is responsible for complying with the safety instructions, for using personal protection equipment when required, and for reporting on any shortcomings regarding safety instructions or protection measures.

### **Conflicts of interest**

Wärtsilä expects full loyalty from its employees. Employees must avoid situations where their personal interests may conflict with those of Wärtsilä. This means, for instance, that employees are not allowed to accept gifts or entertainment from a stakeholder, except a gift or entertainment of a minor value given on an occasional basis, providing it does not create a conflict of interest situation.

### **Anti-corruption**

No Wärtsilä company or any of its employees may, directly or indirectly, promise, offer, pay, solicit or accept bribes or kickbacks of any kind, including money, benefits, services or anything of value. Such payments and favours may be considered bribery, which violates local legislation and internationally recognised principles for combatting corruption and bribery.

### **Environment**

Wärtsilä's target is to develop and produce for its customers environmentally advanced solutions and services that fulfil essential requirements, such as low emissions and high efficiency. Efforts are made to achieve sustainable development by means of raw material selection, processes, products, wastes and emissions through the use of the latest technical advances. Each employee shall comply with the policies and instructions regarding environmental protection.

### Relationship with authorities and local communities

Wärtsilä maintains constructive co-operation with authorities and regulatory bodies, at both local and international levels. Wärtsilä seeks to play a role in serving the needs of the local communities whenever possible.

### Innovation and protection of proprietary information

Wärtsilä supports and encourages innovation by its employees in all areas of its activities.

Wärtsilä's intellectual property is one of its most valuable assets, and the patents, trademarks, copyrights, trade secrets, and other proprietary information of Wärtsilä must be protected. At the same time, each Wärtsilä employee must respect the intellectual property rights of others.

### **Accuracy of accounting records**

Wärtsilä accounting records must be accurate and reliable in all material respects. Unrecorded funds are prohibited. The records must not contain any false, misleading, or artificial entries.

### **Competition and fair dealing**

Competition laws aim to protect consumers and businesses against unfair business practices. Each employee shall comply with those laws. Actions such as participation in cartels, abuse of a dominant position in the market place, or the exchange of price or other commercial information between competitors are prohibited. Wärtsilä employees should be sensitive to competition concerns when attending occasions where competitors, or potential competitors, can be present.

### **Anti-fraud**

Wärtsilä does not tolerate fraudulent behaviour or activities, such as embezzlement, fraud or theft. Such violations will lead to immediate termination of employment and are subject to criminal sanctions.

### **Implementation**

Wärtsilä takes an active approach to the application of this Code and promotes its implementation through the effective communication of its contents to employees. Wärtsilä monitors the application of this Code internally.

Suppliers and business partners are an important and integral part of the total value chain of the products and services of Wärtsilä. They are expected to conduct their businesses in compliance with the same high legal and ethical standards and business practices as Wärtsilä. Wärtsilä promotes the application of this Code by monitoring the actions of its suppliers and business partners.

In the case that questions arise regarding the interpretation of, or compliance with, this Code, Wärtsilä Legal Affairs should be contacted.

The application of the Code will be reviewed from time to time by the Board of Management, which may decide on necessary revisions or interpretations.

### **Reporting violations**

Any Wärtsilä employee becoming aware of a potential violation of this Code must contact his or her superior or Wärtsilä Legal Affairs. The president of the respective subsidiary must be informed, unless he or she is party to the alleged violation, in which case the Group General Counsel of Wärtsilä Corporation must be contacted. Wärtsilä will investigate all reported matters with discretion. Wärtsilä shall not take any adverse actions as a result of such reporting against any employee reporting in good faith what he or she believes to be a violation of this Code.

### **Sanctions**

Violation of this code may lead to a warning, the termination of employment, and the payment of damages. Additionally, certain violations of a criminal nature can lead to criminal sanctions, such as fines or imprisonment.

Approved by the Board of Management in 2011.

# Wärtsilä's Quality, Environmental, Health and Safety Policy

We shape the marine and energy markets with advanced technologies, and focus on lifecycle performance to enhance our customers' business and benefit the environment being:

- Reliable and safe
- · Efficient and environmentally sound
- · Compliant with the applicable legal requirements and regulations.

We continue to improve our performance and reduce adverse environmental impact to satisfy our customers and other stakeholders.

We create and maintain safe and healthy workplaces for our employees and partners in all of our business operations. We give our employees the authority to stop work if conditions are unsafe or quality is compromised.

Our skilled organisation acts as a responsible global citizen.

Approved by Wärtsilä Board of Management 10.12.2015

Jaakko Eskola President & CEO

## **Employee practices**

Wärtsilä's corporate policy on equal opportunities and fair employment practices creates a common framework for employee practices in all Wärtsilä companies and contains the following sections: Equal opportunities, Human and labour rights, Well-being at work, No harassment accepted, Remuneration, Implementation, and Violations.

### **Equal opportunities**

Wärtsilä is committed to fostering equal employment opportunities, in which individuals are selected and treated on the basis of their job-relevant merits and abilities, and are given equal opportunities within Wärtsilä.

Wärtsilä's policy is to treat all employees equally on the basis of their merits, without discriminating them on the basis of their race, ethnic or national origin, colour, gender, family status, sexual orientation, creed, disability, age, or political beliefs.

### **Employee benefits and remuneration**

The basic principle for remuneration in the company is to pay the same wage for the same job and the same performance. The salary is meant to be just, fair, and encouraging. Differences in individual salaries are based on how demanding the job is, on differences between competence, work experience, and performance, and not on gender.

In general, temporary and part time employees are offered the same benefits as permanent employees. In some countries, eligibility is linked to months or years of service – such differences being typically based on collective agreements according to local legislation.

Individual salaries are reviewed once a year in connection with the performance review and in the framework of annual salary increase guidance. The company may pay employees an annual bonus in accordance with company rules and based on separate bonus agreements. Based on financial and individual performance, the

bonus outcome is determined once a year. Employees may be paid a spot bonus based on exceptional performance. Benefits, such as a company car, service year award, and well-being, fitness, and health services, are planned and implemented locally taking into account both company guidelines and national practices.

### Minimum notice period

Wärtsilä complies with European Union directives, local acts of co-operation in the companies and corporations, collective agreements and equivalent regulations concerning consultation and local bargaining. Concerning the termination of employment, Wärtsilä respects national labor union agreements and employment legislation.

In the case of occurrences having significant business or social implications, such as personnel redundancies, the transfer in full or part of production facility location, structural changes, as well as transnational effects, the EWC Working Committee and/or local employee representatives are consulted before decisions about such matters are made or, if that is not possible, as soon as possible. The objective is to provide information about any significant operational change at the time of planning.

### **Competency management**

Wärtsilä's Competency Management and Development frame is a structured way to carry out long-term competence development plans within our businesses and functions. Wärtsilä has defined 16 global job families consisting of generic job descriptions for seven different demand levels. In the job description, the most critical competencies of the job are defined and used as a basis for individual position competence requirements. Typically in the connection of annual development discussion, individual competencies are assessed against the job requirements and position profile. Competence assessment of our employees and a comparison with competence targets allow us to analyse competence gaps and create development plans accordingly.

All learning and development activities in Wärtsilä strive to develop, maintain, and renew the short- and long-term skills and competencies required to fulfil our strategy. Having the right competencies available at the right time and being able to continuously adapt to a changing business environment are critical success factors for Wärtsilä.

### **Consultation and information procedures in Group companies**

Wärtsilä's procedures for consultation and information within the Group are arranged in each country according to local legislation. Wärtsilä's Code of Conduct calls for ongoing and open dialogue between the company's management and employee representatives through co-determination bodies, and employees are kept informed of both the Group's situation and that of their particular company. Company management and personnel engage in an open discussion also in those countries where there are no formal co-determination bodies as such. Regular briefings for personnel are an integral part of the operating procedures of Wärtsilä companies. Employee participation in decision-making also extends to occupational health and safety (OHS). Most Wärtsilä units have an OHS committee with representatives from all personnel groups.

In addition to Wärtsilä's procedures for consultation and information for employees at the local level, the European Works Council (EWC) handles issues that affect at least two companies located in the EU and the Group as a whole. The EWC and its working committee play an active role in considering and pursuing transnational issues.

Dialogue at the individual level is conducted through development discussions, which are held at least once a year. The subjects covered in these discussions range from the Group's and business unit's targets to the individual's job description, competence development, career alternatives, personal targets, and feedback. Development discussions are by definition held with all employees.

Employees are able to have a direct impact on the company's operations and their development by making suggestions. Each Wärtsilä employee can offer suggestions for improvement in operations either through the continuous improvement process (CIP) or by submitting private initiatives. CIP-proposals are discussed jointly

and need a common decision to be put into effect. Individual initiatives are evaluated by experts within the company and, if found to be feasible, are put into effect. Another global channel for new ideas is the MyDea tool in the Idea Management portal via which new ideas concerning products and solutions, operational development, and business are proposed and channeled to the nominated substance owners for comments and further reviews.

Business performance updates are given to all personnel on a regular basis in connection with Wärtsilä interim reporting. The company intranet "Compass' and the employee magazine "Wattsup" are the common global channels for internal communication.

### **Recognition of excellent performance**

Wärtsilä encourages its employees to be innovative by granting an annual Technology and Innovation Award either to an individual or to a team for the best technical innovation of the year. The award criteria are that the invention must be innovative and environmentally sound, it must represent leading technology, improve a product or process, and offer potential for cost savings. Wärtsilä also grants annually a Customer Care Award for a team or individual who actively participated in the initiatives leading to development of business operations, quality improvements in how we serve and partner with customers, customer satisfaction, or Wärtsilä values demonstration.

## Management approach

Wärtsilä utilises various tools and processes to manage and to further develop its sustainability. The key tools for sustainability are presented in the table below.

### Wärtsilä's tools for sustainability

Basic principles	Systems and processes	Others
Vision, Mission, and Strategy	Quality Management System	Sustainability target setting
Corporate Governance	Environmental Management System	Sustainability management reviews
Corporate policies and principles: Code of Conduct, QEHS Policy, Policy on Equal Opportunities and Fair Employment Practices, Anti-Corruption Policy, Compliance Reporting Policy, etc.	Occupational Health and Safety Management System	Business development tools: Due diligence, Environmental surveys
Corporate Manual	Supplier Management System	Stakeholder dialogue
Corporate requirements for suppliers	Risk management process	Sustainability reporting

### Wärtsilä's management system

Wärtsilä's management system aims to generate added value for Wärtsilä's various stakeholders, achieve the company's strategic objectives, support sustainability performance, manage operating risks, and enhance Wärtsilä's performance through the continuous improvement process. The system includes a range of tools,

such as systems for managing quality, the company's environmental responsibilities, and occupational health and safety. Management reviews are conducted at various levels of the organisation to monitor the effectiveness of the system, the achievement of targets, and the development of key performance indicators. Wärtsilä's processes are developed in the Businesses, the Business lines and the Functions. These development projects are governed by the Wärtsilä Controllers' meeting and OD Portfolio Management Team, Wärtsilä Presidents' Quality Review and Quality Reviews, and the Functional Management Teams.

Wärtsilä's Board of Management is responsible for defining the company's main strategies, principles and policies, and for the management system itself. The Board of Management regularly monitors the effectiveness and performance of the management system. Responsibilities are distributed to the line organisation at all levels of the company, and the management system defines a specific sphere of responsibility for each Wärtsilä employee. Work groups for developing the management system are appointed at the corporate level and in most Wärtsilä subsidiaries. At the Group level, the following work groups coordinate the development of product and operational issues:

Work group	Focus	Main tasks
Wärtsilä Presidents' Quality Review	Quality	Overall responsibility for Wärtsilä's quality, quality process improvement, and achievement of strategic quality goals.
Wärtsilä Controllers' Meeting	Strategic operational development	Overall responsibility for Wärtsilä's operational development and the operational development plans, and governing the work of IM and Process development
Business Line Quality Reviews	Quality	Support and oversee quality development based on customer perception of our quality and full end-to-end lifecycle view. Platform for focusing on the key improvement areas with the biggest impact to our customers. Crossfunctional decision making to increase efficiency and shorten resolution lead time.
Wärtsilä OD Portfolio Management Team	Operational development	Operational development road map, targets, and guidelines based on business strategies and targets, and overall operational development process responsibility for the approval of the Wärtsilä Controllers' Team. Cross-divisional operational development alignment and harmonisation.
Wärtsilä EHSS Management Team	Environmental, health and safety and security (EHSS)	Overall responsibility for Wärtsilä EHSS, EHSS management system development, corporate level overall responsibility for Wärtsilä EHSS measuring and target setting, and monitoring of legislation developments.

### **Management systems**

### Proportion of Wärtsilä companies with certification

Quality (ISO 9001)	92%
Environment (ISO 14001)	66%
Occupational health and safety (ISO 18001)	67%

## **People management**

The purpose of Wärtsilä's People Strategy, as an integral part of group strategy, is to support the company businesses and to ensure the successful implementation of their strategies. This is achieved by developing the company's organisation and competencies to meet both the current and future business needs.

The key focus areas of the strategy continue to be the further development of leadership and a leadership culture, as well as an emphasis on high performance and operational excellence throughout the organisation. Strengthening accountability and ownership is encouraged by promoting employee engagement through a culture of open communication, integrity, and innovation. Similarly, the strategy ensures that the businesses have the required resources, and skilled and motivated people at their disposal. This involves the implementation of changes within the organisation, a continuous focus on competence development and performance excellence, with quality in the setting of targets, proper and regular feedback, the evaluation of overall performance, and recognition of outstanding performance.

Wärtsilä Human Resources continues to develop people management processes, tools, and ways of working that are consistent across national and organisational boundaries. In particular, an intensive effort has been made to further develop managerial skills in people management by rolling out Management Focus, a modular training programme for line managers. In 2016, the performance management module and content was reviewed to provide even better support to the line managers in their daily leadership role. Wärtsilä Human Resources continuously invests in technologies and tools that enable quick access to online reports, employee information, and annual compensation planning for both local and multi-country teams.

### Transforming company culture

Wärtsilä continued to work on diversity during 2016. The company's values of "Energy, Excellence and Excitement" are strengthened by the diversity of its employees. Wärtsilä aims to capture opportunities and make things happen, to do things better than any of its competitors, and to foster openness, respect, and trust while creating excitement. A diverse workforce generates higher profits, has better complex problem-solving skills, and enables access to a larger talent pool.

During the fourth quarter of 2016, Wärtsilä's digital strategy was introduced. It is a strategy designed to drive digital competence pervasively across the business, rather than to create a separate digital silo. This transformation is about reinventing our company into becoming "Wärtsilä as a service" – a digitally enabled, insight led, customer centric leader in the Marine and Energy sectors.

The first phase of the transformation initiative was kicked off in December by presenting the future Digital organisation. There will be multiple steps involved as progress is made towards the final digital vision. Through this transformation, Wärtsilä will change the ways of working, which will mean changes in the current setup as well. The significant digital transformation to be executed will require the acceptance of change, as well as working with different processes, solutions, and business lines.

### **Performance management**

One of the essential elements of the Wärtsilä People Strategy is to embrace and develop a culture of high performance and performance excellence throughout the organisation. Coaching to achieve better performance through smart target setting and continuous, real-time, feedback is at the core of succeeding in these efforts.

The performance management process supports Wärtsilä in reaching its business targets by translating business strategies into team and individual objectives. Each Wärtsilä employee needs to know and understand Wärtsilä's business strategies and their goals. More importantly, everyone needs to know the main targets set for their own units, and the target areas related to their own work. More focus has been put on the quality and impact of the process by emphasising the importance of continuous feedback, expected behaviours, and opportunities for personal growth.

The positive trend in development discussion compliance has continued. The global coverage of the annual development discussions was 96.2%. As a part of the performance management process, each employee receives performance feedback and an evaluation based on their overall job performance, as well as a personal development plan for the future. Overall performance evaluation is one of the considerations in compensation decisions, and is in line with the principle of performance-based rewarding.

### Learning and development

Wärtsilä continued its leadership development activities in many areas. New learning solutions for line managers have been developed to support them in their people management and leadership roles. The annual executive development programme (LLP) was held in November, and six other global leadership development programmes for senior managers were held during 2016.

A new learning solution - Growth Lab - for future leaders' development was kicked off in August. Twenty-two Wärtsilä managers and leaders, with 10 to 15 years work experience, were nominated for this new action learning programme. Participants have been given three project assignments by the Board of Management. These projects are aimed at analysing and building possible future business opportunities. The Growth Lab programme will be closed during the first quarter of 2017 with the next programme, which will be based on the lessons learned and the feedback from the first implementation, set to begin later in 2017.

Wärtsilä's HR organisation has developed an Operational Excellence Academy learning framework and an Operational Excellence learning portal with supporting materials for all those staff in the organisation involved in leading operational excellence. Close to 100 senior managers starting from the top management have participated in operational excellence learning modules during 2016, and more than 100 leaders will do so in 2017. The aim of the OE Academy is not only to learn, but to establish operational excellence as an integrated part of the company culture and way of working, and to ensure continuous efficiency improvement.

Learning on the job, self-learning, mentoring, coaching, job rotation, and assignments designed to encourage competence development and the transfer of competence and skills from experienced to younger employees, are integral parts of the development of learning and competence within the company. Employees are given formal classroom training at all organisational levels; from induction training for new employees, to training courses for the company's top executives. Wärtsilä employees attended a total of 54,999 training days during 2016; an average of 3.0 training days per employee.

In 2016, HR together with the Wärtsilä Land & Sea Academy, began preparations for upgrading the global learning management system. The new cloud version will be more user friendly and features the latest learning management system (LMS) capabilities, which are translated into an enhanced user experience. This supports the organisation's present and future needs in terms of virtual learning, collaboration, reporting, assessment, and finally mobility; enabling users to learn anywhere, anytime. The new LMS will be operational by the end of the second quarter of 2017.

### **Engagement**

At Wärtsilä, equal opportunities and opportunities for personal growth are core beliefs. The company supports its employees in self-improvement and in finding their own path within the company. Recruiting and retaining the best talent enables Wärtsilä to be the most valued business partner of its customers, and the employer of choice for current and future employees.

MyVoice is a global Wärtsilä employee satisfaction survey. The purpose of the survey is to collect employee feedback on issues related to well-being at work, the work environment, management and strategy, and to initiate development actions for improving practices

The ninth MyVoice survey took place during September – October 2016, and the results were published in November. The overall participation rate was 79.4%, which was at the same level as in 2015. On the group level, the biggest improvements were seen in the areas of Customer Focus and Values. Among the overall observations from the 2016 results, Wärtsilä values are well known, and pride in working at Wärtsilä remained high on the response chart. However, a small decline was noted in the Engagement index, especially in those units where restructuring measures have been taken. The results also indicated a continued increase in appreciation of the equal opportunities and diversity awareness at Wärtsilä. Among the challenges indicated in the survey were remunerations, as well as the amount and quality of communication with managers.

## **Environmental management**

The environment is the key element in Wärtsilä's approach to sustainability. For us, environmental responsibility has two dimensions: products and operations. Most of our efforts to improve our environmental performance, also within our operations, are conducted as part of product development and improvement. This work is supported by operational measures, which are based on achieving high environmental standards and continuous improvement.

Continual improvement of environmental performance requires the organisation to constantly work in a systematic way. This work is guided by our strategy and its environmental targets, the Code of Conduct, and the company's policies relating to Quality, Environment, Health and Safety, and it is co-ordinated and monitored by the EHSS Management team. In developing our operations, processes, and products, we endeavour to use the latest technologies available for improving efficiency in areas such as material and energy consumption, as well as for reducing and managing emissions and waste.

Wärtsilä has defined a process for the development of a product environmental strategy and its targets. The process includes the identification of aspects and impacts of the products, the means to influence these impacts, the identification of enabling and restricting boundary conditions, and the analyses of the information and the preparation and implementation of the strategy and the targets.

Wärtsilä continuously develops and improves its operations and products with the help of certified environmental management systems. Our principle is to apply the certified EHS (Environmental, Health and Safety) management systems based on ISO 14001 and OHSAS 18001 in all Group companies, excluding those companies focusing purely on sales. These units are required to apply Wärtsilä's internal EHS model which was aligned in 2016 to meet the requirements of new ISO 14001:2015 standard. Our EHS management systems cover all the operations of our subsidiaries, which means that we are able to promote environmental protection and reduce adverse impacts on a wide front.

The company's EHS management system focuses especially on complying with legal requirements, identifying and reducing environmental aspects, impacts and risks, training personnel and clearly defining their responsibilities, full documentation of activities and procedures, action in emergencies, and continuous improvement of environmental performance. The company's subsidiaries set their own targets covering significant environmental aspects of their operations and monitor the overall performance of the management

systems. At the end of 2016, 55 Wärtsilä companies operated with a certified environmental management system. These certified environmental management systems cover roughly 86% of Wärtsilä's total workforce.

### Wärtsilä's environmental strategy - a continuous process



### **Environmental management in Wärtsilä**



# Occupational health and safety

Wärtsilä's occupational health and safety principles are defined in the Code of Conduct, the company's QEHS Policy, and in the directive on environment, health, and safety (EHS). Wärtsilä's subsidiaries are required to have a management system in place that conforms to the QEHS Policy and the EHS directive. The main aspects of the management system relate to compliance with legislation, identifying and minimising occupational health and safety risks, personnel training, implementing effective health and safety programmes and instructions, recording and investigating occurred incidents, and the continual improvement of occupational health and safety performance. The number of Wärtsilä subsidiaries with OHSAS 18001 certification increased during 2016. At the end of 2016, 56 Wärtsilä companies operated with a certified occupational health and safety management system covering roughly 87% of Wärtsilä's total workforce.

In addition to the management system, Wärtsilä companies apply occupational health and safety programmes as required by local legislation. These are normally developed by occupational health and safety committees made up of company management and personnel representatives. Altogether, 81% of Wärtsilä companies have an occupational health and safety committee.

The indicators used to measure occupational health and safety performance include the number of accidents, the time of absence due to sickness, the frequency of accidents and amount of near miss / hazard observation reports. Wärtsilä has set a corporate level target of achieving zero injuries. This target is a long-term commitment from the company to strengthen a safety culture, and it requires actions from all Wärtsilä companies and employees. The safety performance of the companies is monitored on a monthly basis and the results are reviewed by the Board of Management. To further strengthen Wärtsilä's safety culture, a new global programme known as ZeroMindset was introduced in 2015. ZeroMindset will focus on three key elements: our leaders, the shared safety mindset of individuals, and effective safety tools and practices. During 2016, the EHS organisation prepared an intensive leaders' safety engagement concept which will be rolled out at the beginning of 2017, targeting all Wärtsilä line managers. This engagement will include face-to-face training sessions and hands-on practicing at workplace.

During 2016, Wärtsilä continued expanding its proactive WeCare programme. WeCare is a global software and way of working for reporting and investigating near misses, hazards, and accidents. A total of 12,650 incidents were reported to the WeCare system in 2016, of which 91% represented proactive near miss or hazard observations. This was a 41% increase compared to 2015. More than 4,200 Wärtsilä employees took part in the process of reporting, investigating, and action handling through WeCare, which indicates a good acceptance and communication of the system. As a final result, incident investigations resulted in 11,800 different improvement actions completed within Wärtsilä. As a new feature, a WeCare mobile app was introduced at the end of 2015 to increase reporting, especially in locations other than Wärtsilä premises. During 2016, 1580 reports were done by a mobile device.

In addition, Wärtsilä delivered its second global Safety Day, which took place on 10 March 2016. The theme for this event was "safe by choice", focusing on the most important choices you can make to protect yourself. This Safety Day was a great success with local events being held in locations throughout the entire Wärtsilä network. As part of the events, employees participated in playing games related to safe choices at work.

# Responsible business conduct

# **Human and labour rights**

Wärtsilä supports and respects basic human values as outlined in the UN's Universal Declaration of Human Rights. Wärtsilä also supports the Ten Principles of the UN Global Compact, of which six principles are related to Human and Labour rights.

Wärtsilä's employees represent 134 nationalities. The company supports fair and equal treatment of all its employees. Wärtsilä supports the work-related rights defined by the International Labour Organization. Therefore the company works to ensure that there is freedom of association and right to collective bargaining in the company. In those countries where local legislation does not recognise these rights, Wärtsilä endeavours to give employees other channels for expressing their opinions.

Wärtsilä does not accept the use of forced labour or child labour in any form. Human and Labour rights are a part of the Wärtsilä Code of Conduct training material and also the Wärtsilä Supplier Handbook. At the end of 2016, 79% of Wärtsilä's employees have successfully completed the renewed Code of Conduct training.

# **Preventing corruption and bribery**

Wärtsilä's Code of Conduct, Anti-Corruption Policy, and Broker Directive expressly prohibit the company and its employees from offering or accepting any kind of benefit considered to be a bribe and from taking actions that could give rise to a conflict of interest or breach of loyalty. The instructions make it compulsory to comply with anti-corruption laws of all the countries in which Wärtsilä does or intends to do business and urge the reporting of any cases of corruption and bribery. The company continues to rendering an extensive training programme for its personnel on anti-corruption principles and applicable legislation as well as the relevant company policies and procedures.

### **Political lobbying**

Wärtsilä's policy is to engage in an open dialogue and discussion with both local and international public authorities and officials. The aim of the dialogue is to share information and improve the quality of regulation. Wärtsilä participates in public consultations in the areas of importance to the company. Wärtsilä is part of the Transparency Register of the European Commission.

### **Competition regulation**

Wärtsilä has a compliance programme for managing risks relating to competition law in place, and the company's management is strongly committed to implementing this programme. The cornerstone of the programme is a competition law manual, which is kept up-to-date, providing information on competition rules and guidelines for Wärtsilä's personnel. As before, Wärtsilä arranged a number of competition law training seminars in 2016 for the relevant personnel in order to promote knowledge of competition laws and thereby ascertain full compliance with them.

### **Security management**

Wärtsilä has a corporate security policy and various guidelines, which incorporate human rights considerations and international best practices. Wärtsilä's security management principles and strategies are reviewed and approved in the Presidents' Security Meetings, which consists of Presidents of each Business, Executive Vice Presidents for Corporate Relations, Legal, Finance, and Control, and security professionals. Security management in Wärtsilä is divided into six specific security areas: Personnel, Premises, Information, Cyber, Crisis Management, and Travel Security. Operational security management in these areas is implemented on the business and local level. Wärtsilä prefers security service providers who are members of ICoCA (International Code of Conduct Association).

# Local community approach

Wärtsilä aims to contribute towards the well-being of local communities in which the company is present. This can be reached, for example, by creating employment, paying taxes and social dues, providing training and education to employees, co-operating with local stakeholders, and by supporting local development.

The guiding principle of Wärtsilä's Code of Conduct is to promote openness and good interaction with its stakeholders locally. This applies as much to the families of personnel, our neighbours, educational institutions, and the media, as to local authorities and officials. The methods used towards this end include Open Door days, press briefings, and different modes of communication for different target groups.

As a truly international company, Wärtsilä has delivered solutions to more than 170 countries. Wärtsilä supports its solutions globally during their entire lifecycle, often spanning up to 30 years. Thus, Wärtsilä can at times be present in countries facing various uprisings, ethnic conflicts, area disputes, or violations of human rights. Conducting business locally emphasises the importance of responsible business practices. Governments and the international community define the proper framework for companies to conduct their business. Wärtsilä complies with relevant legislation and international conventions. Wärtsilä complies with all relevant guidelines of the OECD and the International Chamber of Commerce and with the sanctions set by the United Nations and the European Union, by supporting their implementation. In addition, the Wärtsilä Code of Conduct applies to all Wärtsilä employees. We are committed to sustainable development and responsible business conduct, and we promote the Ten Principles of the UN Global Compact within the sphere of our influence.

Wärtsilä's impact on employment, the public sector, and the company's activities for charitable purposes are described in the Economic Performance section of this report. Measures to evaluate the impacts on local communities in case of operational changes of Wärtsilä subsidiaries are determined case by case.

# **Product design principles**

### **Product design principles**

Wärtsilä strives to develop environmentally sound, safe, and reliable products and solutions for its customers. By providing lifecycle maintenance, reconditioning, and retrofitting services for its products, Wärtsilä is able to support its customers' operations throughout the entire life of service of Wärtsilä products. Reconditioning of engines and components increases the reliable service life of the products. Modernising can improve current operational performance of installations and enables customers' operations to meet tightening future regulative requirements.

The majority of the international environmental policies and requirements for Wärtsilä's products and solutions are set by the International Maritime Organization (IMO), and the International Finance Corporation (IFC), a member of the World Bank (WB) group. On the regional or national level, organisations such as the United Nations Economic Commission for Europe (UNECE), European Commission (EC), US Environmental Protection Agency (EPA), and other emission standards such as in Germany, Japan, and India are considered the most important policy and regulatory directors for Wärtsilä products.

The IMO is responsible for adopting its own standards for the safety and security of shipping and the prevention and control of marine pollution and emissions from vessels. The IMO regulates nitrogen and sulphur oxide emissions as well as ballast water treatment procedures and limitations. The IFC provides general and industry specific Guidelines of Good International Practices (GIIP) such as the Environmental, Health, and Safety (EHS) Guidelines for Thermal Power Plants, which is today considered the minimum environmental standard in larger global power plant projects. It is adhered to in most of the projects financed by international financial institutions in emerging markets. In the European Union (EU), the EU Industrial

Emissions Directive (IED) sets the requirements to minimise pollution from different industrial sources throughout the EU.

Wärtsilä's engines are designed to meet the requirements of the EC's Machinery Directive, the SOLAS Convention and other relevant safety directives. Wärtsilä's propulsion systems are designed to comply with the SOLAS and safety requirements of relevant classification bodies. New types of engines must also meet international safety requirements. Type approval is acquired from classification societies before new products are launched. Wärtsilä's ship design follows class society and flag state rules in the design process to secure safe and compliant designs for its clients. Class approval is required for drawings and calculations to be delivered to the client before construction of the vessel starts.

Wärtsilä's products are delivered with appropriate user guides that include basic information about the products and full instructions for their use. In addition, Wärtsilä provides appropriate specific training to ensure environmentally sound and safe utilisation of Wärtsilä's products at customers' daily operations.

In order to ensure Wärtsilä's ability to respond to future regulation requirements, the company actively monitors legislative initiatives and changes in environmental legislation. As a result, Wärtsilä has focused its R&D activities on the development of new environmentally sound products and solutions that meet the future demands of the changing operating environment.

# **Supply chain management**

Suppliers play a significant role in our delivery process. We aim to have close and excellent relationships with our key suppliers in order to ensure that both parties understand and comply with our strict process and product requirements. Apart from financial benefits, close relationships stimulate knowledge sharing, create an environment of innovation, and integrate more strongly strategic suppliers into Wärtsilä's value chain. Wärtsilä has an extensive supply base with more than 25,000 active suppliers, most of whom are located in Europe, where we have our main production units. We are also continuously investing in developing a strong supply chain network in Asia.

Wärtsilä has defined processes for selecting suppliers, determining their requirements, and developing the supply relationship. We offer our suppliers a partnership that strengthens the competitiveness of both parties. A precondition of this partnership is an open and continuous dialogue. The partnership approach is also applied in Wärtsilä's research and development activities, in which we often collaborate with universities, research institutes, and key suppliers.

Wärtsilä's supplier requirements address both general features and issues relating to quality, product-specific requirements, environmental management, occupational health and safety, social responsibility, and legal compliance. These requirements are included in standard supply contracts. Suppliers are also responsible for complying with relevant laws and regulations. Wärtsilä monitors that key suppliers comply with these requirements by using performance indicators and conducting various types of audits. Suppliers must demonstrate their compliance with these requirements in order to receive approved supplier status.

Wärtsilä assesses and manages its key suppliers through its Supplier Management System. Wärtsilä regularly conducts supplier evaluations, which are divided into three categories: pre-assessment, auditing, and performance review. In the pre-assessment phase, Wärtsilä assesses potential new suppliers before the supplier relationship begins. Audits are conducted for new suppliers of critical components and for suppliers whose performance does not meet Wärtsilä's requirements. Performance reviews are carried out to identify and solve deviations from the requirements.

As part of the supplier evaluation, Wärtsilä conducts a rating based upon Wärtsilä's supplier requirements. This rating is a result of an assessment of various information sources, such as pre-qualification questionnaires, dialogue with suppliers, and/or conducted audits. Based on this rating, the suppliers can be

approved, approved with limitations or remarks, or banned. During 2016, 132 suppliers with no valid assessment were rated, and 85 suppliers received a renewal of their rating (valid for 3 years). By the end of 2016, we rated 658 out of our 1,060 key suppliers, which covers 96% of key supplier spend, and 2,225 suppliers in total with a spend coverage of 66.7%.

This rating is part of the quarterly supplier reviews conducted by Wärtsilä Supply Management. The rating is reviewed regularly, as are the results of conducted audits.

In 2016, 28 suppliers were banned because of non-compliance with Wärtsilä's requirements, including 19 for sustainability reasons.

Wärtsilä has clear expectations towards its suppliers in terms of compliance with relevant legislation, environmental, quality, and occupational health and safety management, and social performance, and strives to ensure that these expectations are met. Wärtsilä develops its supply management system on a regular basis.

In 2017, Wärtsilä will be launching a risk-based supplier assessment and management system for new suppliers, which will be applied by 2018 also to existing suppliers.

# **Sustainability data**

# **Economic**

Wärtsilä's purpose is to create value for its various stakeholders. The focus is on profitability and raising shareholder value. Achieving this depends on our ability to satisfy the expectations of our other stakeholders as well. These include providing customers with high-quality and environmentally sound products, solutions and services, building long-term partnerships with suppliers, offering employees competitive compensation and working conditions, and contributing to the well-being of the local communities in which we operate. Good economic performance establishes a platform for the other aspects of sustainability – environmental and social responsibility.

### **Economic performance**

Direct Economic Value Distributed (G4-EC1)

MEUR	2016	2015	2014	2013	2012
Customers					
Net sales	4 801	5 029	4 779	4 654	4 725
Suppliers					
Cost of goods, materials, and services purchased	2 969	3 136	3 066	2 901	3 007
Value added	1 831	1 893	1 713	1 753	1 717
Distribution of value added					
Distributed to stakeholders	1 593	1 555	1 475	1 443	1 432
Employees					
Wages and salaries	939	935	906	903	887
Public sector					

Taxes and social dues	343	349	313	314	317
Creditors					
Net financial items	-53	-34	-28	-19	-30
Shareholder					
Dividends	256	237	227	207	197
Communities					
Donations given	2	1	1	1	1
For business development	238	338	239	310	285
	2016	2015	2014	2013	2012
Customers					
Net sales (MEUR)	4 801	5 029	4 779	4 654	4 725
Net sales by market area (MEUR)					
Europe	1 581	1 566	1 402	1 329	1 202
Asia	1 774	2 051	1 989	1 759	2 009
Americas	1 039	1 006	840	1 068	994
Africa	313	329	398	405	398
Other	94	78	150	93	122
Suppliers					
Cost of goods, materials, and services purchased (MEUR)	2 969	3 136	3 066	2 901	3 007
Employees					
Salaries and wages (MEUR)	939	935	906	903	887
Salaries and wages by market area (MEUR)					
Europe	650	632	637	649	631
Asia	153	163	144	138	145
Americas	110	112	99	91	91
Africa	19	21	18	14	12
Other	7	8	8	10	8
Net sales/employee (TEUR)	262	271	265	248	250
Public sector					
Taxes and social dues (MEUR)	343	349	313	314	317
Taxes and social costs by market area (MEUR)					
Europe	246	246	220	232	234
Asia	45	50	42	34	39
Americas	47	44	37	39	36
Africa	5	6	12	8	6
Other	0	2	2	2	2
Subsidies received (TEUR)	8 343	9 669	11 486	6 331	5 543
Net financial items (MEUR)	-53	-34	-28	-19	-30
Community					
Donations given, Board of Directors (TEUR)	1 365	110	110	111	104
Donations given, Wärtsilä companies (TEUR)	533	511	608	609	456

Financial implications and other risks and opportunities for the organisation's activities due to climate change (G4-EC2)

Wärtsilä Italia S.p.A is the only subsidiary that falls into the scope of the EU Emission Trading Scheme (ETS) because of the heating plant of the factory. The EU ETS has not had any impact on the company's profitability. Wärtsilä's response to climate change is to develop and provide products, solutions, and services that enable our customers to reduce their greenhouse gas emissions. More information about Wärtsilä's solutions for climate change can be found on our website: www.wartsila.com. The potential business risks related to climate change and Wärtsilä's products are presented under the sustainability and climate change risks in the Risk Management chapter of the Governance review.

Coverage of the organisation's defined benefit plan obligations (G4-EC3)

The pension cover is based on the legislation and agreements in force in each country. In Finland, most of the pension obligations are covered by the Employee Pensions system (TyEL). The largest defined benefit plans are used in Switzerland, Germany, the UK and Sweden. Most of these defined benefit pension plans are managed by pension funds, and their assets are not included in the Group's assets. Wärtsilä's subsidiaries make their payments to pension funds in accordance with the local legislation and

practices in each country. Authorised actuaries in each country have performed the actuarial calculations required for the defined benefit plans. More information on the Group's pension obligations can be found in the Financial Review, Note 22. Pension obligations.

Financial assistance received from government (G4-EC4)

Subsidies received (TEUR)	2016	2015	2014	2013	2012
	8 343	9 669	11 486	6 331	5 543

The value of the subsidies received in 2016 was EUR 8 343 thousand and they were among others related to R&D projects. The most contributing countries in 2016 were Finland, Spain, and Norway.

#### **Market presence**

Wage levels (G4-EC5)

Wärtsilä applies and follows the local employment legislation in all countries and respects the local collective labour agreements, which often define the minimum wage levels. In addition, entry level salaries are benchmarked against the market references by function and educational qualification. Laws and regulations give the minimum level, but often the actual salaries exceed these levels. A total compensation package is tailored for each country on the basis of corporate rewarding guidelines and local market practices. The base salary is set to meet market conditions, the demands of the job, and individual competence and performance.

Hiring principles (G4-EC6)

In principle, all open vacancies are published both externally and internally ensuring equal opportunity to apply for Wärtsilä positions. If there is no specific reason such as a competence transfer need from other countries to hire expatriates to the position, local residents are hired. This principle also applies to senior management. Senior management includes global business and corporate management and local company management positions. Globally, 76% of Wärtsilä's senior management is locally hired, in other words from the same country as the Wärtsilä subsidiary they work for.

# **Environment**

The environmental impacts of Wärtsilä's operations largely relate to manufacturing. The main environmental aspects of manufacturing relate to the use of energy and natural resources and thus also to the emissions that are produced by the manufacturing processes. Product development also requires the testing of products and individual components which, alongside manufacturing, loads the environment. However, the positive impacts of product improvements on the environment far outweigh the negative impacts of testing when taking the product's entire lifecycle into account.

The main reasons for significant fluctuations in certain reported environmental performance indicators from year to year are:

- Changes in production volumes
- Changes in R&D testing programmes
- · Changes in company structure (divestments, mergers, and acquisitions)
- · Changes in the reporting scope and coverage

### Monitoring environmental impacts

Within Wärtsilä, environmental impacts caused by operational activities are monitored as follows:

- · Participation in the monitoring of air quality with other local stakeholders
- Measurement of air emissions

- · Charting of noise levels
- · Periodical effluent analysis
- Soil analysis
- · Dispersion analyses and bio-indicator surveys

#### **Materials**

Materials used by weight or volume (G4-EN1)

The main materials used in Wärtsilä products are various metals: cast iron, alloy and structural steel, aluminium alloys, and bronze. In 2016, the total material usage was 84 913 tons (100 767). The major material groups were various metals 71%, sand 22%, and various chemicals 2%.

Materials	2016	2015	2014	2013	2012
Total material usage (t)	84 913	100 767	88 736	91 720	99 570
Metals (t)	59 898	73 285	65 363	69 991	70 323
Sand (t)	18 399	20 915	16 445	16 537	21 279
Chemicals (t)	1 831 *		5 447	3 865	6 730
Others (t)	3 601	1 542	1 481	1 327	1 238

<sup>\*</sup> A substantial error in reporting classifications was corrected in 2016, meaning that the figure is not directly comparable to earlier years.

Percentage of materials used that are recycled input materials (G4-EN2)

The main materials used in Wärtsilä products are various metals: cast iron, alloy and structural steel, aluminium alloys and bronze. Recycled material content of these metals vary depending on the material and supplier in question. Recycled material, such as end-of-life coins and bronze propellers, is used for example in the casting of new propellers.

### **Energy**

Energy consumption within the organisation (G4-EN3)

The total energy consumption (in terajoules, TJ) includes the electricity, heat, and fuels used in Wärtsilä companies in recent years. The fuels are used mainly in engine testing, but also in heating, production, and transportation. In 2016, the fuels were from non-renewable sources.

Wärtsilä uses electricity in its manufacturing operations - for example in machining components - and in service workshops and offices. Both the electrical and the heat energy generated during engine test runs can be utilised. Wärtsilä's aim is to use the electrical energy for its own purposes while also selling part of this electrical energy to local power companies. Due to the nature of engine test runs, the production of electricity and the company's electricity demand are not equivalent; this allows the surplus energy to be sold to local power companies.

Heating for factories and offices accounts for most of Wärtsilä's consumption of heat energy. In several factories, the heat generated in engine test runs is used for heating. Some factories and offices are connected to a local district heating network, some have their own heating plant, and some use electricity for heating.

Energy	2016	2015	2014	2013	2012
Total energy consumption (TJ)	1 471	1 539	1 475	1 613	1 691
Electricity consumption (MWh)	139 363	142 819	140 713	143 833	143 810
Purchased electricity (MWh)	132 771	131 501	131 896	136 098	125 761
Generated electricity (MWh)	6 592	11 318	8 817	7 735	18 007
Sold electricity (MWh)	23 620	21 834	25 548	23 527	22 568
Heat consumption (MWh)	33 542	30 161	25 073	29 077	27 910
Light fuel oil (t)	3 918	4 801	4 461	4 765	5 096
Heavy fuel oils (t)	3 647	3 675	3 579	3 755	5 920
Natural gas (t)	8 614	9 750	8 721	9 806	9 767
Other fuels (t)	3209	2834	3348	4214	4025

#### Energy intensity (G4-EN5)

Energy	2016	2015	2014	2013	2012
Total energy consumption (TJ)/Net sales	0.313	0.334	0.319	0.354	0.406

#### Reduction of energy consumption (G4-EN6)

The Wärtsilä Energy Efficiency programme was launched in 2008. The ultimate goal of this programme is to reduce Wärtsilä's energy consumption by at least 10% in terms of absolute consumption (GWh) by 2016 compared to mean energy consumption in 2005. Since the launch of the programme comprehensive energy audits have been carried out in the nine most energy consuming countries. The energy audits have revealed the savings potential and measures to improve energy efficiency and have been used as a concrete basis for energy saving actions. These energy saving actions have achieved reductions of energy consumption of various energy types, including electricity, heat and fuels. For the smaller energy consuming companies, Wärtsilä has created tools for identifying the energy saving potentials. By the end of 2016 energy savings of 43.3 GWh have been reached.

Energy savings	2016	2015	2014	2013	2012
Annual energy savings	1.3 GWh	4.6 GWh	1.9 GWh	15.7 GWh	7.5 GWh
Cumulative energy savings	43.3 GWh	42.0 GWh	37.5 GWh	35.6 GWh	19.9 GWh

#### Water

#### Total water withdrawal by source (G4-EN8)

Wärtsilä's water consumption can be divided into two categories: domestic use and cooling use. Domestic water is used mainly for sanitary purposes and by industrial equipment, such as machine tools and washing machines. Some factories also use domestic water to produce moulds or to fill in their closed-loop cooling system needs. Wärtsilä uses seawater for its engine and process cooling needs.

Total annual water consumption split by the water withdrawal source: Out of cooling water about 99% comes from local surface watercourses where only heat is released along with clean water, and about 1% of cooling water comes from municipal water utilities. Out of Wärtsilä's total water consumption in 2016, about 92% was seawater for cooling purposes, about 6% was from municipal water supplies, about 1% was directly withdrawn groundwater, and about 0.05% was rain water or waste-water reused from another organisation.

Water	2016	2015	2014	2013	2012
Total water consumption (1 000 m³)	8 444	6 971	7 774	7 534	9 546
Consumption of domestic water (1 000 m³)	613	703	683	744	799
Consumption of cooling water (1 000 m³)	7 831	6 268	7 091	6 790	8 747

### Water sources significantly affected by withdrawal of water (G4-EN9)

No water source has been found to be significantly affected by any Wärtsilä subsidiary water withdrawal.

### Percentage and total volume of water recycled and reused (G4-EN10)

Wärtsilä Italia S.p.A. recycled 153 070 m3 of water in 2016 by running it through a water treatment plant and reusing the cleaned water in production processes. The amount corresponds to roughly 61% of Wärtsilä Italia's annual water consumption and 2% of Wärtsilä's total water consumption in 2016. No other major water recycling processes are in use in Wärtsilä production facilities globally.

### **Emissions**

#### Greenhouse gas (GHG) emissions (G4-EN15-EN18)

In addition to direct CO<sub>2</sub> emissions, Wärtsilä's operations generate indirect CO<sub>2</sub> emissions. In 2016, the calculated secondary CO<sub>2</sub> emissions were 59 697 tons (60 317) (from purchased electricity and heat) and the CO<sub>2</sub> emissions from flights totalled 37 972 tons (39 033).

GHG emissions	2016	2015	2014	2013	2012
Emissions of carbon dioxide (t) (direct) (SCOPE 1)	57 355	63 441	57 477	59 631	63 762
Emissions of carbon dioxide (t) (indirect) (SCOPE 2)	59 697	60 317	55 989	57 040	54 011
Emissions of carbon dioxide (t) (indirect) (SCOPE 3)	168 571 *	39 033	39 619	40 596	39 033
GHG emissions intensity (all)	60.8	35.30	33.10	34.50	37.70

<sup>\*</sup> Includes indirect emissions from materials, energy, and flights from 2016. Pre-2016 figures only include emissions from flights.

#### Reduction of greenhouse gas (GHG) emissions (G4-EN19)

Wärtsilä has taken several measures to reduce its indirect CO2 emissions. The energy efficiency commitment aims to reduce energy consumption and emissions. In addition, Wärtsilä's focus lies on reducing travelling by implementing a strict travel policy and by using three main virtual meeting concepts: Skype instant messaging, which enables live chats between two people or more, Skype meetings allowing multi-person meetings from personal computers, in which presentation material can be shared, and the Telepresence videoconferencing system. In Wärtsilä, Skype and Telepresence are in everyday use. Approximately 1 300 Skype conferences are arranged daily, 82 video conference rooms in 37 countries and 38 Telepresence rooms established in Wärtsilä premises in 19 countries.

### NOx, SOx and other significant emissions (G4-EN21)

Air emissions are mainly caused by test runs and the painting of completed engines or other Wärtsilä products. Test run emissions consist of nitrogen oxides (NOx), sulphur dioxide (SOx), carbon dioxides (CO2) and particles, as well as small amounts of other emission components. The painting of engines and other Wärtsilä products generates VOC emissions (volatile organic compounds). Engine emissions are reduced through research and development, as well as product development and testing. These measures also generate emissions, but their results reduce the future emissions of manufactured engines.

Emissions	2016	2015	2014	2013	2012
Emissions of nitrogen oxides (t)	500	553	519	549	697
Emissions of sulphur oxides (t)	59	63	76	91	145
Emissions of total hydrocarbons (t)	116	145	87	130	180
Particulates (t)	9	9	9	10	13
Emissions of VOC (t)	30	40	40	49	51

The primary sources of manufacturing noise are the engine test runs and the ventilation machinery on factory roofs. This noise is mostly low frequency and is therefore not easily detected by the human ear. Wärtsilä has specifically addressed the issue of noise protection using technical means and has succeeded in lowering noise levels considerably. However, noise abatement is a continuous need and requires regular monitoring.

### **Effluents and waste**

### Total water discharge by quality and destination (G4-EN22)

Wärtsilä uses seawater for its engine and process cooling needs, in which case the cooling water system is kept separate so that only heat is released into the natural water system. Wastewater is sewered and piped to the local wastewater treatment plant or treated on site before being discharged. If the effluent is not suitable for discharge, it is taken away for appropriate processing, for example to a special treatment plant for hazardous wastes.

Several Wärtsilä subsidiaries have environmental permits allowing clean or properly treated water discharge into natural water bodies. Most of this discharge is clean cooling water released back into local surface watercourse, where only heat is released.

In 2016, the total amount of water discharge was 8 515 221 m3.

2016 water discharge	Municipal sewer	Sea	River	Ground
Amount (m3)	259 858	7 820 626	403 535	31 185
% of total water discharge	3	92	5	0

Total weight of waste by type and disposal method (G4-EN23)

Manufacturing activities cause various wastes. These are divided into two main categories: hazardous and non-hazardous wastes. Hazardous wastes include cutting fluids, various types of waste oil, paints and solvents, oily wastes, solid wastes, etc. Non-hazardous wastes include scrap metal, metal swarf, waste plastics, waste wood, domestic waste, cardboard, and paper waste. All Wärtsilä companies sort their waste according to local municipal regulations. Generally speaking, the main sorting categories are waste to be incinerated, waste for landfills, and waste for recycling.

Waste management in Wärtsilä has four aims, listed in their order of priority:

- to reduce the amount of waste generated in processes
- to use waste as a material
- to use waste as energyto dispose of waste in an environmentally sound way

Waste	2016	2015	2014	2013	2012
Total waste (t)	50 020	52 037	46 829	44 741	62 517
Non-hazardous waste (t)	42 663	44 864	39 409	33 623	39 512
Hazardous waste (t)	7 357	7 173	7 420	11 118	23 005
Waste for landfills (t)	9 962	8 593	9 621	16 875	21 988
Waste for recycling (t)	30 695	34 074	27 328	14 622	15 423
Waste for incineration (t)	1 889	2 197	2 460	2 125	2 101
Hazardous waste for landfills (t)	964	2 586	2 504	6 360	17 376
Hazardous waste for recycling (t)	5 470	3 502	3 792	2 796	3 200
Hazardous waste for incineration (t)	923	1 084	1 124	1 963	2 429

### **Products and services**

Extent of impact mitigation of environmental impacts of products and services (G4-EN27)

Environmental products and services are the most important means for Wärtsilä to mitigate the environmental impacts. Wärtsilä has a key role in providing environmentally sound solutions and services that enable our customers to develop their business in a sustainable way. The value of sustainable innovation is delivered across a wide range of environmentally sound products and solutions, including technologies related to efficiency improvement, reduction of gaseous and liquid emissions, effluent and ballast water treatment, as well as to products and solutions that are flexible, efficient, reliable, safe, cost-efficient to operate, and that have a minimal environmental footprint throughout their lifecycles.

### **Expenditures**

Total environmental protection expenditures and investments by type (G4-EN31)

Concerning Wärtsilä's operations, we have defined expenditures as environmental expenditures if they are related to soil, water and air pollution control, waste management, environmental management, or noise control.

A substantial proportion of the company's investments in product development are targeted at securing environmental compliancy providing short- and long-term benefits for the whole value chain and ultimately for the environment.

Expenditures	2016	2015	2014	2013	2012
R&D costs (MEUR)	131	132	139	185	188
Environmental costs					
Environmental capital expenditures (MEUR)	0.7	0.5	1.9	0.6	0.8
Environmental operating expenditures (MEUR)	4.0	4.6	4.8	5.1	6.3

# Social

Wärtsilä's aim is to provide the best value and service to our customers by continuously developing our competencies and way of working. The strategic goal of Wärtsilä's social responsibility and people strategy is to bring the business strategy alive by developing Wärtsilä's organisation and competencies to meet the evolving business needs.

Our aim is to have energetic, competent, and motivated personnel with exciting and meaningful jobs and career opportunities led by excellent leaders. We recognise good performance and respect diversity. We also endeavour, by applying high standards of occupational health and safety, to offer a hazard-free workplace to our employees, contractors, and others working in different parts of the corporation.

Good corporate citizenship is accomplished through active co-operation, open communication, and good relationships with our stakeholders. Wärtsilä's operations and relations with its stakeholders are based on the company's Code of Conduct, with which each Wärtsilä company and individual is required to comply.

### Structural changes in 2016 (G4-13)

As a response to the challenging global marine market situation, Wärtsilä started in July 2015 organisational adjustments in Marine Solutions with a plan to reduce 600 jobs globally, of which about 160 were planned to be in Finland. Wärtsilä implemented changes during 2016.

In April 2016, Wärtsilä announced further measures to adapt the organisation to the weakened new build market situation and the tough competitive environment in both the marine and energy markets. The organisational adjustments which signify the reduction of approximately 550 jobs, are concentrating in engine related R&D activities in Finland.

When fully implemented, these restructuring programmes are expected to result in annual savings of approximately EUR 90 million. Of the savings approximately EUR 60 million materialised by the end 2016, and the remainder are estimated to materialise by the end of 2017.

On 30 June 2016, Wärtsilä acquired American Hydro Corporation from Weir Group plc. Wärtsilä foresees that the acquisition will strengthen its presence in hydro and industrial services as well as support growth strategy and expansion in renewables, improving Wärtsilä's offering and services towards customers. The USA and Canada based company currently employ 241 people.

On 30 June 2016, Wärtsilä signed an agreement to acquire Eniram, a Finland-based technology company providing the marine industry with energy management and analytics solutions. Ownership of the company transferred to Wärtsilä with effect from 1 July 2016. The acquisition of Eniram enables Wärtsilä to grow and strengthen its existing digital offering and in-house capabilities, specifically in data analytics, modelling and performance optimisation. Eniram which is headquartered in Helsinki, Finland and has subsidiaries in the UK, the USA, Germany and Singapore has 89 employees worldwide.

In 2015 Wärtsilä and China State Shipbuilding Corporation (CSSC) reached an agreement to join forces in a new joint venture based on Wärtsilä's 2-stroke engine business. In June 2016 Wärtsilä and CSSC have agreed to transfer Wärtsilä's 30% minority stake in the two-stroke joint venture Winterthur Gas & Diesel (WinGD) to CSSC. Following the transaction, CSSC owns 100% of WinGD. The two-stroke operations have, until the divestment, been classified as discontinued operations.

On 30 June 2016 Wärtsilä sold its majority interest in Wärtsilä Ship Design Serbia to the operative management of the company. Wärtsilä Ship Design Serbia employed 31 employees.

In September 2016 Wärtsilä agreed to divest its power drives business to Finland based The Switch. The deal was closed in October 31. The divestment will encompass Wärtsilä's Medium and Low Voltage power drives specialised for marine applications. The assets include the company's test centre and parts of its manufacturing facilities in Stord, Norway. This business has earlier been a part of Wärtsilä's Electrical & Automation (E&A) business line. Following the acquisition, the Switch will serve as one of the supply chain partners to Wärtsilä's E&A business. 17 employees have changed employer from Wärtsilä to The Switch.

# **Employment**

Personnel in 2016 (G4-10, G4-11, G4-LA1, G4-LA12)

In addition to direct employment, Wärtsilä employed also indirectly an external workforce totalling 2 876 man-years in subcontracting at its factories and units. The units located in Finland had a total personnel of 3 195 employees.

All in all, 2 680 employees left and 1 709 joined Wärtsilä globally during 2016 for different reasons. Wärtsilä had 18 011 employees at the end of 2016.

Personnel	2016	2015	2014	2013	2012
Number of employees at the end of the year	18 011	18 856	17 717	18 663	18 887
Personnel by business					
Services	10 567	10 592	10 692	10 785	11 163
Marine Solutions	6 074	6 847	5 603	3 612	2 139
Energy Solutions	903	959	978	1 053	932
PowerTech	*	*	*	2 449	3 811
Other	467	459	444	764	842
Personnel by market area					
Europe	10 399	10 893	9 633	10 507	10 490
Asia	4 992	5 297	5 477	5 628	6 084
Americas	1 919	1 917	1 840	1 876	1 693
Africa	612	656	676	563	533
Other	89	92	91	89	87
Average age of employees	41.0	41.0	40.2	39.7	39.4
Permanent employees (%)	89	89	88	88	88
Temporary employees (%)	11	11	12	12	12
Full-time employees (%)	98	98	98	97	97
Part-time employees (%)	2	2	2	3	3
Employee turnover (resigned) (%)	5.3	5.2	6.2	7.7	6.9
Net employment creation	-840	-755	-283	-477	-416

<sup>\*</sup> PowerTech was merged into Marine Solutions in 2014

Number of employees by employment contract and gender in 2016	Permanent	Temporary
Total	16 569	1 442
Male	14 151	1 226
Female	2 418	216

Permanent employees by employment contract type and gender in 2	016 Full-time	Part-time
Total	16 238	331
Male	14 032	281
Female	2 206	50

Total workforce by employees and supervised workers and by gender in 2016*	Employees	Supervised workers
Total	18 011	1 091
Male	15 377	815
Female	2 634	276

<sup>\*</sup> Total workforce includes Wärtsilä employees and supervised external employees.

### Total workforce by market area in 2016\*

Europe	
Male	9 131
Female	1 889
Asia	
Male	4 786
Female	617
Americas	
Male	1 643
Female	319
Africa	
Male	632
Female	85

<sup>\*</sup> Total workforce includes Wärtsilä employees and supervised external employees.

New employee hires in 2016	Employees	<b>Rate (%)</b>
Total	1 709	9.1
Gender		
Male	1430	8.9
Female	279	9.9
Age group		
< 30 years	643	20.7
30-50	819	7.0
> 50 years	247	6.0
Market area		
Europe	561	5.1
Asia	546	10.2
Americas	429	22.4
Africa	173	25.5

Employee turnover (resigned) in 2016	Employees	Rate (%)
Total	919	5.3
Gender		
Male	782	5.3
Female	137	5.3
Age group		
< 30 years	207	11.1
30-50	577	5.5
> 50 years	135	3.4
Market area		
Europe	337	3.3
Asia	387	10.2
Americas	97	5.6
Africa	98	19.1

Benefits provided to full-time employees that are not provided to temporary or part-time employees (G4-LA2)

In general, temporary and part time employees are offered the same benefits as permanent employees. In some countries, eligibility is linked to months or years of service – such differences being typically based on collective agreements according to local legislation.

### Labour/management relations

Minimum notice periods regarding operational changes (G4-LA4)

Wärtsilä way of working concerning minimum notice periods is described in the Employee Practices section.

### **Occupational health and safety**

Percentage of total workforce represented in formal joint management-worker health and safety committees (G4-LA5)

Wärtsilä companies apply occupational health and safety programmes as required by local legislation, which are normally developed by occupational health and safety committees consisting of representatives of the companies' management and personnel. Altogether 81% of Wärtsilä companies have an occupational health and safety committee covering 94% of Wärtsilä's employees.

Type of injuries and rates of injuries, occupational diseases, lost days and absenteeism, and total number of work-related fatalities (G4-LA6)

The positive trend in reducing lost time injuries continued. Wärtsilä achieved a good result in 2016, with a lost time frequency index of 9% below that of the previous year. There has been a continual lost time injury frequency reduction since year 2008.

However, Wärtsilä regrets to report a contractor fatality. A contracted male driver was transporting personnel to a power plant under Wärtsilä Operation & Maintenance agreement in Nigeria. The car crashed into a cement truck reversing into the express way. The driver lost his life in this car accident.

Injuries	2016	2015	2014	2013	2012
Total number of injuries	439	461	510	730	742
Number of lost time injuries resulting in at least 1 day absence, total	147	157	168	199	238
Number of lost time injuries – work-related	95	104	130	162	194
Number of lost time injuries – commuting	52	53	38	37	44
Lost time injuries / million working hours	2.6	2.8	3.5	4.4	5.5
Absence rate					
Absence due to illness (% of total working hours)	2.2	1.9	2.0	2.1	2.0
Absence due to lost time injury (% of total working hours)	0.1	0.1	0.1	0.1	0.1
Absence due to occupational diseases (% of total working hours)	0.0	0.0	0.0	0.0	0.0
Fatalities					
Number of fatalities, total	1	1	5	1	0
Employees	0	1	3	1	0
Contractors	1	0	2	0	0

Workers with high incidence or high risk of diseases related to their occupation (G4-LA7)

Wärtsilä employees constantly work close to the running engines while conducting overhaul operations or testing engines, which exposes them to high levels of noise. Wärtsilä has occupational safety and health programmes in place to prevent hearing loss, including providing hearing protectors to those employees under risk of hearing loss.

### **Training and education**

Average hours of training per year (G4-LA9)

Wärtsilä's average number of training days in 2016 for male employees was 3.2 and for female employees 2.8.

Training days/employee	2016	2015	2014	2013	2012
All employees	3.0	3.0	4.2	4.1	3.4
Managers and superiors	3.7	3.5	5.1	4.6	3.3
Other white-collar employees	2.9	2.9	3.5	4.1	3.9
Blue-collar employees	3.0	3.1	4.4	3.6	3.0

Programmes for skills management and lifelong learning (G4-LA10)

Wärtsilä programmes for skills management is described in People Management section. Wärtsilä offers a wide variety of internal training courses for its employees, covering over 20 training categories. These include topics like engine technology, health and safety, language and culture, project management, environment, security, and leadership.

Percentage of employees receiving regular performance and career development reviews (G4-LA11)

Development discussions held annually	2016	2015	2014	2013	2012
Coverage %	96	92	92	91	84

### **Diversity and Equal opportunity**

Composition of governance bodies and breakdown of employees (G4-LA12)

A diverse workforce generates higher profits, better complex problem-solving skills, and access to a larger talent pool. Wärtsilä's Diversity Initiative began in 2012 and aims to drive an inclusive corporate culture at all levels to meet global requirements in the corporation. By investing in diversity and supporting employees of varied gender, age, personality, and educational background, Wärtsilä becomes a more innovative business partner as well as a more attractive employer.

Gender diversity	2016	2015	2014	2013	2012
Male/female ratio (%)	84/16	85/15	86/14	85/15	84/16
Executive positions globally: male/female ratio (%)	89/11	89/11	90/10	90/10	90/9
Regional diversity					
Number of nationalities	134	131	122	120	107

## **Product and Service Labelling**

Results of surveys measuring customer satisfaction (G4-PR5)

In order to put the needs of customers always first, Wärtsilä carefully listens and acts upon customer feedback, at both operative and management levels. Wärtsilä places great emphasis on earning long-term customer trust through keeping its promises. While challenges may arise at any time in this business, relationships are strengthened by focusing on customer satisfaction and loyalty.

Customer feedback on project deliveries and the operation of their installations, is welcomed. To know what works and where to improve, as well as understanding the customers' operational environments, is critical in developing the company's products and services. To ensure customer satisfaction, their feedback is systematically reviewed and the needed actions are taken. In addition, Wärtsilä collects feedback during different events, activities, and interactions with its customers.

Customer satisfaction	2016	2015	2014
Marine Solutions	76%	75%	78%
Services	90%	89%	89%
Energy Solutions	97%	95%	88%
Sample	4 899	4 312	4 118

Customer satisfaction percentage is based on one question: Are you satisfied with Wärtsilä overall performance? Answering options: Satisfied, Neutral or Dissatisfied. Percentage shows Satisfied as part of total answered.

# **Compliance**

## **Environmental compliance**

Wärtsilä companies comply with all local environmental legislation. The operations of Wärtsilä's manufacturing companies require a valid environmental permit, the terms of which are generally met. Incidents of non-compliance are described in the following chapters.

Environmental disturbances (G4-EN24) and complaints (G4-EN34)

The number of disturbances, complaints, and incidents of non-compliance are presented in the table below. Reported disturbances typically cover incidents in which the Wärtsilä company concerned has been obliged to report the disturbance to the authorities.

The main environmental disturbances that occurred in Wärtsilä's business locations in 2016 were 12 minor fuel or oily water spills. These disturbances were investigated and the appropriate corrective actions to minimise the impact on the environment were taken in each case. There were also two complaints made by occupants of the neighbouring property related to noise. The complaints were investigated and the noise levels promptly normalised.

Cases of non-compliance (G4-EN29)

During the review period, no instances of non-compliance related to environmental regulations were identified.

Disturbances, complaints, and non-compliances	2016	2015	2014	2013	2012
Environmental					
Disturbances	12	3	11	5	3
Non-compliances	0	3	1	2	2
Complaints	2	2	1	1	7
Social					
Non-compliances	4	4	1	4	3
Fines of non-compliance cases (EUR)	37 860	30 111	9 824	9 787	45 079

Human and labour rights compliance (G4-LA16, G4-HR3, G4-HR4, G4-HR5, G4-HR6, G4-HR12, G4-SO8, G4-SO11)

Wärtsilä supports and respects basic human values as outlined in the UN's Universal Declaration of Human Rights. Wärtsilä also supports the Ten Principles of the UN Global Compact, of which six principles are related to Human and Labour rights.

Wärtsilä's employees represent 134 nationalities. The company supports fair and equal treatment of all its employees. Wärtsilä

supports the work-related rights defined by the International Labour Organization (ILO), and works, therefore, to ensure that there is freedom of association and the right to collective bargaining in the company. In those countries where local legislation does not recognise these rights, Wärtsilä endeavours to give employees other channels for expressing their opinions.

Wärtsilä does not accept the use of forced labour or child labour in any form. Wärtsilä is unaware of any cases of human rights being breached, discrimination, infringements of rights at work, or the use of forced or child labour. During the reporting period the following misconducts were realised:

Wärtsilä Korea Ltd. was charged a penalty fee of EUR 21 500 for not fulfilling its legal obligation to hire six disabled persons. The company has mainly hired blue collar employees, which limits the suitable job offerings to disabled persons.

Wärtsilä Brasil Ltda has an ongoing case of allegedly not granting the weekly 24 hour rest required by law to an employee. This case was registered at Wärtsilä Brasil in Niterói/RJ by Ministry of Labor authorities during a scheduled inspection. The company has filed an appeal to competent authorities. No fine has been issued by the respective authorities to date.

Wärtsilä Brasil Ltda has an ongoing case of allegedly keeping employees working under offshore rotation shifts longer than 15 continuous days. This case was registered at Wärtsilä Brasil in Niterói/RJ by Ministry of Labor authorities during a scheduled inspection. The company has filed an appeal to competent authorities. No fine has been issued by the respective authorities to date

Wärtsilä Brasil Ltda has an ongoing case of allegedly having not granted an employee the minimum break required by law between two working days. This case was registered at Wärtsilä Brasil in Niterói/RJ by Ministry of Labor authorities during a scheduled inspection. The company has filed an appeal to competent authorities. No fine has been issued by the respective authorities to date.

#### Non-compliance cases presented in previous reports

Wärtsilä Brasil Ltda's appeal in 2015 against claims related to non-compliances found by the Ministry of Labour in its Manaus facility were rejected, and the company received a fine of EUR 16 360.

### Preventing corruption and bribery (G4-SO5)

During the review period, no instances of corruption or bribery were identified.

#### Political lobbying (G4-SO6)

During 2016, Wärtsilä did not make any contributions to political parties.

### Competition regulation (G4-SO7)

Wärtsilä arranged, as it has earlier, a number of competition law training seminars in 2016 for relevant personnel in order to further promote their knowledge of competition laws, and thus ascertain full compliance with such laws.

Product responsibility (G4-PR2, G4-PR4, G4-PR7, G4-PR8, G4-PR9)

Wärtsilä conducted an internal audit of test processes, which brought forward limited deviations in fuel consumption measurement tests conducted for certain marine engines before customer dispatches. Wärtsilä has reached out to customers on an individual basis, as well as reviewed all test procedures, using both internal and external resources, to secure new, more transparent processes and controls. It is to be noted that the engines in question have fulfilled the regulatory and classification society requirements.

# **Report profile**

### **Data collection**

The data on the products' environmental performance is based on measured test results. Performance data on the environmental and social aspects of sustainability has been collected from the Wärtsilä companies using a detailed questionnaire. Economic performance data is based mainly on audited financial accounts.

The sustainability data is collected and reported according to Wärtsilä's specific internal reporting guidelines that include all the definitions and instructions necessary for this purpose. Environmental expenditure and investments are reported applying the Eurostat instructions.

Each company has a nominated individual responsible for collection and consolidation of the data, and for its quality and reliability. The management of each company approves the data before it is consolidated at the Group level. The companies report their sustainability data using Wärtsilä's sustainability reporting system. The reported data is checked at both local and Group levels before its consolidation. The content of this Sustainability Report was reviewed and approved by Wärtsilä's Board of Management.

# Report assurance

KPMG Oy Ab has independently assessed the report against GRI principles for defining content and quality. As part of the assurance process, KPMG assesses local level data management and processes, evaluates the relevance and reliability of the data reported to headquarters, and assesses whether the reporting guidelines of Wärtsilä are well understood and applied. This is achieved through conducting site visits and videoconferencing. Site visit was carried out in Trieste, Italy. Wärtsilä France, Wärtsilä SAM Electronics (Germany) and Wärtsilä Water Systems (UK) were assessed through videoconferencing.

### Additional sources of information

Wärtsilä has previously published the following reports:

Wärtsilä Environmental Report 2000

Wärtsilä Sustainability Report 2002

Wärtsilä Sustainability Report 2004

Wärtsilä Sustainability Report 2005

Wärtsilä Annual Report 2006

Wärtsilä Annual Report 2007

Wärtsilä Annual Report 2008

Wärtsilä Annual Report 2009

Wärtsilä Annual Report 2010

Wärtsilä Annual Report 2011

Wärtsilä Annual Report 2012

Wärtsilä Annual Report 2013

Wärtsilä Annual Report 2014

Wärtsilä Annual Report 2015

These reports and their sustainability data are available on Wärtsilä's website: www.wartsila.com.

## **Sustainability Report Project Team**

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# **Materiality assessment**

# **Identified material aspects and boundaries**

Entities included in the organization's consolidated financial statements (G4-17)

The entities included in Wärtsilä's Consolidated Financial Statements are listed in the <u>Notes to the</u> Consolidated Financial Statements 33. Subsidiaries.

All the Group companies are included in Wärtsilä's Sustainability reporting. The report covers Wärtsilä's businesses. At the company level, the report includes the parent company and its subsidiaries as well as its manufacturing, service and sales units. The report excludes Wärtsilä's associated companies, joint ventures, and supply chain companies.

### Process for defining report content and aspect boundaries (G4-18)

Wärtsilä's Sustainability Reporting 2016 is prepared according to the GRI (Global Reporting Initiative) sustainability Reporting Guidelines (G4) and the Reporting Principles for Defining report content. This report has been prepared in accordance with the G4 sustainability reporting procedures defined by the Global Reporting Initiative (GRI). The report corresponds to the 'Comprehensive' level in the G4's reporting framework. This means that our reporting covers all the Standard Disclosures of the G4 framework and all the sustainability aspects we have identified as material in our operations.

In 2014, Wärtsilä updated the assessment of material sustainability topics. The process included an assessment of economic, environmental, and social aspects from the stakeholders' point of view and as an impact to Wärtsilä's business. Stakeholder views were collected through a questionnaire answered by 96 key stakeholder contacts in various Wärtsilä units and functions worldwide. The aim of the stakeholder questionnaire was to evaluate how important different sustainability aspects are for assessments and decision-making of Wärtsilä's stakeholders. Sustainability aspects for the stakeholder evaluation were identified based on Wärtsilä's previous experience on material sustainability topics, industry peer review, and analysis of significant economic, environmental and social impacts in Wärtsilä's value chain. Focus on stakeholder assessment was in investors and financiers, major customers, personnel, local societies, and media.

The significance of identified aspects was then analysed as a current or potential business impact on Wärtsilä. The business implications of identified sustainability aspects were evaluated based on direct financial impacts as well as risks and opportunities. In addition the level of internal policies or practices were used as an indication of potential business impact.

As a result of the materiality assessment, the following aspects were identified as material for Wärtsilä:

- Environmental impacts of Wärtsilä's products and services
- · Compliance with laws and regulations
- Economic impacts to stakeholders
- · Personnel skills and development
- · Anti-corruption and -bribery, and

- · Occupational health and safety
- In addition to the identified material aspects Wärtsilä discloses sustainability data on several other areas, because
  they are frequently asked by Wärtsilä's stakeholders or they are considered important on the basis of continuity of
  sustainability reporting.

Aspect boundaries for the identified material aspects were then evaluated in reflection to the sustainability context that is based on the significance of their economic, environmental, and social impacts in our value chain. A more detailed description of the aspect boundaries and completeness of data collection for the identified material aspects can be found in the G4-20 Aspect boundary within the organisation and G4-21 Aspect boundary outside the organisation.

#### Material aspects (G4-19)

From a sustainability impact point of view, product-related environmental issues are the most significant for Wärtsilä. The use of Wärtsilä's products has an environmental impact both locally and globally. Other dimensions of sustainability mainly have a local impact.

Sustainability impact	Local	Global
Economic	•	
Environmental		
- Product related	•	•
- Operational	•	
Social	•	

The following GRI G4 aspects have been identified as material for Wärtsilä's sustainability reporting:

Category	Aspects	Identified material aspect for Wärtsilä, reported in accordance with GRI G4	Other aspects included in Wärtsilä Sustainability Reporting	Excluded from Wärtsilä Sustainability Reporting*
Economic	Economic performance  Market presence  Indirect economic impacts  Procurement practices	•	•	•
Environmental	Materials Energy		•	

	Water		•	
	Biodiversity			•
	Emissions		•	
	Effluents and waste		•	
	Products and services	•		
	Compliance	•		
	Transport			•
	Overall		•	
	Supplier environmental assessment			
	Environmental grievance mechanisms		•	
Labour practices and decent work	Employment		•	
	Labour/management relations		•	
	Occupational health and safety	•		
	Training and education	•		
	Diversity and equal opportunity		•	
	Equal remuneration for women and men			٠
	Supplier assessment for labour practices	•		
	Labour practices grievance mechanisms	•		
Human rights	Investment			•
	Non-discrimination			•
	Freedom of association and collective bargaining			•

	Child labour			•
	Forced and compulsory labour			•
	Security practices			•
	Indigenous people			•
	Assessment		•	
	Supplier human rights assessment			•
	Human rights grievance mechanisms		•	
Society	Local communities		•	
	Anti-corruption	•		
	Public policy		•	
	Anti-competitive behaviour		•	
	Compliance	•		
	Supplier assessment for impacts on society			•
	Grievance mechanisms for impacts on society		•	
Product responsibility	Customer health and safety		•	
	Product and service labelling		•	
	Marketing communications			•
	Customer privacy			•
	Compliance	•		

<sup>\*</sup> Several Compliance-related indicators under the excluded GRI aspects have also been included in the reporting in order to supplement a comprehensive description of the overall importance of compliance to Wärtsilä.

Wärtsilä's sustainability reporting provides a full standard disclosure of the management approach and performance indicators defined by the GRI G4 Guidelines.

### Aspect boundary within the organisation (G4-20)

The aspect boundary for the material aspects is all Wärtsilä companies. The economic performance data covers all Wärtsilä companies. The data on environmental and social performance covers all Wärtsilä companies except the following:

- Wärtsilä Operations Guyana Inc.
- Wärtsilä Yuchai Engine Co. Ltd.
- Wärtsilä Egypt Power S.A.E
- Wärtsilä Tanzania Ltd.
- Wärtsilä Muscat LLC
- Funa International Oy
- American Hydro Corp.
- Eniram Oy

These companies will be included in Wärtsilä's sustainable development reporting in the forthcoming years. Wärtsilä's Sustainability Reporting is an integrated part of its annual reporting, and therefore Wärtsilä publishes its sustainability data annually.

# **Coverage of operational data**

### Operational data, % of Wärtsilä companies

	2016	2015	2014	2013	2012
Economic	100	100	100	100	100
Environmental	93	83	94	93	79
Social	100	100	100	93	79

### Operational data, % of personnel

	2016	2015	2014	2013	2012
Economic	100	100	100	100	100
Environmental	98	91	98	99	94
Social	100	100	100	99	94

### Operational data, % of product manufacturing

	2016	2015	2014	2013	2012
Economic	100	100	100	100	100
Environmental	100	95	100	99	93
Social	100	100	99	93	100

### Aspect boundary outside the organisation (G4-21)

Wärtsilä's Sustainability Report does not cover performance data collected outside the Group companies.

#### Explanation of the effect of any re-statements of information provided in earlier reports (G4-22)

There are no major restatements of information provided in previous reports.

### Significant changes from previous reporting periods (G4-23)

There are no significant changes from previous reporting periods in the reporting scope and aspect boundaries. Historical data covers all entities that were part of the Group at the end of each reporting period.

# **Reporting principles**

### **Economic performance data**

The economic performance data is based on audited financial accounting and covers all Wärtsilä subsidiaries unless otherwise stated.

**Donations:** The data of this indicator included 15 major Wärtsilä subsidiaries and the parent company in 2016.

Subsidies: The data of this indicator included all Wärtsilä subsidiaries and the parent company in 2016.

**The social costs** for employees contribute to the funding of pensions, unemployment, and other social benefits that provide security and improve the quality of life for the company's employees and their families.

**Senior management** includes all employees with the highest job grade levels 10-15. At the end of 2016 this covered 439 employees.

# **Environmental performance data**

**Materials** include all the major material flows used in the production processes globally. The most material consuming product categories include engines, propellers, and propulsion systems.

**Total energy consumption** includes both direct and indirect energy usage. The direct energy usage includes the fuels used by Wärtsilä subsidiaries. Lower heating values (LHV) are used to calculate the energy consumption of fuels in joules. LHVs are based on information supplied by vendors or results of fuel analysis. The indirect energy usage includes the purchased electricity and heat. Since the efficiency of purchased

electricity and heat generation is not known, the energy conversion is done directly from the purchased values.

Fuel consumption data is based on either invoices or measured values.

Heat and electricity data is based on either invoices or measured values.

**Energy intensity** describes the ratio of total internal energy consumption divided by the total net sales of the subsidiaries included in the data gathering in a particular year.

**GHG emissions intensity** describes the ratio of total greenhouse gas emissions divided by the total net sales of the subsidiaries included in the data gathering in a particular year.

**Reduction of energy consumption** data is based on energy efficiency actions, which are based on the results of third-party energy audits. Energy audit reports include proposed energy saving actions with calculated energy saving potentials per action item.

**Water consumption:** The reported figures are based on either measured values or invoices. The cooling water usage might also be calculated from the heat load in some units.

**Recycled water:** The reported amount is the total measured recycled water used in Wärtsilä Italia S.p.A. Their water treatment plant provides reusable water for manufacturing processes.

**Water discharge:** The reported figures are based on either measured values or invoices. The cooling water discharge might also be calculated from the heat load in some units.

**Emissions:** The reported figures are mainly based on measured values, based on which specific emission factors are determined. The specific emission factors are determined for various fuels and engine types. The emissions of the heating boilers are either measured or calculated. The indirect CO<sub>2</sub> emissions (scope 2) are calculated by using the emission factors from the DEFRA (the UK government Department for Environment, Food and Rural Affairs). The indirect CO<sub>2</sub> emissions (scope 3) of energy consumption are calculated by using the emission factors from the DEFRA. The indirect CO<sub>2</sub> emissions (scope 3) of material consumption are calculated by using the emission factors from thinkstep's GaBi database. The CO<sub>2</sub> emissions of air travel (Scope 3) are based on calculations by Wärtsilä's travel agency and are based on DEFRA defined factors. The other-than-GHG emissions of vehicles are calculated by using the VTT (Technical Research Centre of Finland) Lipasto database emission factors. GWP factor used for converting methane emissions to CO<sub>2</sub>-equivalent is

**Environmental disturbances:** As such are considered major incidents, which generally require communication to local authorities.

### Social performance data

**Total number of injuries:** The reported figures include all types of reported work-related injuries, as well as commuting injuries and possible fatalities.

**Lost time injuries:** The reported figures include all reported work-related injuries resulting in absence from work of at least one day.

**LTI frequency** is expressed as reported lost time injuries and possible fatalities per million working hours. The working hours are actual paid working hours. The lost time injury rate does not include commuting injuries.

**Net employment creation** is calculated by deducting the number of permanent employees having left the company for any reason from the amount of newly hired permanent employees during the reporting period.

**Employee turnover** is calculated from permanent employees. The number of resigned permanent employees is divided by the number of permanent employees at the beginning of the reporting period.

# **Independent Assurance Report**

# To the Board of Management of Wärtsilä Oyj Abp

We have been engaged by the Board of Management of Wärtsilä Oyj Abp (hereafter Wärtsilä) to provide limited assurance on Wärtsilä's Sustainability Information in the electronic Wärtsilä Annual Report 2016 from the reporting period 1. January – 31. December 2016 (hereafter the Sustainability Information).

The Sustainability Information includes data and text presented in the following sections of Wärtsilä's Annual Report:

- The "Sustainability" -section and its sub-sections;
- The "CEO review" -section;
- The following sub-sections of the "This is Wärtsilä" -section: "Wärtsilä in Brief", "Corporate strategy", "Sustainability targets", "Innovating for sustainability", "Sustainability highlights", "Research and Development", "Energy Solutions and Sustainability", "Marine Solutions and Sustainability" and "Services and Sustainability";
- The following sub-sections of the "Governance" -section: "Internal control", and "Risks and risk management";
- The sub-sections of the "Stories" -section specifically marked with "Sustainability Assured".

Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4 was used as the assurance criteria.

# Inherent limitations on the engagement

The inherent limitations on accuracy and completeness in data related to the Sustainability Information are to be taken into account when reading our assurance report. The presented Sustainability Information is to be considered in connection with the explanatory information on data collection, consolidation and assessments provided by Wärtsilä.

The Board of Management of Wärtsilä is responsible for the measuring, preparation and presentation of the Sustainability Information in accordance with the *Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4*.

Our responsibility is to express an independent conclusion on the Sustainability Information. We have conducted the engagement in accordance with ISAE 3000 (Revised). To the fullest extent permitted by law, we accept no responsibility to any party other than Wärtsilä for our work, for this assurance report, or for the conclusions we have reached.

We are independent from the company according to the ethical requirements in Finland and we have complied with other ethical requirements, which apply to the engagement conducted.

We apply the International Standard on Quality Control 1 (ISQC 1) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Summary of the work performed

A limited assurance engagement consists primarily of making inquiries of persons responsible for the preparation of the Sustainability Information presented, and applying analytical and other evidence gathering procedures, as appropriate. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower.

# In our engagement we have performed the following procedures:

- Interviews with members of Wärtsilä senior management;
- An assessment of the Sustainability Information's conformity with the reporting principles of the GRI G4 guidelines for defining content and reporting quality;
- An assessment of coverage of the material aspects selected for the Sustainability Information and the definition of reporting boundaries in the context of Wärtsilä's business operations and sector;
- An assessment of data management processes, information systems and working methods used to gather and consolidate the Sustainability Information;
- A review of the Sustainability Information with an assessment of information quality and reporting boundary definitions:
- Assessment of data accuracy and completeness through a review of the original documents and systems on a sample basis;
- One site visit and three video conferences, conducted to Wärtsilä subsidiaries.

# **Conclusions**

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared in accordance with the *Global Reporting Initiative (GRI) Sustainability Reporting Guidelines G4* in all material respects.

Helsinki, 7. February 2017

KPMG OY AB

Virpi Halonen

Authorized Public Accountant

Nathalie Clément Senior Manager, Advisory

# **GRI and UNGC index**

# **General standard disclosures**

### **STRATEGY AND ANALYSIS**

GRI content	Links	Remarks	UNGC
G4-1 CEO's statement	CEO review		•
G4-2 Key impacts, risks and opportunities	Risks and risk management Corporate strategy Our targets Energy Solutions and sustainability Marine Solutions and sustainability Services and sustainability Innovating for sustainability	See also business strategy sections	•

### **ORGANISATIONAL PROFILE**

GRI Content	Links	Remarks	UNGO
G4-3 Name of the Organisation	Wärtsilä in brief		•
G4-4 Primary Brands, Products, and Services	Wärtsilä in brief Energy Solutions Marine Solutions Services		•
G4-5 Location of the Organization's Headquarters	Shares and shareholders	Helsinki, Finland	•
G4-6 Number of Countries where the Organisation Operates	Wärtsilä in brief Notes to the Consolidated Financial Statements	www.wartsila.com	•
G4-7 Nature of Ownership and Legal Form	Shares and shareholders		•
G4-8 Market Areas	Wärtsilä in brief		•
G4-9 Scale of the Organisation	Wärtsilä in brief Shareholders		•
G4-10 Total Number of Employees by Employment Contract, Employment Type, Region and Gender	Social		•
G4-11 Percentage of Total Employees Covered by Collective Bargaining Agreements	Responsible business conduct	58% of Wärtsilä employees were covered by collective bargaining agreements in 2016.	•
G4-12 Organisation's Supply Chain	Supply chain management		•
G4-13 Significant Changes during the Reporting Period Regarding the Organisation's Size, Structure, Ownership, or its Supply Chain	Structural changes Board of Directors' report		•

G4-14 Whether and How the Precautionary Approach or Principle is Addressed by the Organisation	Product design principles Risks and risk management Research and development	
G4-15 Externally Developed Economic, Environmental and Social Charters, Principles, or Other Initiatives to Which the Organisation Subscribes or Which It Endorses	Guiding principles	
G4-16 Memberships of Associations and National or International Advocacy Organisations	Stakeholder relations	

## **IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES**

GRI Content	Links	Remards	UNGC
G4-17 Entities Included in the Organisation's Consolidated Financial Statements	Materiality assessment		
G4-18 Process for Defining the Report Content	Materiality assessment		
G4-19 Material Aspects	Materiality assessment		
G4-20 List of Entities or Groups of Entities Within the Organisation for Which the Aspects Are Material	Materiality assessment		
G4-21 List of Entities or Groups of Entities Outside of the Organisation for Which the Aspects Are Material	Materiality assessment		
G4-22 Effect of any Restatements of Information Provided in Previous Reports, and the Reasons for Such Restatements	Materiality assessment		
G4-23 Significant Changes from Previous Reporting Periods in the Scope and Aspect Boundaries	Materiality assessment		

## **STAKEHOLDER ENGAGEMENT**

GRI Content	Links	Remarks	UNGC
G4-24 List of Stakeholder Groups Engaged by the Organisation	Stakeholder relations		•
G4-25 Basis for Identification and Selection of Stakeholders with whom to Engage	Stakeholder relations		•
G4-26 Organisation's Approach to Stakeholder Engagement	Stakeholder relations		•
G4-27 Key Topics and Concerns that Have Been Raised through Stakeholder Engagement	Stakeholder relations		•

# REPORT PROFILE

GRI Content	Links	Remarks	UNGC
G4-28 Reporting Period	Report profile		•
G4-29 Date of Most Recent Previous Report	Report profile		•
G4-30 Reporting Cycle	Report profile		•
G4-31 Contact Point for Questions Regarding the Report or its Contents	Report profile		•
G4-32 GRI "in accordance" option	Materiality assessment Independent assurance report		•
G4-33 Policy and Current Practice with Regard to Seeking External Assurance	Independent assurance report		•

## **GOVERNANCE**

GRI Content	Links	Remarks	UNGC
G4-34 Governance Structure, Including Committees	Corporate Governance Board of Directors		•
G4-35 Division of Responsibilities	Corporate Governance Board of Directors		•
G4-36 Positions with Responsibility	Board of Management		•
G4-37 Processes for Consultation with Stakeholders	Annual General Meeting Internal Control		•
G4-38 Members of the Board of Directors	Board of Directors		•
4-39 Status of the Chair of the Highest Governance Body	Board of Directors		•
G4-40 Election of the Board of Directors	Annual General Meeting Board of Directors	The nomination committee proposes new board members. The committee consults major shareholders, and in their proposals they take into account the specific needs of the Board, including sustainability competencies and diversity.	•
G4-41 Processes to Ensure Conflicts of Interest are Avoided and Managed	Board of Directors Insider management Shareholders		•
G4-42 Highest Governance Body's Role in Setting Purpose, Values, and Strategy	Board of Directors Internal Control		•
G4-43 Highest Governance Body's Collective Knowledge	Internal Control Board of Management		•
G4-44 Evaluation of the Highest Governance Body's Performance	Board of Directors	The evaluation is of general nature, but also includes sustainability issues if such concerns arise. The evaluation partly affects the membership changes within the Board.	•
G4-45 Highest Governance Body's Role in the Identification and Management of Risk	Board of Directors Risks and risk management		•
G4-46 Highest Governance Body's Role in Reviewing the Effectiveness of the Organisation's Risk Management	Board of Directors		•
G4-47 Frequency of Risk Reviews	Board of Directors Board committees Internal Control	13 meetings in 2016.	•
G4-48 Highest Committee or Position that Formally Reviews and Approves the Organisation's Sustainability Report	Report profile		•
G4-49 Process for Communicating Critical Concerns	Internal Control		

G4-50 Nature and Total Number of Critical Concerns that Were Communicated		This information is not publicly disclosed.	
G4-51 Remuneration Policies for the Highest Governance Body and Senior Executives	Salary and remuneration report 2016		•
G4-52 Process for Determining Remuneration	Board committees Employee practices		•
G4-53 Stakeholders' Views on Remuneration	Salary and remuneration report 2016		•
G4-54 Ratio of the Annual Total Compensation for the Organisation's Highest-Paid Individual and the Median for All Employees		This information is not publicly disclosed.	
G4-55 Percentage Increase in Total Compensation for the Organisation's Highest-Paid Individual and the Median for All Employees		This information is not publicly disclosed.	

## **ETHICS AND INTEGRITY**

GRI Content	Links	Remarks	UNGC
G4-56 Ethics and Integrity	Corporate strategy Guiding principles		•
G4-57 Mechanisms for Seeking Advice on Ethical and Lawful Behaviour	Code of Conduct Compliance		•
G4-58 Mechanisms for Reporting Concerns about Unethical or Unlawful Behaviour	Code of Conduct Compliance		•

# **Specific standard disclosures**

### **DMA** and Indicators

## **CATEGORY: ECONOMIC**

GRI content	Links	Remarks	UNGC	Material aspect indicators
G4-Generic Disclosures on Management Approach (DMA)	Management approach	www.wartsila.com/ sustainability	•	•
Material aspect: ECONOMIC PERFORMANCE			,	
G4-EC1 Direct economic value generated and distributed	Economic performance			•
G4-EC2 Financial implications and other risks and opportunities due to climate change	Economic performance			•
G4-EC3 Coverage of defined benefit plan obligations	Economic performance			•
G4-EC4 Financial assistance received from governments	Economic performance			•
MARKET PRESENCE				
G4-EC5 Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	Market presence	Partly reported	•	
G4-EC6 Proportion of senior management hired from the local community at significant locations of operation	Market presence		•	

### **CATEGORY: ENVIRONMENTAL**

GRI Content	Links	Remarks	UNGC	Material aspect indicators
MATERIALS				
G4-EN1 Materials used by weight	<u>Materials</u>		•	
G4-EN2 Percentage of materials that are recycled input materials	<u>Materials</u>	Partly reported. The recycled material input of metals varies between 20% and 95%, depending on the type of furnace and foundry used by the metal recycling companies in the supply chain, of which there are too many to state an exact percentage.	•	
ENERGY				
G4-EN3 Energy consumption within the organisation	Energy		•	
G4-EN5 Energy intensity	Energy		•	
G4-EN6 Reduction of energy consumption	Energy		•	
WATER				
G4-EN8 Total water withdrawal by source	<u>Water</u>		•	
G4-EN9 Water sources significantly affected by withdrawal of water	Water		•	
G4-EN10 Percentage and total volume of water recycled and reused	Water		•	
EMISSIONS				
G4-EN15 Direct greenhouse gas emissions (scope 1)	Emissions		•	
G4-EN16 Indirect greenhouse gas emissions (scope 2)	<u>Emissions</u>		•	
G4-EN17 Other indirect greenhouse gas emissions (scope 3)	<u>Emissions</u>		•	
G4-EN18 Greenhouse gas emissions intensity	<u>Emissions</u>		•	
G4-EN19 Reduction of greenhouse gas emissions	Emissions	It is not possible to state the exact amount of GHG emission reductions achieved from the reduced travelling, because such a figure would be purely hypothetical.	•	
G4-EN21 Nitrogen oxide (NOx), Sulphur oxide (SOx), and other significant air emissions	<u>Emissions</u>		•	
EFFLUENTS AND WASTE				
G4-EN22 Total water discharge by quality and destination	Effluents and waste		•	

G4-EN23 Total weight of waste by type and disposal method	Effluents and waste		•	
G4-EN24 Total number and volume of significant spills	Compliance		•	
Material aspect: PRODUCTS AND SERVICES				
G4-EN27 Extent of impact mitigation of environmental impacts of products and services	Products and services	www.wartsila.com/ sustainability	•	•
G4-EN28 Percentage of reclaimed products and their packaging materials for each product category		Not suitable for Wärtsilä	•	•
Material aspect: COMPLIANCE				
G4-EN29 Significant fines and sanctions for non- compliance with environmental regulations	Compliance		•	•
OVERALL				
G4-EN31 Total environmental protection expenditures and investments	Expenditures		•	
ENVIRONMENTAL GRIEVANCE MECHANISMS				
G4-EN34 Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Compliance		•	

## **CATEGORY: SOCIAL**

GRI Content	Links	Remarks	UNGC	Material aspect indicators
SUB-CATEGORY: LABOUR PRACTICES AND DECENT W	ORK			
EMPLOYMENT				
G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender, and region	Employment		•	
G4-LA2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Employment			
LABOUR/ MANAGEMENT RELATIONS				
G4-LA4 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Labour/Management Relations		•	
Material aspect: OCCUPATIONAL HEALTH AND SAFETY				
G4-LA5 Percentage of total workforce represented in formal joint management–worker health and safety committees	Occupational health and safety		•	•
G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Occupational health and safety	Partly reported. For employees classification by gender is not reported due to privacy protection legal constraints, but classification by region will be reported in the 2017 Annual Report. The availability of information on contractors will be studied and analysed in 2017.	•	•

G4-LA7 Workers with high incidence or high risk of diseases related to their occupation	Occupational health and safety		•	•
G4-LA8 Health and safety topics covered in formal agreements with trade unions	Responsible business conduct	In some cases local collective bargaining agreements also cover OHS issues. Detailed listing of the topics not applicable, as it is not considered meaningful information.	•	•
Material aspect: TRAINING AND EDUCATION				
G4-LA9 Average hours of training per year per employee by gender, and by employee category	Training and education		•	•
G4-LA10 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Training and education	Various types of training can be offered in restructuring situations, however specific actions are defined case by case.		•
G4-LA11 Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Training and education		•	•
DIVERSITY AND EQUAL OPPORTUNITY				
G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Employment Diversity and equal opportunity		•	
LABOUR PRACTICES GRIEVANCE MECHANISMS	'	'		
G4-LA16 Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms	Compliance		•	
SUB-CATEGORY: HUMAN RIGHTS				
NON-DISCRIMINATION				
G4-HR3 Total number of incidents of discrimination and corrective actions taken	Compliance		•	
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAI	NING			
G4-HR4 Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Compliance Supply Chain Management		•	
CHILD LABOUR				
G4-HR5 Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	Compliance Supply Chain Management		•	
FORCED OR COMPULSORY LABOUR		·		
G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced compulsory labour, and measures taken to contribute to the elimination of all forms of forced labour	Compliance Supply Chain Management		•	

G4-HR12 Number of grievances about human rights filed,	<u>Compliance</u>		•	
addressed, and resolved through formal grievance mechanisms	Compilance		•	
SUB-CATEGORY: SOCIETY				
Material aspect: ANTI-CORRUPTION				
G4-SO3 Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Risks and risk management	Coverage of risk management processes is 100% of our operations.	•	•
G4-SO4 Communication and training on anti-corruption policies and procedures	Sustainability targets	Partly reported. For employees' classification by employee category and region, as well as by business partners, will be studied and analysed in 2017.	•	•
G4-SO5 Confirmed incidents of corruption and actions taken	Compliance		•	•
PUBLIC POLICY				
G4-SO6 Total value of political contributions by country and recipient/beneficiary	<u>Compliance</u>		•	
ANTI-COMPETITIVE BEHAVIOR				
G4-SO7 Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	Compliance			
Material aspect: COMPLIANCE				
G4-SO8 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Compliance			•
GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY				
G4-SO11 Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	Compliance			
SUB-CATEGORY: PRODUCT RESPONSIBILITY				
CUSTOMER HEALTH AND SAFETY				
G4-PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their lifecycle, by type of outcomes	<u>Compliance</u>			
PRODUCT AND SERVICE LABELLING				
G4-PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	Compliance			
G4-PR5 Results of surveys measuring customer satisfaction	Product and Service Labelling			
MARKETING COMMUNICATIONS		,		
G4-PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	Compliance			

CUSTOMER PRIVACY				
G4-PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	<u>Compliance</u>			
Material aspect: COMPLIANCE				
G4-PR9 Monetary value of significant fines for non- compliance with laws and regulations concerning the provision and use of products and services	Compliance			•

# **Governance**

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# **Corporate governance**

Wärtsilä Corporation complies with the guidelines and provisions of its Articles of Association, the Finnish Limited Liability Companies Act, and the rules and regulations of the NASDAQ OMX Helsinki Stock Exchange. Wärtsilä also applies the Global Reporting Initiative's G4 Sustainability Reporting Guidelines and complies with the Finnish Corporate Governance Code 2015 ("Code") issued by the Finnish Securities Market Association. The Code is publicly available on <a href="http://cgfinland.fi/en/">http://cgfinland.fi/en/</a>. Wärtsilä has not deviated from any of the Code's recommendations.

Wärtsilä's Corporate Governance Statement, prepared in accordance with the recommendations of the Code, is also published as a separate statement on Wärtsilä's website as well as in this Annual Report. The content of this Corporate Governance section corresponds fully to Wärtsilä's Corporate Governance Statement. Wärtsilä's Audit Committee has reviewed the Corporate Governance Statement, and the Company's external auditor has monitored the issuing of the statement and verified that the description of the main features of the internal control and risk management section, as related to the financial reporting process included in the statement, matches the Financial Statements.

# **Governing bodies**

Wärtsilä implements a single-tier governance model, by which management of the Wärtsilä Group is the responsibility of the General Meeting of shareholders, the Board of Directors, and the President & CEO. Their duties are for the most part defined by the Finnish Companies Act. The General Meeting of shareholders elects the Board of Directors and auditors. The Board of Directors is responsible for the strategic management of the company. The Board appoints the President & CEO, who is in charge of the operative, day-to-day management of the company. He is assisted in his work by the Board of Management.

### **Governing bodies**



# **Annual General Meeting**

Wärtsilä's ultimate decision-making body is the General Meeting of shareholders. It resolves issues as defined for General Meetings in the Finnish Companies Act and the company's Articles of Association. These include:

- · approving the financial statements
- · deciding on the distribution of dividends
- discharging the company's Board of Directors and CEO from liability for the financial year
- · electing the company's Board of Directors and auditors and deciding on their remuneration

A General Meeting of Wärtsilä Corporation shareholders is held at least once a year, at a time no later than the end of June. If needed, the company may also hold Extraordinary General Meetings. An invitation to the General Meeting is published on the Company's website or in not less than two daily newspapers, which are commonly distributed in Finland, as decided by the Board of Directors. The invitation shall be published no earlier than two months, and no later than three weeks, prior to the General Meeting. It shall, however, be published at least nine days prior to the shareholders' record date. Wärtsilä also publishes invitations to its General Meetings as stock exchange releases. The documents and draft resolutions to be submitted to the General Meeting can be found on Wärtsilä's website.

Shareholders have the right to add items falling within the competence of the Annual General Meeting to the meeting's agenda. The request must be submitted to the Board of Directors in writing sufficiently in advance of the meeting so that the item can be added to the Notice of the General Meeting. Wärtsilä publishes on its website the date by which a shareholder must notify the company's Board of Directors of an issue that he or she demands to be addressed at the General Meeting. This information is given no later than by the end of the financial period preceding the General Meeting, and includes the postal or email address to which the demand shall be sent. The demand is always deemed to have arrived in sufficient time if the Board has been notified of the demand at the latest four weeks before the delivery of the Notice of the General Meeting.

All shareholders registered by the record date in the company's list of shareholders maintained by Euroclear Finland Ltd have the right to attend the Annual General Meeting. Each share entitles the holders to one vote. The General Meeting is organised in such a manner that shareholders can participate in the meeting as extensively as possible. The Chairman of the Board of Directors, the members of the Board of Directors, and the President & CEO are present at the General Meeting. The auditor-in-charge also attends the Annual General Meeting. The director candidates shall also be present at the General Meeting that decides upon their election.

### **Annual General Meeting 2016**

Wärtsilä's Annual General Meeting was held on 3 March 2016. A total of 1,693 shareholders representing 113,858,630 votes participated in person or by proxy. The Annual General Meeting approved the financial statements and discharged the members of the Board of Directors and the company's President & CEO from liability for the financial year 2015. The Meeting approved the Board of Directors' proposal to pay a dividend of EUR 1.20 per share. The dividend was paid on 14 March 2016.

Wärtsilä's Annual General Meeting decided upon updating Article 2 of the Articles of Association to read as follows:

"The company shall develop, manufacture and sell mechanical and electrical products, plants and systems, sell spare parts, and provide operation and maintenance services in the marine and energy markets, either directly or through its subsidiaries and associated companies. The company can also provide financing, design and consulting services as well as engage in other industrial and commercial activities. The company may deal in securities and engage in other investment activities."

It was decided to change Article 8 of the Articles so that the notice to the general meeting can be given by publishing it on the Company's website or in not less than two (2) daily newspapers, which are commonly distributed in Finland, as determined by the Board.

The Board of Directors was authorised to resolve on donations of a maximum of EUR 1,300,000 to be made to universities during 2016 and 2017. The most significant recipient of the donations would be Aalto University.

All resolutions were taken without voting. The minutes of the meeting and other related documents can be found on Wärtsilä's website; www.wartsila.com > Investors > Governance.

# **Board of Directors**



# **MIKAEL LILIUS**

Independent of the company and significant shareholders. Chairman of the Board of Wärtsilä Corporation. Born 1949, B.Sc. (Econ.). Member of the Board of Wärtsilä Corporation since 2010, Chairman of the Board since 2011.

### **Primary working experience**

Fortum Oyj, President & CEO, 2000-2009; Gambro AB, President & CEO, 1998-2000; Incentive AB, President & CEO, 1991-1998; KF Industri AB (Nordico), President & CEO, 1989-1991 and Huhtamäki Oy, President of the Packing Division, 1986-1989.

#### Other positions of trust

Ahlström Capital Oy and Metso Corporation, Chairman of the Boards; Evli Bank Ltd., Member of the Board; Ab Kelonia Oy, Member of the Supervisory Board.

Holdings in Wärtsilä Corporation on 31.12.2016: 18,414 shares



## **SUNE CARLSSON**

Independent of the company and dependent of significant shareholders based on the Board of Directors' overall evaluation. Born 1941, M.Sc. (Eng.). Member of the Board of Wärtsilä Corporation since 2013, Deputy Chairman of the Board since 2015.

#### **Primary working experience**

AB SKF, President & CEO, 1998-2003; ABB Ltd, Executive Vice President, 1988-1998 and ASEA AB, Executive Vice President, 1977-1988.

#### Other positions of trust

Patricia Industries AB. Member of the Board.

#### Relevant prior positions of trust

Board chairmanship: Atlas Copco AB, 2003-2014. Board memberships: Investor AB, 2002-2015; Stena AB, 2009-2011; Autoliv Inc, 2003-2011 and Scania AB, 2004-2007.

Holdings in Wärtsilä Corporation on 31.12.2016: 12,203 shares



## **MAARIT AARNI-SIRVIÖ**

Independent of the company and significant shareholders. Born 1953, M.Sc. (Tech.), eMBA. Secretary General of Directors' Institute Finland – Hallitusammattilaiset ry; Managing Director of Boardview Oy; Senior Adviser at Eera Oy. Member of the Board of Wärtsilä Corporation since 2007.

#### **Primary working experience**

Mint of Finland Ltd., President and CEO, 2008-2010; Borealis Group, 1994-2008, several senior positions of which the most recent was Vice President BU Phenol, 2001-2008, Vice President BU Olefins, 1997-2001 in Copenhagen, Denmark and Neste Oyj 1977-1994.

#### Other positions of trust

Non-Executive Director of Berendsen plc; Directors' Institute Finland – Hallitusammattilaiset ry and ecoDa (The European Confederation of Directors' Associations), Member of the Boards.

#### Relevant prior positions of trust

Board memberships: Rautaruukki Oyj, 2005-2012; Ponsse Oyj, 2007-2010 and Vattenfall AB, Sweden, 2004-2007.

Holdings in Wärtsilä Corporation on 31.12.2016: 9,810 shares



## **KAJ-GUSTAF BERGH**

Independent of the company and significant shareholders. Born 1955, B.Sc., LL.M. Managing Director of Föreningen Konstsamfundet r.f. Member of the Board of Wärtsilä Corporation since 2008.

## **Primary working experience**

Skandinaviska Enskilda Banken, Member of management, 2000-2001; SEB Asset Management, Director, 1998-2001; Ane Gyllenberg Ab, Chief Executive Officer, 1986-1998; Oy Bensow Ab, Director, Executive Vice President, 1985-1986; Ane Gyllenberg Ab, Administrative manager, 1984-1985 and Ky von Konow & Co, Administrative manager, 1982-1983.

#### Other positions of trust

Sponda Oyj, Julius Tallberg Oy Ab, Mercator Invest Ab and KSF Media Holding Ab, Chairman of the Boards; Stockmann plc, Ramirent Group and JM AB, Member of the Boards.

#### Relevant prior positions of trust

Board chairmanships: Fiskars Corporation 2006-2014; Ålandsbanken Abp 2011-2013 and Aktia Abp 2005-2009. Board memberships: Fiskars Corporation 2014-2015 and Stockmann Oyj Abp 2007-2013.

Holdings in Wärtsilä Corporation on 31.12.2016: 9,032 shares



#### **TOM JOHNSTONE**

Independent of the company, dependent of significant shareholders due to a position on the Board of Directors of Investor AB. Born 1955, Master of Arts, Honorary Doctorate in Business Administration and Honorary Doctorate in Science. Member of the Board of Wärtsilä Corporation since 2015.

#### **Primary working experience**

Several management posts within the SKF Group, the latest as President and CEO of AB SKF, 2003-2014.

## Other positions of trust

British Swedish Chamber of Commerce and Husqvarna AB, Chairman of the Boards; Investor AB and Volvo Cars, Member of the Boards.

Holdings in Wärtsilä Corporation on 31.12.2016: 1,360 shares



## **RISTO MURTO**

Independent of the company and significant shareholders. Born 1963, Ph.D. (Econ.). President & CEO of Varma Mutual Pension Insurance Company. Member of the Board of Wärtsilä Corporation since 2014.

#### **Primary working experience**

Investments, Varma, Executive Vice President, 2010-2013; Investments, Varma, Senior Vice President, Chief Investment Officer, 2006-2010; Opstock Ltd, Managing Director, 2000-2005; Opstock Ltd, Director, 1997-2000.

#### Other positions of trust

University of Oulu, Chairman of the Board; Federation of Finnish Financial Services and Sampo plc, Member of the Boards; The Finnish Pension Alliance TELA, I Deputy Chairman of the Board.

Holdings in Wärtsilä Corporation on 31.12.2016: 1,980 shares



## **GUNILLA NORDSTRÖM**

Independent of the company and significant shareholders. Born 1959, M.Sc. in Electronics, Industrial Marketing Management. Member of the Board of Wärtsilä Corporation since 2012.

#### **Primary working experience**

President & CEO, Electrolux Major Appliances Asia/Pacific and Executive Vice President, Electrolux AB, 2007-2015; Senior management positions with Telefonaktiebolaget LM Ericsson and Sony Ericsson in Europe, Latin America and Asia, 1983-2007.

#### Other positions of trust

Bombardier Transport Co, Member of the Board; Member of the Committee of Swedish Business Association of Singapore; Member of EDHEC International Advisory Board.

## Relevant prior positions of trust

Board memberships: Atlas Copco, Sweden, 2010-2016, Luleå University, Sweden, 2007-2010 and Videocon Industries Limited, India, 2009-2010.

Holdings in Wärtsilä Corporation on 31.12.2016: 3,423 shares



#### **MARKUS RAURAMO**

Independent of the company and significant shareholders. Born 1968, M.Sc. (Econ. and Pol. Hist.). Executive Vice President, City Solutions Division and Member of the Fortum Executive Management Team. Member of the Board of Wärtsilä Corporation since 2011.

# **Primary working experience**

Fortum Corporation, Executive Vice President, Heat, Electricity Sales and Solutions Division, 2014-2016; Fortum Corporation, Chief Financial Officer, 2012-2014; Stora Enso Oyj Helsinki, CFO and Member of the GET, 2008-2012; Stora Enso International London, SVP Group Treasurer, 2004-2008; Stora Enso Oyj Helsinki, VP Strategy and Investments, 2001-2004; Stora Enso Financial Services Brussels, VP Head of Funding, 1999-2001 and Enso Oyj Helsinki, several financial tasks, 1993-1999.

#### Other positions of trust

Teollisuuden Voima Oyj, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2016: 4,534 shares

# **Operations of the Board of Directors**

Responsibility for the management of the company and the proper organisation of its operations is invested in the company's Board of Directors, which is composed of five to ten members. Board members serve for one year at a time and are elected by the General Meeting. According to the Corporate Governance Code's recommendation 10, the majority of Board members shall be independent of the company and at least two of

the members representing this majority shall be independent of significant shareholders of the company. The Board evaluates the independence of the members annually and re-evaluates as necessary.

The Nomination Committee prepares the proposal for the General Meeting regarding the election of the directors for the Board, and communicates with significant shareholders, when required, on matters pertaining to the proposal. The proposal for the composition of the Board is included in the Notice of the General Meeting. The same applies to a proposal for the composition of the Board made by shareholders with at least 10% of the votes carried by the company shares, provided that the candidates have given their consent to the election and the company has received information on the proposal sufficiently in advance as to be included in the Notice of the General Meeting. The candidates proposed shall be disclosed separately in corresponding order. Wärtsilä publishes the biographical details of the candidates for the Board on its website in connection with publication of the Notice of the General Meeting.

The Board elects a chairman and a deputy chairman from among its members. The Board steers and supervises the company's operations and decides on policies, goals, and strategies of major importance. The principles applied by the Board to its regular work are set out in the Board Charter. The Board also approves the rules of procedure applied by the Board's committees setting out their main tasks and working principles. In addition to matters requiring its decision, the Board is also given updates at its meetings on the Group's operations, financial position and risks.

The Board conducts an annual self-evaluation of its operations and working methods. The purpose of this evaluation is to assess how the Board has executed its tasks during the year and to act as a basis for developing Board functions.

The Board of Directors convenes 7-10 times a year following a pre-determined schedule. In addition to these meetings, the Board convenes as necessary. All meetings are documented.

# **Diversity principles**

In order for the Board of Directors to discharge its duties in the most effective manner, the Board must be highly qualified and sufficiently diverse. When preparing its proposal for the Board's composition, the Nomination Committee takes into account the educational and professional background of the individual candidates, as well as international experience so that the composition of the Board represents a wide variety of competencies and qualifications. The Nomination Committee also takes into account the candidates' age, as having different seniority levels on the Board is considered beneficial in terms of ensuring mutually complementing experience.

Wärtsilä's principle with regard to gender is to have members of both genders represented on the Board. In December 2016, Wärtsilä had two female board members out of eight members in total. The objective of the Company is to achieve over time a more balanced representation of both genders on the Wärtsilä Board.

The Nomination Committee assesses the potential candidates not only in terms of their individual qualifications and characteristics, but also in terms of their ability to effectively work together and jointly support and challenge the company management in a proactive and constructive way.

## **Board of Directors in 2016**

As of 3 March 2016, the Board consisted of the following eight members: Ms Maarit Aarni-Sirviö, Mr Kaj-Gustaf Bergh, Mr Sune Carlsson (deputy chairman), Mr Tom Johnstone, Mr Mikael Lilius (chairman), Mr Risto Murto, Ms Gunilla Nordström and Mr Markus Rauramo.

All eight Board members were determined to be independent of the company and six members were determined to be independent of significant shareholders. Mr Tom Johnstone was determined to be dependent of significant shareholders, due to his position on the board of Investor AB. Based on the Board of Directors' overall evaluation, Mr Sune Carlsson was also determined to be dependent of significant shareholders, due to long-term board positions within the Investor Group.

Until 3 March 2016, the Board consisted of the following eight members: Ms Maarit Aarni-Sirviö, Mr Kaj-Gustaf Bergh, Mr Sune Carlsson (deputy chairman), Mr Tom Johnstone, Mr Mikael Lilius (chairman), Mr Risto Murto, Ms Gunilla Nordström and Mr Markus Rauramo.

During 2016, Wärtsilä's Board of Directors held 13 meetings. The average attendance of all directors was 99%. The financial and strategic development of Wärtsilä and its position in the markets, its growth opportunities, and the general further development of the Company have been, among other things, the major items on the Board's agenda. The digital strategy of the Group has been a particular focal point. People matters are an important and continuous part of the Board's work, as they contribute to the long-term success of the Company. In 2016, the acquisitions of Eniram and American Hydro were important themes in the Board's work.

# **Board member meeting participation in 2016**

	Number of meetings	% of meetings
Mikael Lilius, Chairman	13/13	100
Sune Carlsson, Deputy Chairman	13/13	100
Maarit Aarni-Sirviö	13/13	100
Kaj-Gustaf Bergh	12/13	92
Tom Johnstone	13/13	100
Risto Murto	13/13	100
Gunilla Nordström	13/13	100
Markus Rauramo	13/13	100

# **Responsibilities of the Board of Directors**

The Board considers all matters stipulated to be the responsibility of a board of directors by legislation, other regulations, and the company's Articles of Association. The most important of these are:

- the annual and interim financial statements
- matters to be put before the General Meetings of shareholders
- the appointment of the President & CEO, the Executive Vice Presidents and the CEO's deputy, if any
- the organisation of financial supervision within the company

The Board is also responsible for considering any matters that are so far-reaching with respect to the area of the Group's operations, that they cannot be considered to fall within the scope of the Group's day-to-day administration. Examples of such matters include:

- · approval of the long-term goals of the Group and its businesses as well as the strategies to achieve them
- monitoring the developments, opportunities and threats in the external environment, and their impact on goals and strategy
- approval of the annual business plan and target setting for the Group
- approval of risk management principles
- monitoring and assessing the performance of the President & CEO
- approval of the remuneration and pension benefits of the President & CEO, the Executive Vice Presidents and the CEO's deputy
- approval of the corporate governance principles
- overseeing that the Company complies with legal and regulatory requirements and its Code of Conduct and other established values and ethical principles in its operations

- discussing and monitoring the R&D and product development plans of the Company
- the appointing of the Board committees
- the granting of charitable donations
- approval of other matters that are strategically or financially important, such as significant investments, acquisitions
  or divestments.

# The Board's committees

The Board of Directors appoints annually an Audit Committee, a Nomination Committee, and a Remuneration Committee, and may also nominate other committees if considered necessary in its constitutive meeting following the Annual General Meeting. The Board appoints the members of these committees and their chairmen taking into consideration the expertise and experience required for the duties of the committee. The Board also has the right to remove a member from a committee. The members of each committee are appointed for the same term of office as the Board itself. In addition to the committee members, other Board members may participate in committee meetings, if they so wish. The purpose of the Board's committees is to prepare matters to be put before the Board for its decision. The committees have no decision-making authority of their own.

#### **The Audit Committee**

The Board of Directors appoints an Audit Committee to assist it in the performance of its supervisory duties. The Board appoints from among its members at least three members to the Committee. These members shall have the qualifications necessary to perform the responsibilities of the Audit Committee. The majority of the members of the Audit Committee shall be independent of the company and at least one member shall be independent of the company's significant shareholders.

The Board defines the duties of the Audit Committee in the charter confirmed for the Committee. The Audit Committee monitors the reporting process of financial statements, supervises the financial reporting process, and monitors the efficiency of the internal control, internal audit and risk management systems. Furthermore, the Committee reviews the description of the main features of the internal control and risk management systems pertaining to the financial reporting process, monitors the statutory audit of the financial statements and consolidated financial statements, evaluates the independence of the statutory audit firm, and prepares the proposal for resolution on the election of the auditor. Other duties of the Audit Committee include reviewing the accounting principles of the company and approving any amendments to them, reviewing the interim and financial statements of the company and the reports prepared by the auditor for the Audit Committee, as well as evaluating the processes aimed at ensuring compliance with laws and regulations and monitoring the company's credit position and taxation. The Audit Committee also reviews the company's Corporate Governance Statements and reviews and resolves any special issues raised by the Board of Directors that fall within the competence of the Audit Committee.

The Chairman of the Audit Committee convenes the Committee as required. The Chairman also reports the Committee's proposals to the Board of Directors and regularly reports to the Board on the Committee's meetings.

#### **Audit Committee in 2016**

Chairman Markus Rauramo, members Maarit Aarni-Sirviö and Risto Murto. All members are independent of the company and significant shareholders. The Audit Committee met five times in 2016. The average attendance of all Committee members was 100%.

# **The Nomination Committee**

The Board of Directors appoints a Nomination Committee to assist it in its work. The Board appoints at least three of its members to serve on the Committee. The majority of the members of the Committee shall be independent of the company.

The Board defines the duties of the Nomination Committee in the charter confirmed for the Committee. The Nomination Committee prepares the proposal to be put before the General Meeting regarding the election of the directors for the Board. The Committee communicates, when required, with major shareholders in matters pertaining to the election of the directors for the Board. The Nomination Committee prepares matters concerning the remuneration applying to Board members. The Nomination Committee monitors and reports to the Board of Directors the achievement related to the Board's diversity objectives on a yearly basis and proposes adjustments, if needed, to the Diversity Policy for the Board of Directors.

The Chairman of the Nomination Committee convenes the Committee as required. He also reports the Committee's proposals to the Board of Directors and regularly reports to the Board on the Committee's meetings.

#### **Nomination Committee in 2016**

Chairman Mikael Lilius, members Kaj-Gustaf Bergh, Tom Johnstone and Risto Murto. All members are independent of the company and three are independent of significant shareholders. The Nomination Committee met four times in 2016. The average attendance of all Committee members was 100%.

#### **The Remuneration Committee**

The Board appoints a Remuneration Committee to assist it in its work. The Board appoints at least three of its members to sit on the Committee. The majority of the members of the Committee shall be independent of the company.

The Board defines the duties of the Remuneration Committee in the charter confirmed for the Committee. The Remuneration Committee prepares, as necessary, matters concerning the appointment of the President & CEO, the CEO's deputy and other Board of Management members for the Board of Directors. The Committee prepares proposals for the Board of Directors concerning the remuneration principles, incentive schemes and remuneration that apply to the President & CEO and the Board of Management members. External consultants used by the committee are independent of the company and management.

The Chairman of the Remuneration Committee convenes the Committee as required. He also reports the Committee's proposals to the Board of Directors and regularly reports to the Board on the Committee's meetings.

#### **Remuneration Committee in 2016**

Chairman Mikael Lilius, members Maarit Aarni-Sirviö and Tom Johnstone. All members are independent of the company and two are independent of significant shareholders. The Remuneration Committee met three times in 2016. The average attendance of all Committee members was 100%.

# Board member committee meeting participation in 2016

	<b>Audit Committee</b>	<b>Nomination Committee</b>	Remuneration Committee
Mikael Lilius	-	4/4	3/3
Sune Carlsson	-	1/1	-
Maarit Aarni-Sirviö	5/5	-	3/3
Kaj-Gustaf Bergh	-	4/4	-
Tom Johnstone	-	3/3	3/3
Risto Murto	5/5	4/4	-
Gunilla Nordström	-	-	-
Markus Rauramo	5/5	-	-

# **Board of Management**



## **JAAKKO ESKOLA**

President & CEO of Wärtsilä Corporation since 2015. Born 1958, M.Sc. (Eng.). Joined the company in 1998.

# **Primary working experience**

Wärtsilä Corporation, Senior Executive Vice President and Deputy to the CEO, 2013-2015; President, Marine Solutions, 2006-2015; Vice President, Power Plants Sales & Marketing, 2005-2006; Wärtsilä Development & Financial Services Oy, President, 1998-2005; PCA Corporate Finance, Executive Director, 1997-1998; Kansallis-Osake Pankki, various managerial positions in international project finance, 1986-1997; Industrialization Fund of Finland, Corporate Analyst, 1984-1986; VTT Technical Research Centre of Finland, Researcher, 1983-1984.

#### **Positions of trust**

The Federation of Finnish Technology Industries, Member of the Board.

## Relevant prior positions of trust

European Marine Equipment Council (EMEC), President, 2008-2011.

Holdings in Wärtsilä Corporation on 31.12.2016: 6,420 shares



#### **PIERPAOLO BARBONE**

Deputy to the CEO since 2015 and President, Services & Executive Vice President, Wärtsilä Corporation, since 2013. Born 1957, M.Sc. (Eng.). Joined the company in 1996.

#### **Primary working experience**

Wärtsilä Corporation, Vice President Services, South Europe & Africa, 2013; Wärtsilä Corporation, Vice President Services, Middle East & Asia, 2010-2013; Wärtsilä Italia S.p.A., Executive Vice President, 2000-2003; Ciserv Group, President, 2001-2006; Wärtsilä Corporation, Vice President Field Service, 1997-2009; Wärtsilä Italia S.p.A., Vice President Services, 1997-2003; Fincantieri C.N.I. S.p.A., Isotta Fraschini diesel engines business unit, Sales manager, 1989-1996.

Holdings in Wärtsilä Corporation on 31.12.2016: 5,600 shares



# **PÄIVI CASTRÉN**

Executive Vice President, Human Resources since 2012. Born 1958, M.Sc. (Soc. Sc.). Joined the company in 2005.

### **Primary working experience**

Wärtsilä Corporation, Vice President, Human Resources, 2005-2011; Nokia Corporation, Director, Human Resources, Nokia Finland, 2002-2005; Nokia Networks, HR Director, 2000-2002; Nokia Networks, Networks Systems division, HR Director, 1999-2000; Nokia Networks, HR manager, 1995-1998; Valmet Paper Machinery, HR manager, 1988-1995.

#### **Positions of trust**

The Federation of Finnish Technology Industries, Chairman of the Committee of Education and Employment; Wilhelm Wahlforss Foundation, Chairman of the Board; Member of the IMD Executive Education Advisory Council.

Holdings in Wärtsilä Corporation on 31.12.2016: 3,970 shares



### **JAVIER CAVADA CAMINO**

President, Energy Solutions & Executive Vice President, Wärtsilä Corporation, since 2015. Born 1975, PhD (Eng.). Joined the company in 2002.

## **Primary working experience**

Wärtsilä Corporation, Vice President, Services South Europe and Africa, 2013-2015; Vice President, Propulsion Services, 2015; Wärtsilä Propulsion, Director, Quality & Operational Development, 2012-2013; Wärtsilä Propulsion Wuxi Co., Ltd., Managing Director, 2011-2013; Cedervall Zhangjiagang Marine Components Co., Ltd., Managing Director, 2011-2013; Wärtsilä CME Zhenjiang Propeller Co. Ltd., Technical Director, 2009-2011; Professor at University of Cantabria, Spain, 2007-2009; Wärtsilä Propulsion Spain, S.A., Director, Delivery Centre, 2008-2009; Production Manager, 2002-2007; Robert Bosch Spain, S.A., Production Manager, Starter Motor, 1999-2002; Technical Manager, Production lines, 1997-2002.

Holdings in Wärtsilä Corporation on 31.12.2016: no shares



## **KARI HIETANEN**

Executive Vice President, Corporate Relations and Legal Affairs since 2012. Company Secretary since 2002. Born 1963, LL.M. Joined the company in 1989.

#### **Primary working experience**

Wärtsilä Corporation, Executive Vice President, Human Resources and Legal Affairs, 2002-2011; Wärtsilä Power Divisions, Group General Counsel, 2000-2002; Wärtsilä Diesel Group, General Counsel, 1994-1999; Metra Corporation and Wärtsilä Diesel Group, Legal Counsel, 1989-1994.

#### **Positions of trust**

European Engine Power Plants Association, EUGINE, President; German-Finnish Chamber of Commerce, Chairman of the Board; Finnish-Russian Intergovernmental Economic Commission, II Deputy Chairman; Finnish-Korean Trade Association, Deputy Chairman of the Board; East Office of Finnish Industries Ltd, Member of the Board; Confederation of Finnish Industries (EK), Chairman of the Trade Policy Committee.

Holdings in Wärtsilä Corporation on 31.12.2016: 4,274 shares



## **ROGER HOLM**

President, Marine Solutions and Executive Vice President, Wärtsilä Corporation, since 2015. Born 1972, M.Sc. (Econ.). Joined the company in 1997.

#### **Primary working experience**

Wärtsilä Corporation: Senior Vice President, Engines, 2013-2015; Vice President Seals & Bearings, 2011-2013; Vice President Solutions Management, Services, 2010-2011; Vice President Business Development, Services, 2008-2010; Chief Information Officer, 2006-2008; Program Director, Global ERP Program, 2002-2006; Corporate Controller, 2001-2002; Wärtsilä Finland Oy & Wärtsilä NSD Finland Oy: various managerial positions, 1997-2001.

#### **Positions of trust**

GS-Hydro, Member of the Board of Directors.

Holdings in Wärtsilä Corporation on 31.12.2016: no shares



# ATTE PALOMÄKI

Executive Vice President, Communications & Branding, Wärtsila Corporation, since 2008. Born 1965, M.Sc. (Pol.). Joined the company in 2008.

#### **Primary working experience**

Nordea Bank AB (publ.), Group Chief Press Officer, 2007-2008, Chief Communication Officer, Finland, 2005-2006; Kauppalehti, Senior Business Correspondent, 2002-2005; MTV3, Senior Economic Correspondent, 2000-2002, News Producer, 1995-2000 and News Anchor, 1993-1995.

#### **Positions of trust**

Taloudellinen Tiedotustoimisto TAT (Economic Information Office), European Association of Communication Directors (EACD) and Management Group of the Finland Promotion Board, Member of the Boards.

Holdings in Wärtsilä Corporation on 31.12.2016: 3,869 shares



#### **MARCO RYAN**

Executive Vice President and Chief Digital Officer since 26 September 2016. Born 1966, B.Sc. (IM). Joined the company in 2016.

# **Primary working experience**

Flint Group, Interim Chief Digital Officer, 2016; Thomas Cook Group, Chief Digital Officer, 2013-2015; Thomas Cook Touristik GMbH, Managing Director Omnichannel, 2013-2014; Accenture Interactive, Managing Director (ASEAN), 2011-2013; Premier Farnell Plc, Senior Vice President eCommerce and Digital, 2006-2011; Cappemini Consulting, Executive Consultant, 2001-2006; Interactive Collector Plc, VP Interactive Services, 1999-2001; Telematix and Keyhaven Ltd, Managing Director, 1997-1999; British Army, Officer with various management and operational roles, 1985-1997.

Holdings in Wärtsilä Corporation on 31.12.2016: no shares



### **MARCO WIRÉN**

Executive Vice President and Chief Financial Officer since 2013. Born 1966, M.Sc. (Econ.). Joined the company in 2013.

### **Primary working experience**

SSAB, Executive Vice President and CFO, 2008-2013; SSAB, Vice President Business control, 2007-2008; Eltel Networks, CFO and VP Business Development, 2002-2007; NCC, VP Business Development and Group Controller, 1995-2001.

#### **Positions of trust**

Neste Corporation, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2016: 3,640 shares

# The President & CEO and the Deputy CEO

The Board of Directors appoints a President for the Group who is also its Chief Executive Officer. The President & CEO is in charge of the day-to-day management of the company and its administration, in accordance with the company's Articles of Association, the Finnish Companies Act, and the instructions of the Board of Directors. He is assisted in this work by the Board of Management. The President & CEO's service terms and conditions are specified in writing in his service contract. The President & CEO of the company is Mr Jaakko Eskola. The deputy to the President & CEO is Mr Pierpaolo Barbone, President, Services.

# **Operations of the Board of Management**

The company's Board of Management comprises nine members: the President & CEO, the Chief Financial Officer, the Executive Vice Presidents heading the Energy Solutions, Marine Solutions and Services businesses, the Chief Digital Officer and the Executive Vice Presidents heading the Communications & Branding, the Corporate Relations & Legal Affairs, and the Human Resources functions. The Board of Management members are appointed by the company's Board of Directors, which also approves their remuneration and other terms of their employment.

The Board of Management is chaired by the President & CEO. It considers strategic issues related to the Group and its businesses, as well as investments, product policy, the Group's structure and corporate steering systems, and it supervises the company's operations.

The Chief Financial Officer's main areas of responsibility include group control, treasury (including project and customer financing), taxation and process development, and corporate planning. The Executive Vice Presidents heading the businesses are each responsible for the sales volumes and profitability of their respective global businesses, employing the services of the Group's worldwide subsidiaries. The Chief Digital Officer leads the Information Management organisation and is responsible for defining, developing and executing Wärtsilä's digital strategy, organisational blue print, and related digital governance in close collaboration with the CEO and the Board of Management. The main areas of responsibility of the Executive Vice President, Corporate Relations & Legal are corporate relations and legal affairs, intellectual asset management and sustainability, as well as environmental and occupational health and safety. The Executive Vice President, Human Resources is responsible for people related processes. The main areas of responsibility of the Executive Vice President, Communications & Branding are external and internal communications, as well as branding. Information on the members of the Board of Management and their areas of responsibility and holdings can be found in the Board of Management CVs.

# The Board of Management in 2016

In 2016, the Board of Management met 14 times. The main issues addressed by the Board of Management included market development and business strategy, new growth areas, and the profitability of the company, as well as issues relating to developments regarding competitiveness and costs. Digitalisation and operational excellence were also high on the agenda. Carrying out the acquisitions of Eniram and American Hydro, and planning and implementing the integration process was an important area of focus. Another focus area was the further development of Wärtsilä's organisational structure and the implementation of organisational changes. The development of markets, the regulatory operating environment, order intake and production capacity, as well as supplier and other stakeholder relationships, were also important matters addressed by the Board of Management.

# **Corporate Management**

The company's Corporate Management includes, in addition to the Board of Management, the following directors responsible for corporate functions:

#### Juha Hiekkanen

Vice President, Financial Controlling Born 1978, M.Sc. (Econ.)

#### Riitta Hovi

Deputy General Counsel, Corporate Legal Affairs Born 1960, LL.M., MBA

#### Anu Hämäläinen

Vice President, Group Treasury and Financial Services & Support Born 1965, M.Sc. (Econ.)

#### Johan Jägerroos

Vice President, Corporate Internal Audit Born 1965, M.Sc. (Econ.)

#### Sari Kolu

Director, Compliance Born 1967, Master of Laws, Executive MBA

#### Jukka Kumpulainen

Vice President, Chief Information Officer (CIO) Born 1968, M.Sc. (Eng.)

#### Antti Kuokkanen

Vice President, M&A, Business Control & Analysis Born 1977, M.Sc. (Econ.), M.Sc. (Eng.)

#### Vesa Riihimäki

Vice President, Quality Born 1966, M.Sc. (Eng.)

#### Marko Vainikka

Director, Corporate Relations and Sustainability Born 1970, M.Sc. (Eng.)

#### Natalia Valtasaari

Director, Investor & Media Relations Born 1984, M.Sc. (Econ.)

# **Business Management teams**

Each business head is supported by a Business Management team.

# **Energy Solutions**

#### Javier Cavada Camino

President, Energy Solutions Born 1975, PhD (Eng.)

#### Minna Blomqvist

Vice President, Human Resources Born 1969, M.Sc. (Eng.)

#### Alexandre Eykerman

Vice President, LNG Solutions
Born 1972, M.Sc. (Mech. Eng. & Shipping), MBA (Supply Management)

#### Melle Kruisdijk

Vice President, Europe Born 1971, M.Sc. (Mech. Eng.)

#### Antti Kämi

Vice President, Engine Power Plants Born 1964, M.Sc. (Civil Eng.)

#### Caj Malmsten

Vice President, Africa Born 1972, M.Sc. (Econ.)

#### **Sushil Purohit**

Vice President, Middle East, Asia & Australia Born 1972, B.Sc. (Eng.), MBA

#### Tomas Rönn

Vice President, Americas
Born 1961, B.Sc. (Electrical & Electronics Eng.)

# Laura Susi-Gamba

Vice President, Legal Affairs Born 1963, LL.M.

## Iñigo Viani

Vice President, Renewables and Storage Born 1972, B.A. (Science)

#### Ossi Ylinen

Vice President, Finance and Control Born 1976, M.Sc. (Econ.)

### **Marine Solutions**

#### Roger Holm

President, Marine Solutions Born 1972, M.Sc. (Econ.)

#### Arjen Berends

Vice President, Finance & Control Born 1968, MBA

#### Aaron Bresnahan

Vice President, Sales Born 1969, MBA & MA (Strategic Studies)

# Sinikka Ilveskoski

Vice President, Legal & Contract Management Born 1967, LL.M.

#### Timo Koponen

Vice President, Flow & Gas Solutions Born 1969, M.Sc. (Econ.)

#### Stephan Kuhn

Vice President, Electrical & Automation Born 1962, MBA

#### Juha Kytölä

Vice President, Environmental Solutions Born 1964, M.Sc. (Eng.)

#### Arto Lehtinen

Vice President, Propulsion Born 1971, M.Sc. (Eng.)

#### Stefan Wiik

Vice President, Engines Born 1971, B.Sc. (Eng.)

# **Services**

#### Pierpaolo Barbone

President, Services & Deputy to the CEO Born 1957, M.Sc. (Min. Eng.)

#### Guido Barbazza

Vice President, Emerging Business Born 1960, M.Sc. (Mech. Eng.)

#### Serge Begue

Vice President, Area South Europe & Africa Born 1954, Mech. Eng.

# Peter Bjurs

Vice President, Finance & Control Born 1965, M.Sc. (Econ.)

#### Henri van Boxtel

Vice President, Area Middle East & Asia Born 1959, B.Sc. (Econ.), Nautical degree

#### Tamara de Gruyter

Vice President, Propulsion System Services Born 1972, B.Sc., Shipbuilding Engineering

#### Tomas Hakala

Vice President, 4-Stroke Engine Services Born 1968, B.Sc. (Mech.)

#### Kai Kamila

Vice President, Human Resources Born 1960, M.Ed. (Master of Education)

#### Ralf Lindbäck

Vice President, Legal Affairs Born 1958, LL.M.

#### Stefan Nysjö

Vice President, Area North Europe Born 1970, B.Sc. (Mech.)

#### Vesa Riihimäki

Vice President, Quality Born 1966, M.Sc. (Eng.)

#### **Walter Reggente**

Vice President, Area Americas Born 1965, Chief Marine Engineer

## Sini Spets

Vice President, Business Development Born 1974, M.Sc. (Psychology)

# **Managing Directors of the subsidiaries**

The Managing Directors of the Group's subsidiaries are responsible for ensuring that the local resources are correctly dimensioned to meet the needs of the businesses and that the subsidiary's personnel development needs are met. The Managing Directors are also responsible for ensuring that the subsidiary's operations fulfil the requirements stipulated in the Group processes, including the quality system, that these operations comply with the respective country's legal requirements and with good business practices, and that communication within the subsidiary is conducted according to the targets of the Group.

# Internal control

Wärtsilä has defined its objectives for internal control according to the international COSO framework. Wärtsilä defines internal control as a process implemented by Wärtsilä's Board of Directors, the Management, the Boards of Directors of Group companies, and other personnel, which is designed to provide reasonable assurance regarding the achievement of objectives.

Internal control covers all the policies, processes, procedures and organisational structures within Wärtsilä that help management, and ultimately the Board, to ensure that Wärtsilä is achieving its objectives, that the business conduct is ethical and in compliance with all applicable laws and regulations, that the company's assets, including its brand, are safeguarded, and that its financial reporting is correct. Internal control is not a separate process or set of activities, but is embedded within Wärtsilä's operations.

The system of internal control operates at all levels of Wärtsilä. Wärtsilä maintains and develops its internal control system with the ultimate aim of improving its business performance and, at the same time, of complying with laws and regulations in countries where it operates.

# **Performance management**

Planning and target setting, an integral part of performance management in Wärtsilä, is a regular management activity and not part of Wärtsilä's internal control system. The establishment of objectives, however, is an important pre-requisite for internal control. Through the performance management process, financial and non-financial targets are set for Wärtsilä annually at the Group level. These Group level targets are then translated into targets for the Businesses, Group companies, and eventually for individuals.

The achievement of the annual targets is monitored through monthly management reporting. The performance of the Businesses and the achievement of the annual targets are reviewed on a monthly basis in the respective Management team meetings. The performance relating to the targets set by the Group and the different Businesses are reviewed on a monthly basis by the Board of Management. The respective management teams and the Board of Management also address the reliability of Wärtsilä's financial reporting.

Wärtsilä's financial reporting is carried out in a harmonised way in all major Group companies, using a single instance ERP system and a common chart of accounts. The International Financial Reporting Standards (IFRS) are applied throughout the entire Group. Wärtsilä's finance and control process is essential for the functioning of internal control. Adequate controls in the financial management and accounting processes are needed to ensure the reliability of financial reporting.

The Board of Directors regularly assesses the adequacy and effectiveness of Wärtsilä's internal controls and risk management. It is also responsible for ensuring that the internal control of accounting and financial administration is arranged appropriately. The Audit Committee of Wärtsilä's Board of Directors is responsible for overseeing the financial reporting process. The Group Business Control function is responsible for notifying relevant levels of management regarding deviations from plans, analysing the underlying reasons, and suggesting corrective actions. Group Business Control supports the Businesses in decision-making and analyses to ensure the attainment of financial targets. It maintains and develops the company's performance management processes, so that the management at different levels of the organisation is able to receive timely, reliable, and adequate information regarding the achievement of the organisation's objectives. In addition, it is responsible for developing the financial reporting processes and respective controls.

# Legal and compliance management

Legal and compliance management practices and processes occupy a central role in Wärtsilä's system of internal control. It is Wärtsilä's policy to act in accordance with the applicable laws and regulations in all countries where it operates.

Legal and compliance management acts predominantly in a proactive manner. Legal Affairs supports the President & CEO and the businesses in analysing and making decisions on matters involving contract policy, risk management, and regulatory considerations. Other key activities are to lead compliance management, and to strengthen and ensure the culture of appropriate conduct and behaviour, both internally and in external business transactions. Compliance management is based on the Code of Conduct and relevant group level policies and directives. Company-wide control mechanisms and processes are a part of the overall internal control system.

# **HR** management

Human resource management practices and processes play an active role in Wärtsilä's system of internal control. Wärtsilä's main human resource management processes with respect to internal control are; compensation and benefits, HR development, recruitment and resourcing management, individual performance management, as well as processes for collecting employee feedback. The HR function is responsible for maintaining and developing Wärtsilä's HR processes to enable effective internal control, also at the individual level.

# Other management systems

The Board of Management is responsible for developing and implementing Wärtsilä's management system, continuously improving its performance, and ensuring that it operates effectively. The Wärtsilä management system covers all global processes and management procedures within Wärtsilä related to fulfilling customer requirements. The proper functioning of the management systems highlighted below ensures, for their part, the attainment of Wärtsilä's internal control objectives.

#### Quality

The quality of Wärtsilä's solutions, and thus also quality management, is a top priority for Wärtsilä. Compliance with Wärtsilä's Quality Management System ISO 9001:2000 is compulsory throughout the Group, and compliance with the system is rigorously monitored.

#### **Sustainability**

Wärtsilä is strongly committed to sustainability. Wärtsilä's vision, mission and values, together with a solid financial performance, form the basis for sustainable development within Wärtsilä. Wärtsilä applies global guiding principles, such as the Quality, Environmental, Health & Safety policy (QEHS policy) and the Code of Conduct, which, together with the company's values, ensure a harmonised way of working towards sustainable development. In addition to the aforementioned, the Corporate Manual includes other policies and directives, a description of the company's operating procedures, responsibilities, and the management system structure.

Wärtsilä's Board of Management has overall responsibility for sustainability performance. The Board of Management approves the guiding principles and reviews the content on a regular basis. The Board of Management defines sustainability targets and monitors performance against these set targets. Performance is reviewed in connection with the management reviews at both Wärtsilä's Board of Management and Business Management Team levels.

The Board of Directors reviews major sustainability issues on an annual basis. In addition, the Board of Management identifies major critical concerns and, when necessary, communicates such concerns to the Board of Directors.

Wärtsilä's sustainability function is responsible for providing the necessary information to management, identifying development needs, as well as for coordinating sustainability programmes and preparing instructions. The function cooperates closely with the Businesses and the supporting functions, such as Human Resources, Legal Affairs, Compliance and Quality. It also collects and consolidates sustainability data from the subsidiaries.

Wärtsilä has clearly defined responsibilities, which are supported by necessary instructions and training. This training covers, for example, the Code of Conduct, anti-corruption, as well as environmental and occupational

health and safety issues. Wärtsilä monitors its sustainability performance by utilising the information provided by various sustainability tools and activities, such as internal audits and compliance processes.

#### **Risk management**

Internal control within Wärtsilä is designed to support the company in achieving its targets. The risks related to the achievement of targets need to be identified and evaluated in order for them to be managed. Thus, the identification and assessment of risks is a pre-requisite for internal control within Wärtsilä. Wärtsilä's internal control mechanisms and procedures provide management assurance that the risk management actions are carried out as planned.

Wärtsilä has defined and implemented entity level and process level control activities, as well as information system controls. Control activities at different levels are needed to directly mitigate risks at the respective levels. Wärtsilä's risk management processes consist of Group-wide risk assessment and management processes, as well as project-specific risk assessments and project risk management. The Group-wide risk assessment process results in the creation of action plans for the identified and prioritised risks.

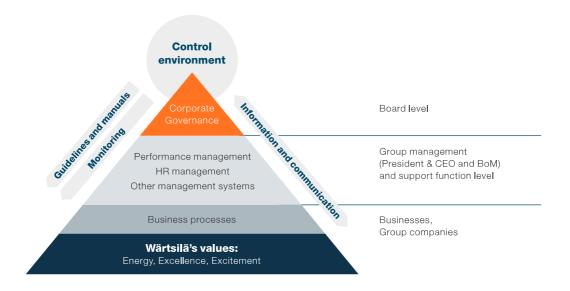
Each Business reports its main risks to Wärtsilä's Board of Management, which reviews the execution of the defined risk management action plans on a regular basis. Wärtsilä's Board of Directors is responsible for defining the Group's overall level of risk tolerance, and for ensuring that Wärtsilä has adequate tools and resources for managing risks. The Board reviews the risk profile regularly. The President & CEO, with the assistance of the Board of Management, is responsible for organising and ensuring risk management in all of Wärtsilä's operations. Business management is responsible for defining action plans for managing the most important risks.

Wärtsilä's most important strategic, operative and financial risks can be found in the <u>Risks and risk</u> management section.

#### **Information management**

Information management plays a key role in Wärtsilä's internal control system. Information systems are critical for effective internal control as many of the control activities are programmed controls.

# Main components of Wärtsilä's internal control



# Values and the control environment

The foundation of Wärtsilä's internal control system is its values: Energy, Excellence and Excitement. Wärtsilä's values are reflected in its day-to-day relations with its suppliers, customers and investors, and also in Wärtsilä's internal guidelines, policies, manuals, processes and practices. The control environment sets the tone for internal control within Wärtsilä and influences the control awareness of its people. It provides discipline and structure for all the other components of internal control. The elements of Wärtsilä's control environment are included in the corporate culture, the integrity, ethical values and competence of Wärtsilä's personnel, as well as in the attention and direction provided to the personnel by the Board of Directors of Wärtsilä. Wärtsilä's values and control environment provide Wärtsilä's Board of Directors and Management with the basis for reasonable assurance regarding the achievement of the objectives for internal control. The President & CEO and the Board of Management define Wärtsilä's values and ethical principles, which are reflected in the Code of Conduct, and set an example for the corporate culture, which together create the basis for the control environment. They are, together with Business management, responsible for communicating Wärtsilä's values to the organisation.

# **Business processes**

The controls embedded in Wärtsilä's business processes play a key role in ensuring effective internal control within the company. Controls in the business processes help ensure the achievement of all the objectives of internal control within Wärtsilä, especially those related to the efficiency of operations and the safeguarding of the company's profitability and reputation. Business management is responsible for ensuring that within its area of responsibility, the defined Group level processes and controls are implemented and complied with. Where no Group level processes and controls exist, Business management is responsible for ensuring that efficient Business level processes with adequate controls have been described and implemented.

# **Guidelines and communication**

#### **Guidelines and manuals**

The components of Wärtsilä's internal control system, including for example, corporate governance, the management system, the performance management process, as well as the business and other processes, are described in various guidelines and manuals. The essential Group level policies and guidelines are compiled in Wärtsilä's Corporate Manual. Wärtsilä's Group level Accounting Manual contains instructions and guidance on accounting and financial reporting to be applied in all Wärtsilä Group companies. The manual supports the achievement of the objectives regarding the reliability of Wärtsilä's financial reporting. Wärtsilä's Group level policies, and any changes to them, shall be approved by a member of the Board of Management.

In addition to the Group level guidelines and manuals, the Businesses have issued related guidelines and instructions for their own, specific purposes. The Business level guidelines and manuals are aligned with, and do not contradict, the Group level guidelines and manuals.

#### Information and communication

An effective internal control system needs sufficient, timely and reliable information to enable the management to assess the achievement of the company's objectives. Both financial and non-financial information is needed, relating to both internal and external events and activities. Informal means by which employees can provide feedback to management, and to communicate suspected misconduct (e.g. directly to the Compliance, Legal Affairs or Internal Audit function) are used. All external communications are carried out in accordance with the Group Communications Policy.

# **Monitoring**

Monitoring is a process that assesses the quality of Wärtsilä's system of internal control and its performance over time. Monitoring within Wärtsilä is performed both on an ongoing basis, and through separate evaluations that include internal, external and quality audits. Business management is responsible for ensuring that all relevant laws and regulations are complied with in their respective responsibility areas. Wärtsilä's management in turn performs monitoring as part of its regular supervisory activities. The Audit Committee of the Board of Directors assesses and assures the adequacy and effectiveness of Wärtsilä's internal controls and risk management.

The Internal Audit function assists the Audit Committee in assessing and assuring the adequacy and effectiveness of Wärtsilä's internal controls and risk management by performing regular audits of Group legal entities and support functions according to its annual plan. Wärtsilä's external auditor and other assurance providers, such as quality auditors, conduct evaluations of Wärtsilä's internal controls. The Group Finance & Control function oversees the financial reporting processes and controls to ensure that they are being followed. It also monitors the correctness of all external and internal financial reporting. The Legal and Compliance function monitors adherence to the compliance policies of the group. The external auditors verify the correctness of the external annual financial reports.

# **Audit**

#### Internal

The Group's internal audit is handled by its Internal Audit unit, which reports to the President & CEO. The purpose of the Internal Audit is to analyse the company's operations and processes, as well as the effectiveness and quality of its supervision mechanisms. The internal auditor also participates, if necessary, in audits undertaken in conjunction with acquisitions and carries out special tasks when needed.

The Internal Audit function covers all of the company's organisational levels and subsidiaries. An internal audit is undertaken in the main subsidiaries on an annual basis, and in network companies at three-year intervals. The Internal Audit function prepares an annual plan under which they independently audit different parts of the company, but it is also empowered to carry out special audits. The annual plan is approved by the Audit Committee, to which the Internal Audit function also reports at regular intervals. If required, the auditors also have the possibility to take direct contact with the Audit Committee or members of the Board of Directors.

#### **External**

The company has one auditor, which shall be an audit firm. The auditor is elected by the Annual General Meeting to audit the accounts for the ongoing financial year, and its duties cease at the close of the

subsequent Annual General Meeting. The auditor is responsible for auditing the consolidated and parent company financial statements and accounting records, and the administration of the parent company.

Following the closing of the annual accounts, the external auditor submits the statutory auditor's report to the company's shareholders and reports regularly also its findings to the Board of Directors' Audit Committee. An auditor, in addition to fulfilling general competency requirements, must also comply with certain legal independence requirements guaranteeing the execution of an independent and reliable audit.

#### **Auditor in 2016**

The Annual General Meeting appointed the audit firm KPMG Oy Ab as Wärtsilä Corporation's auditor for the year 2016. The auditor-in-charge was Ms Virpi Halonen. Auditing fees paid to all the auditors of the Group companies amounted to EUR 3.3 million in 2016. Consultancy fees unrelated to auditing duties paid to the auditors totalled EUR 1.3 million. These latter fees mainly concerned consultation on taxation matters.

# **Related party transactions**

Wärtsilä's related parties comprise the Board of Directors, the President & CEO, the Board of Management, as well as the associated companies and joint ventures. The Group Finance and Control function evaluates and monitors transactions concluded between the company and its related parties to ensure that any conflicts of interest are taken into account appropriately in Wärtsilä's decision-making process.

# Insider management

Wärtsilä manages inside information and insiders in accordance with all applicable laws and regulations regarding insiders and insider trading. The most important statutory provisions are contained in the Market Abuse Regulation (EU) 596/2014 ("MAR"). Wärtsilä also follows the Insider Guidelines of Nasdaq Helsinki Ltd., and Wärtsilä's Insider Policy.

The company draws up an insider list for projects containing inside information. Insiders are given written notification of their status as insiders and instructions on the obligations that apply to insiders.

Members of Wärtsilä's Board of Directors and Board of Management and certain other Wärtsilä personnel are prohibited from trading of the Wärtsilä financial instruments during the 30 days prior to publication of the financial statements bulletin or interim report.

Wärtsilä publishes notifications on transactions conducted by persons discharging managerial responsibilities, and persons closely associated with them in accordance with the provisions of the MAR. Persons discharging managerial responsibilities refer exclusively to the members of the Board of Directors and the Board of Management of Wärtsilä. These notifications are available on Wärtsilä's webpage.

# Salary and remuneration report 2016

#### **Remuneration of the Board of Directors**

The Annual General Meeting decides annually on the fees to be paid to the members of the Board of Directors for one term of office at a time.

The Annual General Meeting approved the following fees to the members of the Board of Directors for 2016:

- to the ordinary members EUR 66,000/year
- to the deputy chairman EUR 99,000/year
- to the chairman EUR 132,000/year

Approximately 40% of the annual fee is paid in Wärtsilä shares. In addition, each member will be paid EUR 600 per board meeting attended, the chairman's meeting fee being double this amount. Each member of the Nomination Committee and the Remuneration Committee will be paid EUR 700 per committee meeting attended and each member of the Audit Committee will be paid EUR 1,200 per committee meeting attended, the chairman's meeting fee being double these amounts. The members of Wärtsilä's Board of Directors were paid altogether EUR 736 thousand for the financial period that ended on 31 December 2016. The Board's members were not covered by the company's incentive schemes.

### Fees paid to the Board of Directors

TEUR	Attendar	nce fees	Yearly	/ fees	To	tal
<b>Board of Directors</b>	2016	2015	2016	2015	2016	2015
Mikael Lilius, Chairman	23	20	132	132	155	152
Sune Carlsson, Deputy Chairman	8	7	99	99	107	106
Maarit Aarni-Sirviö	16	15	66	66	82	81
Kaj-Gustaf Bergh	8	7	66	66	74	73
Tom Johnstone	11	8	66	66	77	74
Risto Murto	15	13	66	66	81	79
Gunilla Nordström	8	7	66	66	74	73
Markus Rauramo	20	19	66	66	86	85

## Fees paid in Wärtsilä shares in 2016

Board of Directors	No. of shares
Mikael Lilius, Chairman	1 465
Sune Carlsson, Deputy Chairman	1 099
Maarit Aarni-Sirviö	732
Kaj-Gustaf Bergh	732
Tom Johnstone	732
Risto Murto	732
Gunilla Nordström	732
Markus Rauramo	732

#### Board of Directors' share ownership in Wärtsilä on 31 December 2016

Board of Directors	No. of shares
Mikael Lilius, Chairman	18 414
Change in 2016	1 465
Sune Carlsson, Deputy Chairman	12 203
Change in 2016	1 099
Maarit Aarni-Sirviö	9 810
Change in 2016	732
Kaj-Gustaf Bergh	9 032
Change in 2016	732
Tom Johnstone	1 360
Change in 2016	732
Risto Murto	1 980
Change in 2016	732
Gunilla Nordström	3 423
Change in 2016	732
Markus Rauramo	4 534
Change in 2016	732

# Remuneration of the President & CEO and the Board of Management

The remuneration paid to the President & CEO and other members of the Board of Management, and the principles underlying it, are determined by the Board of Directors. The remuneration paid to the President & CEO and to the other members of the Board of Management consists of a monthly salary and a bonus. The Board of Directors determines on a yearly basis the terms for the bonus payment. The bonus payments for the President & CEO and the Board of Management are paid based on the achievement of the company's profitability and other financial targets for the financial year. The variable salary can be at most 43% of the maximum total salary for the President & CEO and one third of the maximum total salary for the other members of the Board of Management. Additionally, the Group has a long-term incentive scheme for senior management tied to the development of the company's share price.

The base salary of the President & CEO is EUR 780,000 p.a. He is entitled to participate in the short- and long-term incentives schemes according to the terms and conditions described above. The President & CEO is eligible to take retirement upon reaching the age of sixty-three. His pension scheme is determined according to a defined contribution based system. The retirement pension contribution is a relative part of his annual salary. Remuneration paid to the President & CEO if dismissed by the company corresponds to 18 months' salary plus a six months' period of notice salary.

The members of the Board of Management have a company specific pension scheme. Additional pension schemes and retirement ages vary and are generally based on the retirement scheme of the national social security system to which the person in question belongs, and is either defined benefit or defined contribution based.

Financial benefits of President & CEO Jaakko Eskola, 1 January - 31 December 2016:

- Salary and other short term benefits: EUR 781 thousand
- Bonuses: 179 thousand
- Bonus schemes based on share price development: 216 thousand
- Optional retirement age: 63
- Period of notice: 6 months
- Compensation paid if dismissed by the company: 18 months' salary + 6 months' period of notice salary

Further information on Board of Management remunerations can be found in the Consolidated Financial Statements, <u>Note 29 Related party disclosures</u>.

#### Board of Management's share ownership in Wärtsilä on 31 December 2016

Board of Management	No. of shares
Jaakko Eskola	6 420
Change in 2016	3 100
Pierpaolo Barbone	5 600
Change in 2016	3 600
Päivi Castrén	3 970
Change in 2016	1 720
Javier Cavada Camino	0
Change in 2016	0
Kari Hietanen	4 274
Change in 2016	2 030
Roger Holm	0
Change in 2016	0
Atte Palomäki	3 869
Change in 2016	1 748
Marco Ryan	0
Change in 2016	0
Marco Wirén	3 640
Change in 2016	1 640

### **Incentive schemes**

The Board of Directors determines the incentive schemes for the President & CEO and other members of the Board of Management and the principles underlying them. The Board of Directors also decides on other possible long-term incentive schemes for senior management, unless they are by law determined by the Annual General Meeting. The Board of Management decides on bonus schemes for other directors and managers.

#### **Short-term incentive schemes**

The Group operates a bonus scheme, which is implemented globally in all Businesses. The bonus is based on the Group's profitability and agreed personal targets. Some 3,000 directors and managers are covered by this bonus scheme.

The Group's white- and blue-collar employees are covered by various bonus or profit-based incentive schemes. These are applied in each country according to that country's legislation, or to agreements concerning profit-sharing schemes. All in all, some 80% of the company's employees are covered by the Group's bonus schemes and various other profit-related incentive schemes.

#### Long-term incentive schemes

The Board of Directors has decided on a long-term incentive scheme for senior management tied to the development of the company's share price. The yearly bonus scheme applies to approximately 100 directors. The size of the bonus is based on the share price development during a pre-determined timeframe, and an upper limit is set for the bonus.

The objective of the incentive scheme is to align the interests of the senior management with those of Wärtsilä's shareholders by creating a long-term equity-related interest for the participants and, thus, to promote shareholder value creation, to drive long-term performance culture in Wärtsilä and to commit Wärtsilä's valuable key resources to the company.

Each Board of Management member is expected to accumulate and, once achieved, maintain a share ownership in Wärtsilä which at least corresponds to the individual's annual gross base salary. Board of Management members shall acquire Wärtsilä shares with 50% of the net bonuses received under the

company's long-term bonus scheme until the above share ownership level has been achieved. The shares shall be acquired by a third party stock broker from the stock market during the ten consecutive trading days following the publication of Wärtsilä's financial results for the final year of the individual bonus scheme.

The 2013 bonus scheme comprises 1,846,000 bonus rights. The bonus payment is based on the share price development during a three-year period on the basis of a share price of EUR 37.05. The bonus cannot exceed EUR 10.00 per bonus right and it takes into account 50% of dividends paid. The 2013 bonus scheme will be due for payment in February 2017.

The 2014 bonus scheme comprises 2,076,000 bonus rights. The bonus payment is based on the share price development during a three-year period on the basis of a share price of EUR 44.25. The bonus cannot exceed EUR 10.60 per bonus right and it takes into account 100% of dividends paid. The 2014 bonus scheme will be due for payment in February 2018.

The 2015 bonus scheme comprises 1,962,000 bonus rights. The bonus payment is based on the share price development during a three-year period on the basis of a share price of EUR 47.47. The bonus cannot exceed EUR 13.84 per bonus right and it takes into account 100% of dividends paid. The 2015 bonus scheme will be due for payment in February 2019.

## **Evaluation**

The Board of Directors monitors the Group's short- and long-term incentive schemes and evaluates the achievement of the targets on which they are based. The incentive schemes for 2016 were found to be well balanced and in accordance with market practices.

# Risks and risk management

## The aim and principles of risk management

Wärtsilä, like any other company, is exposed to various risks through the normal course of its activities. No business can be conducted without accepting a certain level of risk, and any expected gains from business activities are to be assessed against the involved risks.

The purpose of risk management is to ensure that Wärtsilä is able to effectively execute its strategies and to reach its targets, in the short term as well as over the long run. The key is to identify the risks that have the potential to restrain the company from reaching its goals, and to determine whether those risks are at an acceptable level.

By definition, risk is the effect of uncertainty on objectives. An effect is a deviation from the expected — positive or negative; in other words either a threat or an opportunity. Actions need to be taken to avoid, mitigate, transfer, or monitor identified risks, or to capture and utilise the opportunities. Wärtsilä's structured risk management process offers a set of reactive, proactive, protective, and preventive tools that are used not only to protect it against threats, but also to turn some of the risks into opportunities.

Risks can only be managed if they are identified and understood in advance, if risk treatment plans for managing them are made, and if a process of continuous follow-up is in place for the related controls. Therefore, risk management is a central part of Wärtsilä's strategic and operational management.

Risk management at Wärtsilä is a continuous process of analysing and managing all the opportunities and threats faced by the company in its efforts to achieve its goals, and to ensure the continuity of the business. The basis for risk management is the lifecycle quality of Wärtsilä's operations and products, and the continuous, systematic loss prevention efforts at all levels of the Group, not only as an integrated part of

management systems, but as part of every employee's daily work. In the long-term, this is the only means for reducing the overall risk related costs.

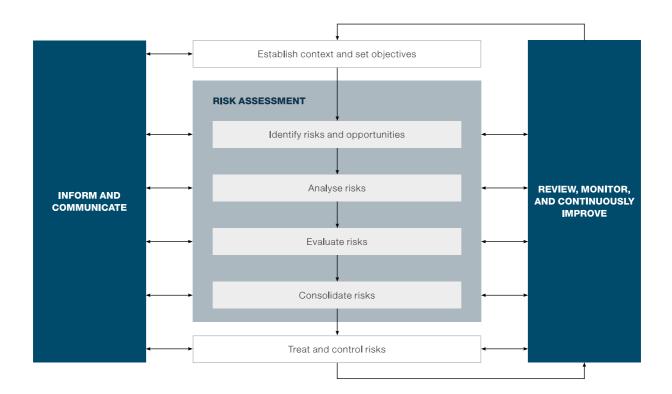
# Risk management policy and process

Wärtsilä has a corporate level risk management policy which defines and formalises the Businesses' risk management and reporting procedures. The document acts as a risk management guideline generating a common understanding over risk related concepts. It harmonises and structures the way of working with respect to risk management within the group in order to achieve a process whereby the risks identified are measurable and possible to consolidate. The policy brings consistency to risk management practice, provides a structure for the organisation and Businesses to handle day-to-day risk management tasks in accordance with the agreed processes, and provides a unified vocabulary to provide further guidance with respect to generic terms and definitions relating to risk management.

The Businesses are responsible for the risks and rewards, and thus managing risks is in the responsibility of business management teams and individual managers. The risk management process controls exposures to risk by using systematic mapping, assessment, treatment, reporting, monitoring and control of risks, including the reporting of residual risks. Wärtsilä's risk management process is based upon the ISO 31000 Risk Management Guidelines and Principles, and the vocabulary of ISO 31000 has been adopted in order to streamline risk related communication within the Group.

The risk management process at Wärtsilä is designed to be an integral part of management, which is embedded in Wärtsilä's culture and practices, and tailored to fit the business functions and processes of the organisation. The process can be seen as a continuous loop consisting of the repetitive steps of context establishment, risk assessment, risk treatment, communication and consultation, and finally monitoring and review.

#### Risk management guidelines and principles



#### **Implementation**

The Board of Directors and the Board of Management decide and set the guidelines on strategic matters. Each Business is responsible for achieving its set strategic goals, and for mitigating and managing its risks. The Corporate Risk Management function is part of Group Treasury, which reports to the Chief Financial Officer. The function is responsible for the risk reporting process, and for conducting risk assessments with the Businesses and their underlying organisations. It co-ordinates all risk management activities within the Group, reviews the business risk profile, and cooperates with the Businesses in the implementation of risk mitigation work. It is also responsible for maintaining the Group risk management policy, and for describing the current way of working in relation to risk reporting. Furthermore, the Risk Management function develops and manages global and local insurance schemes for insurable risks. The Audit Committee reviews and assesses the adequacy of risk management, and the Internal Audit function is responsible for reviewing the risk management process on an annual basis.

# BoD/BoM Group risk report Energy Marine Services Support Functions Underlying organisational units

Risk mitigation actions are decided in the normal course of business. At its meetings, the Board of Management conducts annual Management Reviews for each Business and certain main support functions, addressing also their risks and risk mitigation. The Group risk map is consolidated from the results of the business and function reviews and presented annually as part of the Finance Management Review.

The identified risks are labelled as either internal or external; they are quantified in euro, and their probabilities are estimated. The Group risk report is then prepared and presented to the Board of Directors.

Risk management is part of the Businesses' management process and has been integrated into the Business Management teams' agenda. The Businesses are accountable for organising and reporting on risk management from their underlying geographical business areas, business lines, organisations, and product centres. All follow-up actions are also the Businesses' responsibility.

## **Risk categories**

The relevant risks for Wärtsilä have been classified under four categories; strategic, operational, hazard and compliance, and financial risks. The potential loss expectancy is highest with strategic and operational risks and lowest with hazard and financial risks. The risks in most of the categories can have both upside and downside impacts. In this regard, hazard risks are an exception, since for them only a negative effect is possible.

Risk High

Medium

Low

Risk radars are used to map the main risks within the risk categories. In annual risk assessment workshops between the Businesses and the Corporate Risk Management function, Business specific risk radars are generated for the use and evaluation of the Business Management teams, and are reviewed and updated by them on a regular basis. The Business specific radars are consolidated into a single Group Risk Radar, which is presented to the Board of Directors and the Audit Committee once a year. The purpose is to facilitate the discussion on risk and to give a quick overview of where priorities should lie in terms of risk management.

#### Risk radar

Operational risks



Hazard risks

# Strategic risks

Strategic risk assessment is part of the strategic planning process within the Group. At Wärtsilä, a risk is defined as strategic if it has the potential for imposing a long-term impact on the business.

#### **Business environment risks**

Business cycles in the global economy, and in customer industries, influence the demand for Wärtsilä's products, as well as its financial condition and operating result. The flexible manufacturing model based on capacity outsourcing, together with a stable business mix with a large share of sales deriving from Services, provides Wärtsilä with a certain level of stability in a cyclical market. Important economic matters that indirectly affect Wärtsilä, its clients, and suppliers include inter alia, the liquidity and solvency of financial institutions, and thus not only their capability but also their willingness to extend credit, the counter cyclical stimulus programmes adopted by governments – especially in the power and infrastructure sectors, the enhanced activities of multilateral institutions, such as the International Finance Corporation, the availability of export credit schemes and guarantees, and other such factors. However, Wärtsilä's relatively large order book gives the company time to adapt to changes in market conditions.

The implementation of more stringent environmental regulations is important for Wärtsilä's future growth potential, since the company's comprehensive portfolio of products and services allows customers to meet such stricter requirements. A delay in legislation implementation may present a risk to Wärtsilä, and possible changes in the legislation timeline and scope are, therefore, actively monitored.

## **Market and customer risks**

In the Energy Solutions business, slow economic growth represents the primary risk for demand development. Delays in customer investment decisions can represent a risk in regions with geopolitical tension or significant currency fluctuations. Low oil prices are affecting national infrastructure development in the oil and gas

producing economies, especially in the Middle East and Russia. Price pressure resulting from the challenging competitive environment remains a risk. Orders have been received from all geographic regions, thus limiting the risk of dependence on one particular market. Energy Solutions' three customer segments, namely industrial customers, IPPs (Independent Power Producers), and utilities, were also all represented in the order intake.

Wärtsilä is well represented in all the major shipbuilding markets, and is active in all the main vessel segments. This, along with the large product portfolio, mitigates both geographical and single customer risks. Marine market activity was weak during 2016. Challenges resulting from the uncertainty in the global economy and the business environment within the shipping and shipbuilding industries, continued to affect markets. Increasing consolidation of the market with a decreasing number of major shipbuilding customers, as well as the shrinking order books of many of the shipyards, were observed in 2016. The weak short-term global economic outlook, overcapacity, and low demand for cargo tonnage are the main obstacles to recovery in the conventional shipping markets. Low oil prices, an oversupply of oil and gas, and reduced capital expenditure from the oil companies continue to limit offshore investments. The Cruise & Ferry segment continued to develop positively during 2016, with the demand for cruise vessels being supported by the anticipated growth in Asian passenger traffic. The demand for ferries was supported by signs of economic recovery and increasing passenger volumes in the USA and Europe.

The importance of fuel efficiency and environmental regulations are clearly visible and offer opportunities for Wärtsilä. Wärtsilä is well positioned to sell both equipment and services, including surveys, installation, partnership, and lifecycle support. The regulatory environment is also driving the adoption of gas as a fuel in the broader marine markets. The shipbuilding market continued to be dominated by Asian yards, notably China and South Korea, but with good activity also in Europe thanks to activity in the cruise segment.

Wärtsilä Services' mid- and long-term activities are expected to grow in line with the development of the existing installed base and general global economic developments. Therefore, a slowdown in global growth represent the primary risk for demand development in the Services business. Wärtsilä Services has more than 10,000 individual customers engaging in service and spare part sales annually, and the current active base of installed Wärtsilä engines is 181,000 MW. Thus, dependency on any single customer or customer segment is minor. During recent years, Wärtsilä has increased its focus on credit management processes so as to better manage the increasing risks resulting from higher leverage and decreasing profitability in certain customer segments. Exposure to individual customers is limited, but an industry-wide impact might also affect the profitability of Wärtsilä's Services business.

#### **Competitive situation and price risks**

In larger gas-fired projects, Wärtsilä is facing competition from gas turbine manufacturers, such as GE and Siemens. In smaller gas power plant projects, and in the liquid fuel power plant market, the competitors are mainly other combustion engine suppliers, such as MAN Diesel & Turbo, GE Jenbacher, Caterpillar (MAK), and Rolls-Royce. In Wärtsilä's addressable market, i.e. the market for installations of up to 500 MW, orders for natural gas and liquid fuel power plants totalled a power output of 17.4 GW (17.0) during the first nine months of 2016. Wärtsilä's market share was 15% (10). Wärtsilä's success in the market can be attributed to its flexible power generation solution, which can be used in a wide range of different applications and power plant sizes.

For Marine Solutions, the competitive landscape remained largely unchanged in 2016. The most significant competitors in the main engine markets are MAN Diesel & Turbo, Caterpillar (MAK), and Hyundai Heavy Industries (HiMSEN). Wärtsilä has a strong position in medium-speed engines with a 51% market share in 2016. In auxiliary engines, Wärtsilä's market share was 18%. In propulsion equipment, the competition is more fragmented and varies by product category. One of the main competitors for these products is Rolls-Royce. In environmental solutions, as well as in flow and gas products, the markets are very fragmented. Alfa Laval is one of the main competitors in environmental solutions, while in the Electrical and Automation segment we face competition from companies such as Kongsberg, GE and Siemens. Price competition has continued to be intense in the marine markets. The strategic move of becoming a systems integrator with automation and ship design capability has proven to be important in the competition for new projects with larger and more value added scopes. The concept of selling packaged solutions reduces price volatility.

In the Services business, Wärtsilä has no direct competitors capable of offering a similar portfolio of services from a single source. Excluding the networks of other engine manufacturers, there are few global players in the service market. The continued focus of customers on optimising operating expenditures can lead to a further increase in competition for services where price is more important than quality. The main action for mitigating this risk is to promote the value based offering.

#### Political and legislative risks

Wärtsilä is present in over 200 locations in more than 70 countries and has delivered power plants to 176 countries. Political developments and changes in legislation can have a significant impact on Wärtsilä's business. Wärtsilä actively monitors political and legal developments in its markets, and engages in dialogue with various official bodies on projects of importance to its operations and intellectual property rights. Much of this engagement takes place through interest groups and trade organisations. The company monitors political and legislative changes at both the corporate and subsidiary levels.

In recent years, there has been increased regulatory activity by different governments worldwide, which has led to the need for emphasising due internal processes to ensure compliance. As an example, the continuing and changing trade sanctions were closely monitored during 2016. This has required increased internal efforts to ensure that adequate procedures are in place.

#### Climate change and sustainability risks

Wärtsilä has assessed its sustainability risks, including climate change risks, in both its strategic and operative risk assessments. However, the risks were not found to be significant. The potential business risks related to sustainability, climate change, and Wärtsilä's products are in the areas of regulatory emission restrictions and changes in customer attitudes to using combustion engines and fossil fuels. The risks in environmental legislation changes are related to the complexity of the overall field of different emissions, the balance between commercially available fuels and their resulting emissions, available abatement technologies, the impact on overall energy efficiency, and the resulting financial feasibility of the various alternative ways to meet regulatory demands.

Being at the forefront of technological developments mitigates sustainability risks and gives Wärtsilä many opportunities arising from tightening environmental regulations. Over the years, Wärtsilä has worked continuously to improve the efficiency of its products, while at the same time seeking ways to reduce emissions. The fuel flexibility of Wärtsilä's products enables the utilisation of various fuels, including gas and those from renewable sources, while their operational flexibility enables the installation of large capacity based wind and solar energy systems without hampering the reliability of the electricity grid. In 2016 Wärtsilä entered the solar energy business with its first solar energy project in Jordan; a further step in providing our customers with sustainable innovations that reduce carbon emissions. Wärtsilä's technology also enables energy to be generated with a minimum use of water. The lack of fresh water is expected to be one of the major challenges facing the world in the future. In shipping, Wärtsilä can reduce the carbon footprint of vessels through optimised ship design, and optimal propulsion solutions.

Environmental solutions offer alternative technologies to reduce  $SO_X$  emissions and to treat waste and ballast water. In Energy Solutions, Wärtsilä's Smart Power Generation concept supports the increase in low carbon power generation, including wind, solar, and natural gas fired plants. Wärtsilä offers several retrofit solutions for the after-sales market to reduce emissions and to increase fuel efficiency.

For more information, please see the separate <u>Sustainability report</u> included in this annual report.

#### **Technology risks**

Wärtsilä aims to increase the competitiveness of its solutions and manage technology risks through solid R&D efforts and innovation. The development of new products is based on the strategic view of optimising lifecycle value for customers with modern and sustainable power solutions through, for example, gas solutions, environmental technologies, ship design, and electrical & automation solutions. As a technology leader, Wärtsilä places strong emphasis on emissions control, enhancing efficiency, and maintaining the cost competitiveness of its products.

#### **Operations, risks and opportunities**



#### **Operational risks**

Operational risk management is part of the daily work of the Businesses. Opportunities and risks are identified, assessed, and managed on a daily basis and reported to, and managed by, the appropriate management level. The status of these opportunities and threats are reviewed on a periodic basis and appropriate further actions are taken.

#### **Risk management process**

#### **PROTECTIVE**

#### **PREVENTIVE**

- · Quality systems
- · Contract policies & payment terms
- Insurance risk surveys
- R&D risk elimination process
- · Supplier audits
- WeCare near misses reporting system with corrective measures
- Risk management evaluation



- Business continuity planning Global and local insurance schemes Risk reporting following the ISO 310 Crisis management

#### PROACTIVE

#### **Manufacturing risk**

Wärtsilä constantly analyses its manufacturing footprint and capacity costs, including costs related to the supply chain. Risk assessments have been made for all the main delivery centres, and significant safety and risk mitigation investments have been completed. Risk identification, assessment and mitigation actions are executed on a regular basis as part of operational management. Management systems for quality, environmental, occupational health and safety, and other systems are utilised to improve productivity, while safety and business continuity plans have been implemented for the key delivery centres.

#### Supplier and sub-contractor risk

Wärtsilä's supply management is integrated within the business lines, the goal being to secure quality, lead times, and costs according to business specific requirements. In order to ensure coordinated interfaces and synergies for the cross-divisional supplier base, a category management structure has been put in place. Indirect Purchasing remains a centralised function responsible for managing strategic sourcing activities for indirect materials and services in all businesses and support functions.

The supply management units have a unified process for managing and controlling Wärtsilä's supplier network, and for verifying that the suppliers' performance meets Wärtsilä's expectations. Supplier performance is, therefore, continuously measured. A key activity in managing business continuity planning is the continuous assessment of business interruption risks, which is carried out in cooperation with the company's suppliers. Several supplier risk audits have been completed jointly with the insurer as one means of mitigating risk. These audits are now one of the regular tasks for the supply category managers and the Risk Management function.

Wärtsilä has developed its supply related activities by creating close collaboration and long-term relationships with its main suppliers. This cooperation creates a common view towards values and goals, which in turn supports the management of Wärtsilä's strategic risks. To further mitigate supplier and sub-contractor risks, a comprehensive follow-up of suppliers' credit worthiness has been established. Supplier related risks for key components are mitigated by establishing dual- or multi-sourcing.

#### Lifecycle quality of products and product liability risk

The launching of new products always involves risks. In the R&D process, several risk management techniques are applied, including the risk elimination tool FMEA (Failure Modes and Effects Analysis) and inhouse validation testing. Wärtsilä seeks to control quality risks by monitoring the incoming quality of the supply chain, and by designing and manufacturing its products with all due care. Wärtsilä applies a GATE model in order to control the product development process. Initially, only a limited release of new products is allowed, and via the gate approach, full release authority is given to the sales organisations only after testing and further validation has been completed.

Wärtsilä seeks to control its manufacturing quality risks by applying several assurance and quality control principles. The level of quality assurance and control requirements are determined based on component criticality, and they are applied throughout the delivery chain. The 5S (sort, shine, set, standardise, and sustain) philosophy is implemented at all production sites to increase quality levels, and to support lean operations.

Both Services and the business lines are responsible for supporting customers in all warranty issues. This offers a feedback loop from the field to production and R&D, while taking care of customers' installations throughout their lifecycle. The company makes warranty provisions to cover any costs that may arise after product delivery. The company's product liability insurance covers unexpected damages.

Wärtsilä seeks to continuously improve the quality of its products and services through the adoption of best industry practices and good governance. Management at all levels is responsible for the quality of output from their organisations, and is accountable for ensuring that appropriate review and feedback mechanisms are in place. The centralised Wärtsilä Quality function is responsible for coordinating quality activities across the businesses, and for ensuring that senior governance mechanisms are in place and effective.

#### **Contractual risks**

Wärtsilä's non-service sales include projects and equipment supply deliveries of various sizes. The most substantial orders concern turnkey power plants. However, in relation to the total volume of business, the risks from individual projects do not reach significant levels. The lifecycle quality of the products and work, starting from the initial design, throughout all stages of the production process, to the eventual field service work, plus the use of standard sales contracts, including the establishment of a contract review process, together reduce the risk of product liability claims.

In the Services business, the contractual risk is related mainly to long-term agreements and service projects, such as engine upgrades, retrofits or modifications. These offerings represent approximately 25% of the total Services business, but the risks connected to individual contracts do not reach significant levels since the business between the various customers and countries is broadly spread. In addition, both offerings follow a well-defined sales process, thereby bringing multiple control points to observe embedded risks and to plan their control, both in contractual measures as well as in execution.

#### Risk of non-compliance, corruption and fraud

Wärtsilä complies with the law and its own internal policies and procedures everywhere the company does business. Wärtsilä's Code of Conduct is the key guideline for all employees globally. Wärtsilä is committed to high ethical standards and integrity in its Businesses, and to preventing corruption and violations of the principles set forth in the Code of Conduct, as well as in Wärtsilä's Anti-Corruption and Compliance Reporting policies. Compliance processes are embedded in all of the Businesses, and the responsibility for compliance and awareness of ethics and integrity is that of all Wärtsilä employees. Wärtsilä is fully committed to compliance with the anti-corruption laws and statutes. Wärtsilä's Anti-Corruption Policy absolutely forbids any kind of corruption and bribery, and the top management of the company has a zero-tolerance policy regarding corruption and fraud.

The Compliance function promotes Group wide compliance and continuously strives to raise awareness of the risk of corruption and bribery and other misconduct. It is primarily responsible for creating and enforcing Group level policies and procedures, training programmes, internal compliance investigations, managing the consequences of misconduct, and reporting. The continuous development of Wärtsilä's compliance programme and nurturing the company's commendable ethical culture are pivotal tasks for the Compliance function. Moreover, Compliance supports and cooperates with the Businesses and other corporate functions in their risk management efforts. In 2016, Wärtsilä's Board of Management initiated a Group-wide programme

for strengthening Wärtsilä's Code of Conduct. The programme aims to increase employees' understanding on how the Code of Conduct impacts the everyday work at all Wärtsilä locations wherever Wärtsilä operates.

While Wärtsilä is aware of the risk of being subject to fraud by external business parties, and that the risk of corruption and fraud is heightened in many markets where the company operates, Wärtsilä maintains its highly ethical practices at all times. Full compliance with its stringent anti-corruption regime, including policies to prevent the corruption and bribery risk of third parties, is demanded by Wärtsilä.

#### **Commodity price risk**

#### Oil

The direct effect of oil price changes on Wärtsilä's production is limited, with their impact being mainly demand related. Higher oil prices represent a risk for global economic growth and increase operating costs, especially in the shipping markets. However, they also stimulate investments in exploration and production for oil and gas, both on land and offshore. Furthermore, high oil prices increase investments in gas carriers, gas-based power plants and, increasingly, also in gas-fuelled vessels. Low oil prices can delay investment decisions in oil producing countries and regions, as well as in the offshore industry. Wärtsilä is a global company involved in different shipping and power plant segments where oil price changes can have an opposing impact on demand drivers. This position is further diversified by the increasing importance of natural gas in Wärtsilä's business.

#### Metals

Metal prices have an indirect effect on the component costs of Wärtsilä's products. Furthermore, some key components are sourced with long-term contracts, and thus raw material price volatility is limited.

#### Electricity

Electricity prices have no substantial impact on Wärtsilä's production costs. In the Energy Solutions business, high electricity prices support investments in new capacity by utility customers. Lower grid electricity prices do not favour investments in their own generating capacity by industrial customers.

#### **Hazard risks**

Occupational health and safety systems, travel safety instructions, and crisis management guidelines are aimed at protecting Wärtsilä employees. Appropriate insurances are in place for the personnel, and to emphasise the importance of employee safety, the Board of Management has decided on a corporate level target of zero lost-time injuries. A specific Zero Injury project exists for this purpose, and the target is a part of the company's sustainability programme. During 2016, the near-miss reporting system, WeCare, has been actively used worldwide in order to manage information related to incidents that can threaten the safety, health and security of the company's employees and operations, as well as the environment. This IT solution itself does not alone improve performance, but it does provide a guide for identifying the causes of incidents, and for taking all appropriate actions in a systematic way.

Environmental management systems are in place to mitigate environmental hazard risks. Wärtsilä maintains a register of all properties used and gives guidelines for the purchase, sale, rental and security of premises, and uses external advisors for environmental audits.

None of Wärtsilä's major facilities are located in natural disaster areas. Catastrophic peril related scenarios are identified and, where necessary, exposures are mitigated by, for example, elevating sites above the flood risk level or by constructing flood dikes. For Wärtsilä's main sites, business impact analyses have been conducted and continuity plans created to cover both property and business interruption risks.

The risks that Wärtsilä is unable to influence through its own efforts are transferred whenever possible to insurance companies. Wärtsilä uses appropriate insurance policies to cover indemnity risks related to its personnel, assets, and business interruptions; including supplier triggered interruptions, as well as third-party and product liability. Wärtsilä has established its own captive insurance company, Vulcan Insurance PCC Ltd,

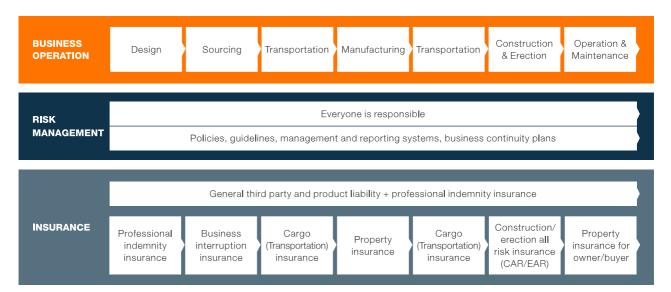
as a risk management tool. The company is located on Guernsey for insurance technical reasons, and it insures only Wärtsilä's own property. Vulcan Insurance PCC Ltd is subject to normal taxation in Finland.

#### Information & cyber security related risks

Wärtsilä has an internal organisation dedicated to cyber security governance and management. This organisation, in cooperation with Wärtsilä's divisional business management, is responsible for Wärtsilä's cyber security governance and management in connection with its customer offerings and internal operations. The Wärtsilä cyber security governance model ties together traditional safety and security functions with cyber security operations.

Information security risks related to Wärtsilä's internal operations are continuously identified, and mitigation activities are executed in network security, endpoint protection, access management and vulnerability management. The Wärtsilä Security Operations Centre monitors the internal threat exposure level with vulnerability scanning capabilities, and provides a coordinated response to identified information security incidents.

#### Which insurances cover our business?



Both risk management work and casualty insurance cover Wärtsilä's products over their entire lifecycle.

#### **Financial risks**

Wärtsilä's financial risks are presented in the notes to the financial statements,  $\underline{\text{Note 30}}$ .

# Wärtsilä's risk profiles & responsibilities

Risks	Risk profile	Policy or other guideline	Responsible body
Strategic risks		Wärtsilä's strategy and business plans	Wärtsilä's Board of Directors (BoD), Board of Management (BoM) and Businesses
Business environment risk	••••	Wärtsilä's strategy and business plans	BoM and Businesses
Market and customer risk		Wärtsilä's strategy and business plans	BoM and Businesses
Competitive situation and price risk		Wärtsilä's strategy and business plans	BoM and Businesses
Political and legislative risk	•••	Various guidelines and risk management policy	Businesses, R&D, Risk management (RM) and Legal functions
Climate change and sustainability risk	•••	QHSE policy, Code of Conduct, management systems (ISO 14001 & OHSAS 18001)	Businesses, R&D and Sustainability function
Technology risk	•••	Patents and industrial rights, product guarantees	Businesses and R&D function
Operational risks		Wärtsilä's strategy and business plans	BoM and Businesses
Manufacturing risk		Production systems, Business Continuity Plan	Manufacturing and Businesses
Supplier and subcontractor risk	•••	Supplier requirement and supplier management system, Business Continuity Plan	Businesses and Supply Management
Lifecycle quality of products and product liability risk		Management systems (ISO 9001), safety instruction and manuals, risk management policy, R&D risk elimination instructions	Manufacturing, R&D function, Businesses, RM, Quality and Legal functions

Contractual risks		Standard contracts, Corporate Sales Contracting Policy	Legal function and Businesses
Commodity price risk	•	Production cost control	Businesses and Treasury function
Data security risk	•	Data security principles and Cyber Security Strategy	Businesses and IM function
Non- compliance risk	•	Code of Conduct, Anti-corruption policy, Compliance policy	Businesses and Compliance function
Hazard risks		Risk management policy and guidelines	Businesses and RM function
Personnel risk	•	Management system (OHSAS 18001), travel safety instructions, crisis management guidelines, near misses reporting and premises safety plans	Businesses, Human Resources (HR), RM, EHS and security functions
Natural catastrophes	•	Crisis management guidelines, Business Continuity Plan	Businesses and RM function
Fire, cargo and other accidents	•••	Management systems (ISO 14001 & OHSAS 18001), premises safety plan	Businesses, RM and Real Estate functions
Financial risks		Wärtsilä's strategy and business plans	Businesses and Treasury function
Foreign exchange risk	•	Treasury policy	Businesses and Treasury function
Interest rate risk	•	Treasury policy	Businesses and Treasury function
Liquidity and refinancing risk		Treasury policy	Businesses and Treasury function
Credit risk		Credit and Treasury policy	Businesses and Treasury function

Low High

# **Investors**

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## **Shares and shareholders**

Wärtsilä Corporation's shares are listed on the Nasdaq Helsinki Large Cap list under the trading code WRT1V. At the end of the financial period 2016, the number of Wärtsilä shares totalled 197,241,130 and the share capital entered in the trade register was EUR 336,002,138.50. Wärtsilä has one share series with each share entitling its holder to one vote at the General Meeting and to an equal dividend.

#### Key figures for the Wärtsilä share

		2016	2015	2014	2013	2012
Earnings per share (EPS)	EUR	1.79	2.25	1.76	1.98	1.72
Book-value of equity per share	EUR	11.60	11.16	9.94	9.35	8.95
Dividend per share	EUR	1.30 <sup>1</sup>	1.20	1.15	1.05	1.00
Dividend per earnings	%	72.8 <sup>1</sup>	53.3	65.4	53.0	58.1
Dividend yield	%	3.0 <sup>1</sup>	2.8	3.1	2.9	3.1
Price per earnings (P/E)		23.8	18.8	21.1	18.1	19.0
Price to book-value (P/BV)		3.7	3.8	3.7	3.8	3.7
Adjusted number of shares	x 1 000					
end of financial year		197 241	197 241	197 241	197 241	197 241
on average		197 241	197 241	197 241	197 241	197 241

Proposal of the Board of Directors.

## The Wärtsilä share on Nasdaq Helsinki

Wärtsilä's share price increased by 1.3% during 2016, while the OMX Helsinki Cap index increased by 8.2%. The highest quoted price for Wärtsilä's share during the financial period was EUR 43.44 and the lowest EUR 33.90. The closing price on 31 December 2016 was EUR 42.68 and the volume weighted average price for the year was EUR 38.68. At year-end, Wärtsilä's market capitalisation was EUR 8,418 million. The volume of trades on Nasdaq Helsinki was 98,870,222 shares, equivalent to a turnover of EUR 3,826 million. Wärtsilä's shares are also traded on alternative exchanges, including Chi-X, Turquoise, and BATS. The total trading volume on these alternative exchanges was 91,947,606 shares.

Further information on share price development can be found on the Wärtsilä IR pages at <a href="www.wartsila.com/investors">www.wartsila.com/investors</a>.

#### **Share price development**



WRT1V high/low

**OMX** Helsinki

**OMXHCAP** 

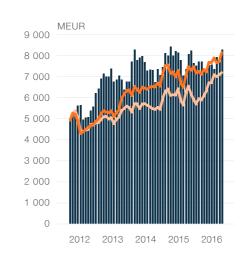
#### **Traded shares/month**



WRT1

Average share price, WRT1V

#### **Market capitalisation**



Monthly average

OMX Helsinki

OMXHCAP

#### The Wärtsilä share on Nasdaq Helsinki

		2016	2015	2014	2013	2012
Trading volume	MEUR	3 826	4 529	5 114	3 328	4 380
Number of traded	x 1 000	98 870	113 737	132 525	95 127	159 853
Stock turnover	%	50.1	80.0	67.2	48.2	81.0
Share price, high	EUR	43.44	44.97	43.82	39.00	33.11
Share price, low	EUR	33.90	33.22	31.85	30.66	22.30
Average share price	EUR	38.68	39.83	38.09	35.00	27.31
Share price at the year-end	EUR	42.68	42.15	37.09	35.77	32.72
Year-end market capitalisation	MEUR	8 418	8 314	7 315	7 055	6 454

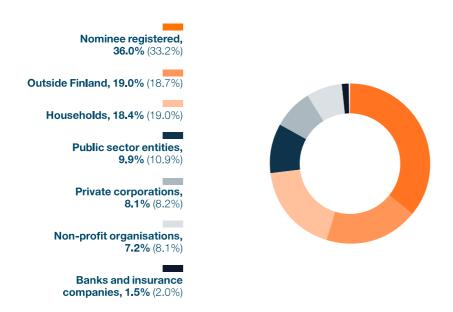
## **Shareholders**

Wärtsilä had approximately 39,200 shareholders at the end of the financial period 2016. Foreign shareholding, including nominee-registered shares, represented 55% (52) at the end of the period, and Finnish retail investors held 18% of the share capital (19). The largest shareholder was Investor AB with 34,866,544 shares or 18% of the share capital.

Further information concerning shareholder base development can be found on the Wärtsilä IR pages at <a href="https://www.wartsila.com/investors">www.wartsila.com/investors</a>.

#### **Ownership structure on 31 December 2016**

Group	Number of shareholders	%	Number of shares	%
Private corporations	1 415	3.6	15 889 818	8.1
Banks and insurance companies	67	0.2	2 916 223	1.5
Public sector entities	40	0.1	19 597 419	9.9
Non-profit organisations	829	2.1	14 162 895	7.2
Households	36 590	93.3	36 284 986	18.4
Outside Finland	296	0.8	37 402 547	19.0
Nominee registered			70 987 242	36.0
Total	39 237	100.0	197 241 130	100.0



#### **Division of shares on 31 December 2016**

Number of shares	Number of shareholders	%	Number of shares	%
1-100	12 075	30.8	629 925	0.3
101-1 000	19 520	49.7	7 830 647	4.0
1 001-10 000	6 949	17.7	19 066 769	9.7
10 001-100 000	621	1.6	14 991 703	7.6
100 001-1 000 000	63	0.2	17 079 570	8.7
1 000 001-10 000 000	6	0.0	10 646 775	5.4
10 000 001-	3	0.0	56 008 499	28.4
Nominee registered			70 987 242	36.0
Total	39 237	100.0	197 241 130	100.0

## Wärtsilä's 50 major shareholders on 31 December 2016, excl. nominee registered

	Owner	Shares	%
1	Avlis Invest AB	34 866 544	17.68
2	Fiskars Corporation	10 881 781	5.52
3	Varma Mutual Pension Insurance Company	10 260 174	5.20
4	Ilmarinen Mutual Pension Insurance Company	2 195 104	1.11
5	Svenska Litteratursällskapet i Finland Rf	2 103 434	1.07
6	The Social Insurance Institution of Finland	1 935 910	0.98
7	State Pension Fund	1 800 000	0.91
8	Elo Mutual Pension Insurance Company	1 505 000	0.76
9	Keva	1 107 327	0.56
10	Jenny and Antti Wihuri Foundation	1 000 000	0.51
11	Schweizerische Nationalbank	975 396	0.49
12	The Finnish Cultural Foundation	970 442	0.49
13	Sigrid Jusélius Foundation	964 475	0.49
14	Savox Investments S.a.	694 000	0.35
	Oy Ingman Finance Ab	600 000	0.30
	The Signe and Ane Gyllenberg Foundation	544 888	0.28
17		533 900	0.27
	Rantanen Tuula Anneli	505 066	0.26
	Svenska Kulturfonden i Björneborg	394 010	0.20
	Louise och Göran Ehrnrooth Stiftelse	377 630	0.20
	Livränteanstalten Hereditas Ab	377 630	0.19
	Blåberg Olli Edvard	320 000	0.16
	Mandatum Henkivakuutusosakeyhtiö	318 064	0.16
	Folkhälsan i Svenska Finland rf Inez och Julius Polins Fond	316 800	0.16
	Von Fieandt Berndt Johan	308 492	0.16
	Folkhälsans Forskningsstiftelse - Kansanterveyden tutkimussäätiö	287 268	0.15
	Sijoitusrahasto Aktia Capital	280 000	0.14
	William Thurings Stiftelse	278 050	0.14
	Fromond Elsa Margaretha Louise	275 500	0.14
	Stockmann Marita	271 226	0.14
31	Danske Invest Suomi Yhteisöosake	269 274	0.14
	Tallberg Carl Johan	260 582	0.13
33	Holding Manutas Oy	255 000	0.13
34	Sijoitusrahasto Nordea Suomi	240 812	0.12
35	SEB Finlandia Sijoitusrahasto	238 029	0.12
36	Odin Finland	221 654	0.11
37		221 266	0.11
38	Holdix Oy Ab	217 000	0.11
39	Brita Maria Renlund Foundation	213 600	0.11
40	Markkola Leena	171 800	0.09
41	Barry Staines Linoleum Oy	166 570	0.08
42	Perceval Ann-Marie Caussin De	166 280	0.08
43	Relander Harald Bertel	164 566	0.08
44	Sijoitusrahasto Seligson & Co	160 477	0.08
45	Karlsson Anne Christine	160 000	0.08
46	Etera Mutual Pension Insurance Company	154 679	0.08
47	Bergsr. Dr H.C. Marcus Wallenbergs stiftelse för företagsekonomisk forskning rf	151 700	0.08
48	Brotherus Pia Monica	151 002	0.08
49	Seligson & Co Suomi Indeksirahasto	150 726	0.08
50	Finska Läkaresällskapet rf	143 900	0.07
	Total	81 109 088	41.12

#### Changes in ownership - flagging notifications

Under the provisions of the Finnish Securities Markets Act, shareholders of listed companies have an obligation to notify both the Finnish Financial Supervision Authority and the listed company of changes in their holdings. The below table summarises the flagging notifications received by Wärtsilä during 2016, further information can be found on Wärtsilä's webpage.

#### Flagging notifications in 2016

Release date	Transaction date	Shareholder	Threshold	Direct holding, %	Total holding, %
29.4.2016	27.4.2016	BlackRock Investment Management (UK)	Above 5%	4.88	5.01
6.5.2016	3.5.2016	BlackRock Investment Management (UK)	Above 5%	5.01	5.13
26.8.2016	25.8.2016	BlackRock Investment Management (UK)	Below 5%	<del>-</del>	<u>-</u>
19.9.2016	16.9.2016	BlackRock Investment Management (UK)	Above 5%	5.00	5.01
22.9.2016	21.9.2016	BlackRock Investment Management (UK)	Below 5%	<del>-</del>	<u>-</u>
26.9.2016	23.9.2016	BlackRock Investment Management (UK)	Above 5%	5.05	5.06
15.12.2016	14.12.2016	BlackRock Investment Management (UK)	Below 5%	<del>-</del>	-

The total number of shares held by BlackRock, Inc. has remained above 5% of Wärtsilä's share capital and total votes throughout the year.

#### **Management holdings**

The members of the Board of Directors, the CEO, the CEO's deputy, and the corporations under their control, owned altogether 72,776 Wärtsilä Corporation shares at the end of 2016, which represents 0.04% of the stock and voting rights.

Further details on the Board of Directors' and Board of Management's ownership of shares can be found in the <u>Corporate Governance section</u>.

#### **Authorisations granted to the Board of Directors**

The Annual General Meeting, held on 3 March 2016, authorised the Board of Directors to resolve to repurchase a maximum of 19,000,000 of the Company's own shares. The authorisation to repurchase the Company's own shares shall be valid until the close of the next Annual General Meeting, however no longer than for 18 months from the authorisation of the shareholders' meeting.

The Board of Directors was authorised to resolve to distribute a maximum of 19,000,000 of the Company's own shares. The authorisation for the Board of Directors to distribute the Company's own shares shall be valid for three years from the authorisation of the shareholders' meeting and it cancels the authorisation given by the General Meeting on 5 March 2015. The Board of Directors is authorised to resolve to whom and in which order the own shares will be distributed. The Board of Directors is authorised to decide on the distribution of the Company's own shares otherwise than in proportion to the existing pre-emptive right of the shareholders to purchase the Company's own shares.

The Board of Directors was authorised to resolve on donations of EUR 1,300,000 at the maximum to be made to universities during 2016 and 2017. The most significant recipient of the donations would be Aalto University.

#### The Board of Directors' dividend proposal

The Board of Directors proposes that a dividend of 1.30 euro per share shall be distributed for the financial period that ended on 31 December 2016. The dividend shall be paid in two equal instalments.

## Wärtsilä on the capital markets 2016

Wärtsilä's Investor Relations (IR) team, consisting of the CEO, CFO, IR Director, and IR Officer, participated in nearly 300 investor meetings during 2016. IR also maintained regular contact with equity research analysts throughout the year. Meetings were conducted in North America, the United Kingdom, continental Europe, and in the Nordic countries. The IR team also attended nine institutional investor conferences in Finland and abroad. In addition to one-on-one and group meetings, Wärtsilä hosted visits to its manufacturing site in Vaasa. During the year, Wärtsilä's foreign ownership represented 55% (52) of the total shareholder base. Investors in Sweden, the United Kingdom and the United States held the largest percentage of foreign shares.

During the year, Wärtsilä gave presentations at events aimed at domestic private investors. Such events included the retail investment fair Sijoitus-Invest and an event hosted by the Finnish Foundation for Share Promotion. In 2016, retail investors accounted for approximately 18% (19) of Wärtsilä's shareholder base.

#### Wärtsilä's Investor Relations policy

The ultimate objective of Wärtsilä's Investor Relations is to produce accurate, sufficient, and up-to-date information regarding the development of Wärtsilä's business operations, strategy, markets, and financial position. This is to ensure that the capital markets have the relevant information concerning Wärtsilä in order to determine the fair value of the Company's shares. To achieve this objective, Wärtsilä publishes annually two interim reports, a half-year financial report, a financial statements bulletin, an annual report, and stock exchange releases. Furthermore, Wärtsilä's management conducts regular discussions with analysts and investors, both in Finland and abroad. Wärtsilä's web pages serve as an archive for all current and historical data on factors affecting the value of its shares.

#### **Prospects**

Guidance on Wärtsilä's prospects is published in the financial statements bulletin, in the half-year financial report, and in the interim reports. The most recently published prospects statement is repeated in the annual report. The published prospects consist of expectations regarding demand development in Wärtsilä's markets, which are approved by the Board of Directors. Wärtsilä does not publish quarterly result forecasts.

Should there be a change in business circumstances that could affect the prospects, Wärtsilä will publish changes to the prospects in accordance with prevailing regulations.

#### **Analyst reports**

Wärtsilä will review, upon request by an analyst, his or her earnings model or report only for factual accuracy or information that is in the public domain. Wärtsilä does not comment or take any responsibility for estimates or forecasts published by capital market representatives.

#### Silent period

Wärtsilä observes a three-week silent period preceding the publication of its results to prevent the revealing of unpublished financial information. During this period, the Company's representatives do not meet with investors or analysts or comment on its financial position.

#### Disclosure policy and financial communications

Wärtsilä discloses information on its goals, financial position, and business operations in an open, timely, truthful, and systematic manner so as to enable stakeholders to form a true and fair view of the Company. Wärtsilä publishes stock exchange releases, press releases, and trade press releases. Wärtsilä's subsidiaries publish press releases with local relevance.

Matters, which contain inside information and may have a material impact on the value of the company's financial instruments are published as stock exchange releases. Press releases contain information on events relating to Wärtsilä's normal business operations, which are assessed to be of general interest for investors and media. Releases to the trade press provide more detailed information on Wärtsilä's products and technologies. All stock exchange releases are published in Finnish, Swedish, and English. Press releases are published in English and can also be published in Finnish and Swedish. Trade press releases are published in English and local releases in the local language. Stock exchange releases and press releases are available on Wärtsilä's website immediately following publication.

#### **Contacts**

Relations with the Company's investors and analysts are handled by IR Director Natalia Valtasaari, together with the IR team. General enquiries can be sent to investor.relations@wartsila.com.

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#### Mari Hamarila

Investor Relations Officer Tel. +358 50 364 3413 mari.hamarila@wartsila.com

Wärtsilä's corporate communications are the responsibility of Atte Palomäki, Executive Vice President, Communications & Branding.

#### Atte Palomäki

Executive Vice President, Communications & Branding Tel. +358 10 709 5599 atte.palomaki@wartsila.com

## **Analysts**

To the best of Wärtsilä's knowledge, at least the following brokers and financial analysts have on their own initiative followed the Company's development during the last 12 months. They have analysed Wärtsilä and drawn up reports and comments and as a result are able to evaluate the Company as an investment target. Wärtsilä takes no responsibility for the opinions expressed.

Company	Analyst	Contact
ABG Sundal Collier AB	Anders Idborg	anders.idborg@abgsc.se +46 8 566 286 74
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Swedbank Markets	Anders Roslund	anders.roslund@swedbank.se +46 8 5859 0093
UBS Deutschland AG	Sven Weier	sven.weier@ubs.com +49 69 1369 8278

## Information for shareholders

#### **Annual General Meeting**

The Annual General Meeting of Wärtsilä Corporation will take place on Thursday, 2 March 2017, beginning at 3 p.m., in the Congress Wing of the Helsinki Fair Center, address: Messuaukio 1, 00520 Helsinki, Finland.

#### Right to attend

Shareholders registered no later than 20 February 2017 in the Company's list of shareholders maintained by Euroclear Finland Ltd have the right to attend the Annual General Meeting.

#### **Notification of attendees**

Shareholders wishing to attend the Annual General Meeting are required to inform the Company thereof no later than 4 p.m. on 27 February 2017 either by e-mail, on the Company's website <a href="www.wartsila.com/agm">www.wartsila.com/agm</a> register, by telephone, by fax or by regular mail.

#### **Registration:**

Wärtsilä Corporation Share Register P.O. Box 196 FI-00531 Helsinki Finland

Telephone: +358 10 709 5282

Between 9 a.m. and 12 p.m. (noon) on weekdays

Fax: +358 10 709 5701 E-mail: yk@wartsila.com

Internet: www.wartsila.com/agm\_register

Letters, e-mails, and faxes informing of participation must reach the Company before the notification period expires at 4 p.m. on 27 February 2017. Letters authorising a proxy to exercise a shareholder's voting right at the Annual General Meeting should also reach the Company before the notification period expires.

#### **Payment of dividend**

The Board of Directors proposes that a dividend of 1.30 euro per share be paid for the financial year 2016. The dividend will be paid in two instalments. The first instalment of 0.65 euro per share will be paid to shareholders who are registered in the list of shareholders maintained by Euroclear Finland Ltd on the record date, which is 6 March 2017. The proposed dividend payment date for this instalment is 13 March 2017. The second instalment of 0.65 euro per share will be paid in September 2017. The second instalment will be paid to shareholders who are registered in the list of shareholders maintained by Euroclear Finland Ltd on the dividend record date, which, together with the payment date, shall be decided by the Board of Directors in its meeting scheduled for 12 September 2017 in accordance with the rules of the Finnish book-entry system. The dividend record date for the second instalment as per the current rules of the Finnish book-entry system would be 14 September 2017 and the dividend payment date 21 September 2017, unless the renewal of the securities processing infrastructure by Euroclear Finland Ltd brings the dividend payment date a few days earlier.

#### Stock exchange releases

Wärtsilä's stock exchange releases are available in English, Finnish, and Swedish on Wärtsilä's website.

## **Financial information 2017**

#### **Annual Report 2016**

The electronic Annual Report 2016 is published in English, Finnish, and Swedish at <a href="www.wartsilareports.com">www.wartsilareports.com</a> and is also available on Wärtsilä's website, <a href="www.wartsila.com">www.wartsila.com</a>

#### **Interim Reports and Financial Statements Bulletin 2017**

- January-March on Wednesday, 26 April 2017
- January-June on Thursday, 20 July 2017
- January-September on Wednesday, 25 October 2017
- Financial Statements Bulletin January-December on Wednesday, 31 January 2018

Interim reports and the Financial Statements Bulletin are available in English, Finnish, and Swedish on Wärtsilä's website, <a href="www.wartsila.com">www.wartsila.com</a>.

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## **Board of Directors' report**

## **Highlights 2016**

Wärtsilä's performance in 2016 was in line with the expectations set out in the company's revised guidance. This was largely thanks to a fourth quarter with good delivery execution, growth in Services' revenues, and an improved project mix. Cash flow developed well, primarily due to a strong focus on working capital management.

Service market activity was solid, with a healthy demand for power plant maintenance services compensating for challenges in certain marine markets. In the equipment businesses, Wärtsilä faced headwinds related to slow trade growth, low oil and gas prices, as well as the financial constraints faced by many marine customers. Activity in the energy markets, on the other hand, improved. Growth in electricity demand in the emerging markets and energy policy changes globally supported customer interest in Wärtsilä's solutions. The combined effect of these end-market trends resulted in stable order intake development.

During the year, Wärtsilä continued to develop its business by expanding its offering of products and solutions through research and development activities, partnerships and acquisitions.

#### **Net sales**

MEUR	2016	2015	Change %
Energy Solutions	943	1 126	-16%
Marine Solutions	1 667	1 720	-3%
Services	2 190	2 184	0%
Group	4 801	5 029	-5%

## **Strategy**

Wärtsilä aims at profitable growth by providing advanced technologies and lifecycle solutions to its marine and energy market customers.

Increasing environmental awareness and changing energy needs are affecting the way that our customers operate. With our integrated offering of services and products, we are well positioned today to respond to the need for energy efficient, innovative, and flexible solutions. We will meet the increasing demand for gas-based technologies with our industry-leading multiple fuel products and LNG solutions. Our objective is to leverage our project management and engineering competences to achieve growth by offering our customers new and innovative solutions. Our digital transformation will provide increased customer value and optimised performance. Our growth ambitions are supported by our superior global service network.

With our production and supply chain management, we constantly seek new ways to maintain high quality and cost efficiency – often in co-operation with leading industrial partners in our key growth markets. Our market driven investments in R&D and our focus on digitalisation create a strong foundation for securing and strengthening our position at the forefront of market innovation. This innovative culture, together with our constant emphasis on safety, diversity, and high ethical standards, attract skilled and committed people and provides the basis for a high performing organisation. Our entrepreneurial drive, customer focus, and passion for doing right not only create new opportunities and environmentally sustainable solutions, but also bring value to all our stakeholders.

#### Strategy implementation in 2016

During the year, Wärtsilä launched several concepts and solutions aimed at improving customers' operational efficiency. These include the updated Nacos Platinum navigation, automation and control system featuring Intelligent Route Planning, and a zero-emissions ferry concept designed to run either entirely on batteries or in a battery-engine hybrid configuration. The first Wärtsilä 31 engines, recognised by Guinness World Records as being the world's most efficient four-stroke diesel engine, were ready for delivery at year-end, and Wärtsilä received two new orders for the next generation engine. Within the Services business, customer emphasis on optimising efficiency supported demand for long-term service agreements.

The importance of natural gas fuelled applications in both the power generation and marine markets is evident. In 2016, gas and multi-fuel applications accounted for 82% of Energy Solutions' quotation activity and for 45% of its order intake. Significant gas-based contracts won included a 100 MW combined heat and power plant to Kraftwerke Mainz-Wiesbaden AG in Germany, as well as a 225 MW Smart Power Generation plant to Denton Municipal Electric in the USA. The latter will provide balancing power for the local community. In the marine markets, Wärtsilä maintained its position as a leading supplier of dual-fuel engines and gas handling systems. The increasing share of gas-based installations within the installed engine base continues to provide growth opportunities for the Services business.

The International Maritime Organization made decisions concerning several environmental topics affecting the marine industry during the year. These included the ratification of the Ballast Water Convention, and the implementation date for the global cap on the sulphur content in marine fuel. Wärtsilä is well placed to help its customers with both of these developments with its wide range of environmental solutions, which includes systems for ballast water treatment and exhaust gas cleaning, as well as dual-fuel engines and related gas technology. Addressing the increasing focus on carbon footprint reduction, Wärtsilä announced its entry into the solar market in early 2016, with hybrid power plants comprising both solar PV plants and internal combustion engines.

Efficiency improvement, fuel flexibility, and the reduction of environmental impact were all areas emphasised in the company's R&D investments, which amounted to EUR 131 million or 2.7% of net sales. Investing in technological leadership is vital for ensuring the competitiveness of Wärtsilä's product portfolio, and for securing a leading position in sustainable innovation.

Wärtsilä's focus on digitalising its operations and customer offering continued during 2016. The acquisition of Eniram was an important step in strengthening Wärtsilä's offering in the fields of data analytics, modelling, and performance optimisation. In August, Wärtsilä appointed a Chief Digital Officer to the Board of Management, with responsibility for defining, developing, and executing Wärtsilä's digital strategy, organisational blue print, and related digital governance. Subsequently, a new digital organisation was announced with the aim of accelerating Wärtsilä's digital transformation.

To promote a high performance culture, Wärtsilä has continued its leadership development programmes in many areas. New initiatives in 2016 included an innovative learning solution, Growth Lab, which aims at developing future leaders through action-based learning. In support of Wärtsilä's focus on establishing a culture focused on continuous improvement, the company also developed an Operational Excellence Academy learning framework and portal with supporting materials for all those staff in the organisation involved in leading operational excellence. Wärtsilä's aim is to foster an inclusive corporate culture by respecting diversity and providing a vision for the future with opportunities to grow for our people. Actions during 2016 have varied from management team inclusive culture and diversity workshops to all employee events. Additionally, the diversity aspect has been incorporated into Wärtsilä's co-operation activities with

educational institutes, its presentations at recruitment fairs, and into the contents of its management training programmes.

Personnel safety is a priority for Wärtsilä and during the year, the company moved steadily closer to its ongoing target of zero lost-time injuries. Lost-time injury frequency was 2.59, which represents a decrease of 9% compared to the previous year. During 2016, Wärtsilä continued expanding its WeCare programme. WeCare is a global software and way of working for reporting and investigating near misses, hazards, and accidents. A total of 11,550 incidents were reported to the WeCare system in 2016, a 46% increase compared to the previous year. Wärtsilä also arranged a global safety day under the theme 'Safe by Choice', during which the safety implications of choices made in the daily working environment were highlighted within the organisation.

#### Financial targets and guidance realisation

Wärtsilä's long-term financial target is to grow faster than global GDP, and to maintain its operating profit margin between 14% at the peak of the cycle and 10% at the trough. Furthermore, the target is to maintain gearing below 0.50, and to pay a dividend of at least 50% of earnings per share over the cycle.

On 27 January 2016, Wärtsilä estimated its net sales for 2016 to grow by 0-5% and operational profitability to be 12.5-13.0%. The expectations were revised on 12 October, due to fewer than anticipated power plant deliveries in 2016. According to the revised guidance, net sales were expected to decline by around 5% and profitability was estimated to be around 12.0%.

Wärtsilä's performance in 2016 was in line with both its long-term targets and its revised guidance for the year. Net sales for 2016 decreased by 5%, bringing Wärtsilä's 5-year compound annual growth rate to 3% compared to the global real GDP compound annual growth rate of 0.4% during the corresponding period. Profitability was 12.1%. Gearing was 0.07 and the Board of Directors' proposed dividend of EUR 1.30 per share represents 73% of operational earnings.

#### **Long-term financial targets**

Target	Development in 2016	Development in 2015
Net sales growth faster than global GDP	5% decline	5% growth
Comparable operating result margin between 10% and 14%	12.1%	12.2%
Gearing below 0.50	0.07	0.17
Dividend payment at least 50% of earnings per share over the cycle	73% <sup>1</sup>	53%

<sup>&</sup>lt;sup>1</sup> Proposal of the Board of Directors.

## The year 2016

#### **Market development**

#### Improved activity in the power generation markets

Sentiment in the power generation markets improved during 2016. The emerging markets were active and their growing demand for electricity drove interest in Wärtsilä's solutions. New energy policies and increasing power generation from renewable sources provided further support for power plant investments, both in the emerging markets and the industrialised world. Despite the positive developments in many regions, competition remained tight globally.

#### **Energy Solutions market share**

In the first nine months of 2016, global orders for natural gas and liquid fuel power plants of up to 500 MW totalled 17.4 GW (17.0), an increase of 2% from the previous year. Wärtsilä's market share increased to 15% (10). Global orders include all gas turbine and Wärtsilä orders with prime movers over 5 MW in size.

#### Weak marine market environment

Newbuild vessel orders fell to an exceptionally low level in 2016, with merely 537 vessels contracted during the year compared to 1,836 in 2015. The challenges related mainly to overcapacity, low oil and gas prices, and weak freight rates in the traditional merchant, offshore, and gas carrier segments.

While the general marine market sentiment was weak throughout the year, activity remained resilient in selected niche segments. Demand was particularly strong in the cruise segment due to fleet expansion programmes. An ageing fleet, planned regulatory developments, and attractive newbuilding prices supported contracting in the ferry segment. In the ro-ro segment, healthy earnings also supported the demand for new vessels.

The shift in vessel contracting mix has benefitted European shipyards. In terms of compensated gross tonnage, Italy and Germany's share of confirmed contracts was above average at 11% and 10% respectively. China remained the largest shipbuilding nation with 36% of the confirmed contracts, while South Korea's share declined to 16% and Japan's share was 11%. The low vessel contracting volumes have led to some consolidation of yards in the major shipbuilding countries during the year.

#### **Marine Solutions market shares**

Wärtsilä's share of the medium-speed main engine market was 51% (50% at the end of the previous quarter). The market share in auxiliary engines was 18% (16% at the end of the previous quarter). Wärtsilä also has a strong position in other key products and solutions, such as electrical & automation systems and gas systems.

#### Solid activity in the service markets

Service market activity was solid during 2016. In the marine market, low oil prices affected the demand for offshore services throughout the year, while low freight rates caused the demand for services in the merchant segment to slow down in the second half. The cruise segment developed positively, especially during the latter part of the year. In power plant related services, the interest in long-term agreements continued to be impacted by global economic uncertainty. However, the demand for maintenance services was healthy throughout the year.

Wärtsilä's installed equipment base consists of propellers, engines and other products. At the end of 2016, Wärtsilä's installed engine base totalled approximately 180,000 MWs, of which four-stroke engines accounted for approximately 65% and two-stroke engines for approximately 35%.

#### **Order intake**

Wärtsilä's order intake for the financial period January-December 2016 was stable at EUR 4,927 million (4,932). The book-to-bill ratio was 1.03 (0.98).

Energy Solutions' order intake was EUR 1,448 million (1,009), which represents an increase of 43% compared to the previous year. Asia and the Americas were the most active regions in terms of ordering activity. Demand was especially strong in Argentina, where Wärtsilä received orders for seven projects comprising in excess of 500 MW of new power generation capacity. Other strategically important orders included a 225 MW power plant, which will provide balancing power to the City of Denton in Texas, USA.

Marine Solutions' order intake declined by 20% to EUR 1,285 million (1,599). The upcoming implementation of emission regulations in the marine industry supported the demand for gas-fuelled vessels particularly in the ferry segment. Orders received during the year included the design and supply of the LNG power and propulsion machinery for the Mediterranean's first LNG fuelled passenger ferry, as well as fully integrated Wärtsilä propulsion machinery packages for the first ever UK domestic dual-fuelled ro-ro passenger ferries. Other significant orders received included a contract to supply the re-gasification system for an FSRU

conversion project that Höegh LNG plans to carry out on a modern LNG vessel. Orders for electrical & automation systems developed well throughout the year. Cruise & ferry accounted for 38% of the order intake. The conventional merchant segment represented 20%, while the gas carrier segment's share was 13%. Navy represented 10%, special vessels 9%, and offshore 3% of the total. Other orders accounted for 7%.

Services' order intake totalled EUR 2,194 million (2,324). The 6% decline related primarily to challenges in certain offshore markets, as well as slower activity in the merchant segment.

#### Order intake in joint ventures

Order intake in the Wärtsilä Hyundai Engine Company Ltd joint venture company in South Korea, and in the Wärtsilä Qiyao Diesel Company Ltd and CSSC Wärtsilä Engine Company Ltd joint venture companies in China totalled EUR 62 million (182) during the financial period January-December 2016. The results of these companies are reported as a share of the result of associates and joint ventures.

#### **Order book**

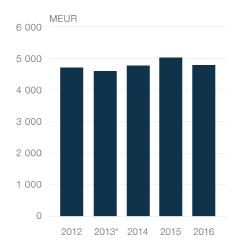
The total order book at the end of the financial period amounted to EUR 4,696 million (4,882), a decrease of 4%. The Energy Solutions order book increased by 23%, totalling EUR 1,680 million (1,366). The Marine Solutions order book decreased by 21% to EUR 2,017 million (2,558). The Services order book totalled EUR 999 million (958), an increase of 4%.

#### **Net sales**

Net sales for January-December 2016 developed in line with guidance, decreasing by 5% to EUR 4,801 million (5,029) primarily due to fewer power plant deliveries than in the previous year. Net sales for Energy Solutions totalled EUR 943 million (1,126), a decrease of 16%. Marine Solutions' net sales decreased by 3% to EUR 1,667 million (1,720). Net sales from the Services business was stable, totalling EUR 2,190 million (2,184), thanks to the growth in revenues from service projects. Of the total net sales, Energy Solutions accounted for 20%, Marine Solutions for 35% and Services for 46%.

Of Wärtsilä's net sales for January-December 2016, approximately 67% was EUR denominated, 20% USD denominated, with the remainder being split between several currencies.

#### **Group net sales development**



<sup>\*</sup> Restated, figure includes continuing operations.

#### Net sales by business area



Services, 46% (43%)

Energy Solutions, 20% (22%)

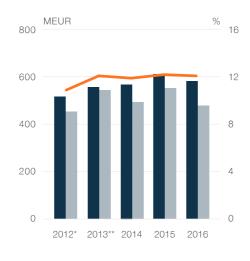
Marine Solutions, 35% (34%)

#### **Operating result and profitability**

For the financial period January-December 2016, the operating result was EUR 532 million (587). This represents 11.1% of net sales (11.7). The decrease from the previous year was primarily due to restructuring costs and fewer power plant deliveries. The comparable operating result was EUR 583 million (612), or 12.1% of net sales (12.2), which is in line with the guidance of around 12% profitability. Items affecting comparability amounted to EUR 51 million (25), of which EUR 48 million (19) related to restructuring programmes and EUR 3 million (6) to acquisitions and other costs. The comparable adjusted EBITA was EUR 618 million (643), or 12.9% of net sales (12.8). Purchase price allocation amortisation amounted to EUR 35 million (32).

During January-December 2016, financial items amounted to EUR -53 million (-34). The financial items were negatively affected by write-downs related to the divestment of the two-stroke joint venture Winterthur Gas & Diesel and to other receivables, which were booked in the second quarter. Net interest totalled EUR -11 million (-12). Profit before taxes amounted to EUR 479 million (553). Taxes amounted to EUR 123 million (124), implying an effective tax rate of 25.6% (22.5). The profit for the financial period amounted to EUR 357 million (451). Earnings per share were 1.79 euro (2.25, including 0.11 from discontinued operations) and the equity per share was 11.60 euro (11.16). Return on investments (ROI) was 17.1% (21.0). Return on equity (ROE) was 15.6% (20.2).

#### Result



- \* Restated due to the revised IAS 19.
- \*\* Restated, figures include continuing operations.

# Profit before taxes Comparable operating result

#### Balance sheet, financing and cash flow

For the financial period January-December 2016, the operating cash flow totalled EUR 613 million (255). Working capital totalled EUR 490 million (543) at the end of the period. Advances received at the end of the period totalled EUR 516 million (564). Cash and cash equivalents at the end of the period amounted to EUR 472 million (334) and unutilised Committed Credit Facilities totalled EUR 640 million (679).

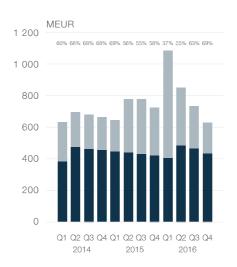
Wärtsilä had interest-bearing debt totalling EUR 629 million (724) at the end of December 2016. The total amount of short-term debt maturing within the next 12 months was EUR 108 million. Long-term loans amounted to EUR 520 million. Net interest-bearing debt totalled EUR 150 million (372) and gearing was 0.07 (0.17).

#### Liquidity preparedness

MEUR	31.12.2016	31.12.2015
Cash and cash equivalents	472	334
Unutilised committed credit facilities	640	679
Liquidity preparedness	1 112	1 013
% of net sales (rolling 12 months)	23	20
Less Commercial Papers	-	130
Liquidity preparedness excluding Commercial Papers	1 112	883
% of net sales (rolling 12 months)	23	18

On 31 December 2016, the average maturity of the total loan portfolio was 42 months and the average maturity of the long-term debt was 43 months.

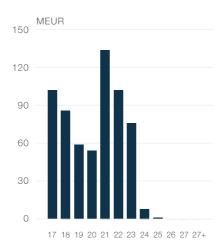
#### Loans



Floating rate loans

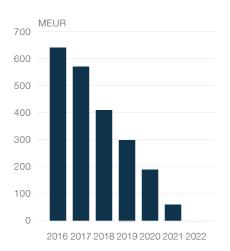
% = Fixed portion of loans (incl. derivates).

#### **Maturity profiles of long-term loans**

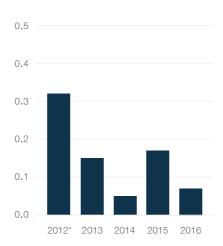


Annual repayments of long-term loans

## Committed revolving credit facilities (end of period)

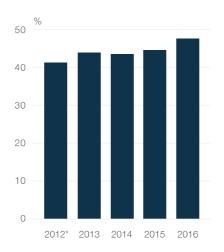


#### Gearing



<sup>\*</sup> Restated due to the revised IAS 19.

#### **Solvency ratio**



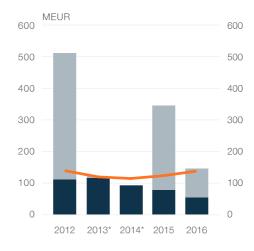
\* Restated due to the revised IAS 19.

#### **Capital expenditure**

Capital expenditure related to intangible assets and property, plant and equipment amounted to EUR 55 million (79) during the financial period January-December 2016. Capital expenditure related to acquisitions and investments in joint ventures totalled EUR 91 million (267). These figures include the acquisitions of Eniram and American Hydro in 2016, and the acquisition of Marine Systems International in 2015. Depreciation, amortisation, and impairment for the financial period amounted to EUR 138 million (124).

In 2017, capital expenditure related to intangible assets and property, plant and equipment is expected to be below depreciation and amortisation.

#### **Gross capital expenditure**



\* Restated, figures include continuing operations.



#### Strategic projects, acquisitions, joint ventures and manufacturing footprint

In March, Wärtsilä and China State Shipbuilding Corporation signed a letter of intent to establish a new joint venture company, which will focus on China's growing market for marine electrical & automation solutions.

In March, Wärtsilä also announced that it had conducted an internal audit of test processes, which brought forward limited deviations in fuel consumption measurement tests conducted for certain marine engines before customer dispatches. Wärtsilä has reached out to customers on an individual basis, as well as reviewed all test procedures, using both internal and external resources, to secure new, more transparent processes and controls. The financial impact of this issue has not been material.

In April, Wärtsilä announced that it would enter the solar energy business by offering utility-scale solar photovoltaic (PV) solutions. The new solutions include solar PV power plants of 10 MW and above, and hybrid power plants comprising solar PV plants and internal combustion engines. Both solutions are offered with full engineering, procurement and construction capability.

In June, Wärtsilä announced the acquisition of Eniram, a Finland-based technology company providing the marine industry with energy management and analytics solutions. Eniram will enable Wärtsilä to enhance its digital offering and in-house capabilities, specifically in data analytics, modelling and performance optimisation. Ownership of the company transferred to Wärtsilä with effect from 1 July 2016. Wärtsilä also announced the acquisition of American Hydro, a U.S.-based supplier and installer of large equipment upgrades and servicing for the hydroelectric and water distribution industries. Ownership of the company transferred to Wärtsilä with effect from 30 June 2016.

During the second quarter, Wärtsilä transferred its 30% minority stake in the two-stroke joint venture Winterthur Gas & Diesel (WinGD) to China State Shipbuilding Corporation (CSSC). Following the transaction, CSSC owns 100% of WinGD. Wärtsilä recognised write-downs of EUR 21 million related to the divestment of shares in its financial items for the second quarter of 2016.

In July, Wärtsilä announced that it had entered into a cooperation agreement with U.S.-based Greensmith Energy to further strengthen its energy system integration capabilities. Greensmith Energy, a leading provider of energy storage software and integration services, will provide the full optimisation software needed for hybrid energy systems.

In December, Wärtsilä signed a manufacturing license agreement with Jiujiang Precision Measuring Technology Research Institute, a subsidiary of China State Shipbuilding Corporation (CSSC), based in Jiujiang, China. The two-way agreement provides CSSC with access to technology and the rights to manufacture the Wärtsilä Aquarius EC Ballast Water Management System under license for CSSC customer applications. In return, Wärtsilä gains access to CSSC's new manufacturing facility, thereby further supporting the supply and demand needs of Wärtsilä customers for the company's ballast water management systems.

Construction of the CSSC Wärtsilä Engine (Shanghai) Co. Ltd factory in Lingang, Shanghai was finalised in the fourth quarter and the official inauguration took place on 9 January 2017.

Wärtsilä is committed to promoting the widespread adoption of liquefied natural gas (LNG) as a fuel in the marine and energy industries. In July, Wärtsilä and other leading marine industry players formed a coalition, known as SEA/LNG, with the aim of helping to break down the barriers hindering the global development of LNG in marine applications, thereby improving the environmental performance of the shipping industry. In August, Wärtsilä and Finland-based Gasum signed a cooperation agreement aimed at developing the use and distribution, as well as service solutions for natural gas in marine and onshore applications. Wärtsilä will provide the gas value chain technology know-how, while Gasum's expertise relates to distributing and selling natural gas and biogas. The development work regarding LNG for marine applications will also utilise the expertise of Skangas, a subsidiary of Gasum and the leading LNG player in the Nordic market. In November, Wärtsilä and the French multinational energy company ENGIE signed an agreement to develop solutions and services within the small-scale LNG business sector. This cooperation combines ENGIE's vast experience in LNG distribution with Wärtsilä's technical expertise, engineering and construction capabilities, supporting the shift towards a low-carbon economy through joint solutions and services.

#### Research and development, product launches

Wärtsilä has placed a strong emphasis on both product and solution innovation during 2016, particularly in the areas of efficiency improvement, fuel flexibility, and the reduction of environmental impact. The R&D related expenditure totalled EUR 131 million, which represents 2.7% of net sales.

In January, Wärtsilä and Cavotec signed an agreement to jointly develop the world's first combined induction charging and automatic mooring concept. Wärtsilä has developed a wireless charging system based on inductive power transfer. Cavotec in turn provides automated mooring systems for various types of vessels, as well as shore power and reel systems. By combining the expertise of the two companies, an integrated wireless charging/mooring concept will be developed for use in Wärtsilä's ship designs.

In March, Wärtsilä launched a complete concept for a series of innovative and cost-effective shuttle ferries, featuring zero or low exhaust emissions. The design characteristic focuses on high energy efficiency with low resistance, both above and below the water line. The ferries are designed to run entirely on batteries or in a battery-engine hybrid configuration where the fuel options are liquefied natural gas or biofuel.

The updated Wärtsilä Nacos Platinum series of navigation, automation and control systems was launched in September. Among the most interesting of the new features is Intelligent Route Planning, which takes into account weather and sea conditions to provide route and power optimisation and, therefore, notable fuel savings. Also in September, Eniram introduced a fleet performance monitoring service called SkyLight, which allows ship operators to monitor the performance of their vessels and fleet, and enables reporting, planning and cost optimisation.

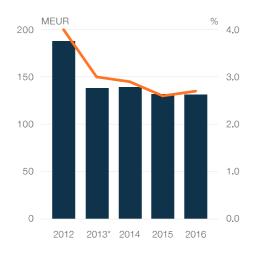
During the third quarter, Wärtsilä launched QuantiServ, which offers reconditioning services, in-situ services, as well as onboard repair and overhaul services to customers operating multiple brand equipment in the marine and energy markets.

Within the Services business, Wärtsilä broadened its range of marine agreement concepts with the launch of Lifecycle solutions. This new concept is an innovative, comprehensive offering that optimises the efficiency and performance of customer assets in the marine and offshore industries. It includes the digital service portfolio Wärtsilä Genius services, which was launched towards the end of 2015. The Lifecycle solutions offering was broadened in November through the introduction of the Wärtsilä Guaranteed Asset Performance solution for power plant operators, in which Wärtsilä guarantees the reliability and availability of the power plant with fixed costs while the customer operates the power plant.

#### **Megawatts delivered**

	2016	2015	Change %
Energy Solutions engines	2 189	2 269	-4%
Marine Solutions engines	1 649	1 634	1%
Wärtsilä total	3 838	3 903	-2%
By joint ventures	657	789	-17%
Engine deliveries total	4 495	4 692	-4%

#### Research and development expenditure



R&D expenditure

Percent of net sales

\* Restated, figures include continuing operations.

#### **Restructuring programmes**

The measures related to the organisational adjustments in Marine Solutions announced in July 2015 have been implemented. The aim of the programme was to reduce 600 jobs globally in response to the sluggish global marine market situation.

In April 2016, Wärtsilä announced further measures to adapt the organisation to the weakened newbuild market situation and to the tough competitive environment in both the marine and energy markets. The organisational adjustments, which will mean the reduction of approximately 550 jobs and the concentration of engine related R&D activities to Finland, are progressing according to plan.

When fully implemented, these restructuring programmes are expected to result in annual savings of approximately EUR 90 million. Of these savings, approximately EUR 60 million materialised by the end 2016, of which EUR 7 million were in 2015. The remainder is estimated to materialise by the end of 2017. The total non-recurring costs related to the restructuring programmes will be approximately EUR 75-80 million, of which EUR 19 million were recognised in 2015. In January-December 2016, restructuring costs amounted to EUR 48 million.

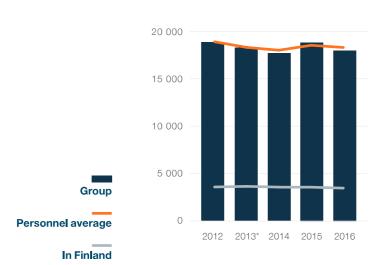
Wärtsilä's aim is to continuously pursue more cost-efficient ways of operating and align its operation to market conditions. In this context, local actions in the Marine Solutions business are expected to result in additional savings of approximately EUR 45 million. The savings will start to materialise during 2017, and will take full effect by the end of 2018. The related non-recurring costs are estimated to be approximately EUR 35 million, of which the majority is expected to be recognised in 2017.

#### **Personnel**

Wärtsilä had 18,011 (18,856) employees at the end of December 2016. On average, the number of personnel for January-December 2016 totalled 18,332 (18,565). Marine Solutions employed 6,074 (6,847) people, Energy Solutions 903 (959), and Services 10,567 (10,592).

Of Wärtsilä's total number of employees, 19% (19) were located in Finland and 39% (39) elsewhere in Europe. Personnel employed in Asia represented 28% (28) of the total, personnel in the Americas 11% (10), and personnel in other countries 4% (4).





\* Restated, figures include continuing operations.

#### **Changes in management**

Wärtsilä appointed Mr Marco Ryan (50) as Chief Digital Officer & Executive Vice President, and a member of the Board of Management, effective from 26 September 2016.

#### Sustainable development

Thanks to its various technologies and specialised services, Wärtsilä is well positioned to reduce exhaust emissions and the use of natural resources, and to support its customers in preparing for new regulatory requirements. Wärtsilä's R&D efforts continue to focus on the development of advanced environmental technologies and solutions. The company is committed to supporting the UN Global Compact and its principles with respect to human rights, labour, the environment and anti-corruption. Wärtsilä's share is included in several sustainability indices.

The International Convention for the Control and Management of ships' ballast water and sediments was ratified in September 2016, and will enter into force on 8 September 2017. Wärtsilä has proactively developed its Aquarius range of Ballast Water Management System solutions, which comprises two treatment technologies. Aquarius-UV provides disinfection using ultra-violet light, while Aquarius-EC provides disinfection using sodium hypochlorite generated through side stream electro-chlorination. Both systems are IMO Type Approved, and are available for installations in both safe and hazardous areas. They also have USCG Alternate Management System (AMS) status.

In October, the IMO's Marine Environmental Protection Committee (MEPC) agreed to implement the global cap on the sulphur content of marine fuels effective from January 2020. The global cap will limit the sulphur content of marine fuels to 0.5%, requiring vessels to run on a cleaner fuel such as LNG, or install abatement systems. Wärtsilä's exhaust gas cleaning systems have in excess of 200,000 running hours of operation, and this, together with its broad offering in gas and dual-fuel engine technologies, positions Wärtsilä well to assist fleet owners around the world to implement plans for compliance.

During 2016, Wärtsilä was selected as an index component of the Dow Jones Sustainability Indices (DJSI), both in the DJSI World and DJSI Europe indices. Inclusion in the DJSI is based on an analysis of corporate economic, environmental and social performance, assessing issues such as corporate governance, risk management, branding, climate change mitigation, supply chain standards and labour practices. Wärtsilä was also reconfirmed for inclusion in the Ethibel EXCELLENCE Investment Register, and selected for inclusion in the Ethibel PIONEER register.

#### **Shares and shareholders**

During January-December 2016, the volume of trades on Nasdaq Helsinki was 98,870,222 shares, equivalent to a turnover of EUR 3,826 million. Wärtsilä's shares are also traded on alternative exchanges, such as Chi-X, Turquoise and BATS. The total trading volume on these alternative exchanges was 91,947,606 shares.

#### **Shares on Nasdaq Helsinki**

31.12.2016		sh	Number of ares and votes	Number of shares traded 1-12/2016
WRT1V			197 241 130	98 870 222
1.1 31.12.2016	High	Low	Average <sup>1</sup>	Close
Share price	43.44	33.90	38.68	42.68
<sup>1</sup> Trade-weighted average price				
Market capitalisation			31.12.2016	31.12.2015
MEUR			8 418	8 314
Foreign shareholders			31.12.2016	31.12.2015
%			55.0	51.9

#### Flagging notifications

During the financial period January-December 2016, BlackRock Inc. informed Wärtsilä of the below changes in ownership. The total number of shares held by BlackRock, Inc. remained above 5% of Wärtsilä's share capital and total votes throughout the year.

#### Flagging notifications in 2016

Release date	Transaction date	Shareholder	Threshold	Direct holding, %	Total holding, %
29.4.2016	27.4.2016	BlackRock Investment Management (UK)	Above 5%	4.88	5.01
6.5.2016	3.5.2016	BlackRock Investment Management (UK)	Above 5%	5.01	5.13
26.8.2016	25.8.2016	BlackRock Investment Management (UK)	Below 5%	-	-
19.9.2016	16.9.2016	BlackRock Investment Management (UK)	Above 5%	5.00	5.01
22.9.2016	21.9.2016	BlackRock Investment Management (UK)	Below 5%	_	-
26.9.2016	23.9.2016	BlackRock Investment Management (UK)	Above 5%	5.05	5.06
15.12.2016	14.12.2016	BlackRock Investment Management (UK)	Below 5%	_	_

#### **Decisions taken by the Annual General Meeting**

Wärtsilä's Annual General Meeting held on 3 March 2016 approved the financial statements and discharged the members of the Board of Directors and the company's President & CEO from liability for the financial year 2015. The Meeting approved the Board of Directors' proposal to pay a dividend of EUR 1.20 per share. The dividend was paid on 14 March 2016.

The Annual General Meeting decided that the Board of Directors shall have eight members. The following were elected to the Board: Maarit Aarni-Sirviö, Kaj-Gustaf Bergh, Sune Carlsson, Tom Johnstone, Mikael Lilius, Risto Murto, Gunilla Nordström and Markus Rauramo.

The audit firm KPMG Oy Ab was appointed as the company's auditor for the year 2016.

#### Authorisation to repurchase and distribute the Company's own shares

The Board of Directors was authorised to resolve to repurchase a maximum of 19,000,000 of the Company's own shares. The authorisation to repurchase the Company's own shares shall be valid until the close of the next Annual General Meeting, however no longer than for 18 months from the authorisation of the shareholders' meeting.

The Board of Directors was authorised to resolve to distribute a maximum of 19,000,000 of the Company's own shares. The authorisation for the Board of Directors to distribute the Company's own shares shall be valid for three years from the authorisation of the shareholders' meeting and it cancels the authorisation given by the General Meeting on 5 March 2015. The Board of Directors is authorised to resolve to whom and in which order the own shares will be distributed. The Board of Directors is authorised to decide on the distribution of the Company's own shares otherwise than in proportion to the existing pre-emptive right of the shareholders to purchase the Company's own shares.

#### **Changes to the Articles of Association**

The Annual General Meeting decided upon updating Article 2 of the Articles to read as follows:

"The company shall develop, manufacture and sell mechanical and electrical products, plants and systems, sell spare parts and provide operation and maintenance services in the marine and energy markets either directly or through its subsidiaries and associated companies. The company can also provide financing, design and consulting services, as well as engage in other industrial and commercial activities. The company may deal in securities and engage in other investment activities."

It was decided to change Article 8 of the Articles so that the notice to the general meeting can be given by publishing it on the Company's website or in not less than two (2) daily newspapers, which are commonly distributed in Finland, as determined by the Board.

#### **Donations to universities**

The Board of Directors was authorised to resolve on donations of EUR 1,300,000 at the maximum to be made to universities during 2016 and 2017. The most significant recipient of the donations would be Aalto University.

#### **Organisation of the Board of Directors**

The Board of Directors of Wärtsilä Corporation elected Mikael Lilius as its chairman and Sune Carlsson as the deputy chairman. The Board decided to establish an Audit Committee, a Nomination Committee and a Remuneration Committee. The Board appointed from among its members the following members to the Committees:

#### **Audit Committee:**

Chairman Markus Rauramo, Maarit Aarni-Sirviö, Risto Murto

#### **Nomination Committee:**

Chairman Mikael Lilius, Kaj-Gustaf Bergh, Tom Johnstone, Risto Murto

#### **Remuneration Committee:**

Chairman Mikael Lilius, Maarit Aarni-Sirviö, Tom Johnstone

#### Risks and business uncertainties

In the power generation markets, slow economic growth represents the primary risk for demand development. Delays in customer investment decisions can occur also in regions with geopolitical tension or significant

currency fluctuations. Low oil prices are affecting national infrastructure development in the oil and gas producing economies, especially in the Middle East and Russia. Price pressure remains a risk due to the challenging competitive environment.

In the marine markets, the weak short-term global economic outlook, overcapacity, and the low demand for cargo tonnage continue to delay recovery in the conventional shipping segment. Economic and political uncertainty, as well as emerging technologies and innovations, will continue to challenge current business models and trade patterns. Offshore investments will remain limited due to an oversupply of oil and gas and reduced capital expenditure from oil companies, despite the recent increase in oil prices. Offshore production continues to face increasing competition from low cost onshore and shale production. In addition, increasing energy efficiency and the introduction of other energy sources, is expected to challenge crude oil demand growth. The decline in newbuilding prices may push shipyards to pressure suppliers on prices. While the risk of cancellations exists, negotiations to extend existing delivery contracts appear to be a larger risk for shipyard order books.

In the Services business, slow economic growth and political instability in specific regions are the main risks for demand development. The challenging conditions in specific marine market segments are also seen as a potential risk.

The Group is a defendant in a number of legal cases that have arisen out of, or are incidental to, the ordinary course of its business. These lawsuits mainly concern issues such as contractual and other liability, labour relations, property damage, and regulatory matters. The Group receives from time to time claims of different amounts and with varying degrees of substantiation. There is currently one unusually sizeable claim. It is the Group's policy to provide for amounts related to the claims, as well as for litigation and arbitration matters, when an unfavourable outcome is probable and the amount of the loss can be reasonably estimated.

The <u>Risks and risk management</u> section of the Annual Report contains a more detailed description of Wärtsilä's risks and business uncertainties.

# Wärtsilä's prospects for 2017

The overall demand for Wärtsilä's services and solutions in 2017 is expected to be relatively unchanged from the previous year. Demand by business area is anticipated to develop as follows:

- Solid in Services, with growth opportunities in selected regions and segments.
- Solid in Energy Solutions, thanks to growth in electricity demand in the emerging markets and the global shift towards renewable energy sources, which will support the need for distributed, flexible, gas-fired power generation.
- Soft in Marine Solutions. Although the outlook for the cruise and ferry segment is positive, the merchant, gas
  carrier, and offshore segments continue to suffer from overcapacity, slow trade growth and customers' financial
  constraints.

Wärtsilä's current order book for 2017 deliveries is EUR 3,143 million (3,097), which mainly comprises Marine Solutions and Energy Solutions' deliveries. Wärtsilä will continue to focus on improving efficiency, which is expected to partially offset lower volumes in the marine markets. The pricing environment in Energy Solutions' markets has stabilised, but the order book is still impacted by the competitive pressure seen in previous years. The good performance in Services is expected to continue.

# Board of Directors' dividend proposal

The Board of Directors proposes that a dividend of 1.30 euro per share be paid for the financial year 2016. The parent company's distributable funds total 1,097,420,182.01 euro, which includes 281,705,697.79 euro in net profit for the year. There are 197,241,130 shares with dividend rights. The dividend will be paid in two instalments, in line with growing practice. The first instalment of 0.65 euro per share will be paid to shareholders who are registered in the list of shareholders maintained by Euroclear Finland Ltd on the record date 6 March 2017. The dividend payment date proposed by the Board for this instalment is 13 March 2017. The second instalment of 0.65 euro per share will be paid in September 2017. The second instalment will be paid to shareholders who are registered in the list of shareholders maintained by Euroclear Finland Ltd on the dividend record date, which, together with the payment date, shall be decided by the Board of Directors in its meeting scheduled for 12 September 2017 in accordance with the rules of the Finnish book-entry system. The dividend record date for the second instalment as per the current rules of the Finnish book-entry system would be 14 September 2017 and the dividend payment date 21 September 2017, unless the renewal of the securities processing infrastructure by Euroclear Finland Ltd brings the dividend payment date a few days earlier.

#### Earnings/share, dividend/share





<sup>1</sup> Proposal by the Board 2016.

### Five years in figures

MELEN         2016         2015         2014         2012*           Net sales         4 7801         5 029         4 770         4 202           Exports from Finland         1 804         1 804         1 804         2 808         2 90         2 94           Exports from Finland         1 8382         3 885         1 804         2 80         3 869         3 8						Restated	Restated
Comparable of table   Comparable   Comparable of table   Comparable   Comparable of table   Comparable of table   Comparable of ta	MEUR		2016	2015	2014	2013*	2012**
Personnel on average	Net sales		4 801	5 029	4 779	4 607	4 725
Personnel on average   18 332   18 565   18 042   18 339   18 590 of which in Finland   3 482   3 480   3 482   3 480   3 489   3 48	of which outside Finland	%	97.5	97.8	98.9	99.0	98.8
of which in Finland         3 482         3 580         3 582         3 682         3 589           Order book         4 686         4 882         4 530         4 31         4 492           From the consolidated statement of income         Depreciation, amortisation and impairment         1 18         124         115         120         139           Share of result of associates and joint ventures         1 14         17         26         28         59           Comparable operating result         583         612         569         557         517           as a percentage of net sales         %         12.1         12.2         11.9         12.1         10.9           Comparable adjusted EBITA         618         643         594         628         589         552           Comparable adjusted EBITA         618         643         594         12.9         11.2         11.0         10.2           Financial period from tel sales         9         12.9         12.8         12.4         12.8         11.7           Financial period from the continuing operations         357         429         389         425         -2           Profiti for the financial period from the discontinued operations         357         451 <td>Exports from Finland</td> <td></td> <td>1 804</td> <td>1 936</td> <td>2 280</td> <td>2 306</td> <td>2 349</td>	Exports from Finland		1 804	1 936	2 280	2 306	2 349
Order book         4 6896         4 8802         4 500         4 311         4 492           From the consolidated statement of income         138         124         115         120         138           Depreciation, amortisation and impairment         138         124         115         120         138           Share of result of associates and joint ventures         14         177         260         28         9           Comparable operating result         532         587         552         537         483           as a percentage of net sales         %         11.1         11.7         10.9         11.7         10.2           Comparable adjusted EBITA         618         643         594         589         552           as a percentage of net sales         1-2         12.8         12.4         12.8         11.7           Financial income from available-for-sale financial assets         1-2         12.8         29         25         51           Net income from available-for-sale financial assets         4         10.0         11.0         10.3         11.8         4.56           Profit ter the financial period from the discontinued operations         357         429         327         -31         -2	Personnel on average		18 332	18 565	18 042	18 339	18 930
Promitite consolidated statement of income   138	of which in Finland		3 482	3 580	3 582	3 662	3 599
Depreciation, amortisation and impairment   138   124   115   120   139     Share of result of associates and joint ventures   14   17   26   28   9     Comparation operating result   583   612   569   557   517     as a percentage of net sales   7   121   122   11.9   12.1   10.9     Operating result   582   587   522   537   483     as a percentage of net sales   9   11.1   11.7   10.9   11.7   10.2     Comparable adjusted EBITA   8   618   648   648   589   552     as a percentage of net sales   9   11.1   12.9   12.8   12.4   12.8   11.7     Financial income and expenses   4   12.9   12.8   12.4   12.8   11.7     Financial income and expenses   4   10.0   11.0   10.3   11.8   9.6     Profit before a sales   9   10.0   11.0   10.3   11.8   9.6     Profit before a fet sales   9   10.0   11.0   10.3   11.8   9.6     Profit before a fet sales   9   10.0   11.0   10.3   11.8   9.6     Profit for the financial period from the continuing operations   357   429   389   425     Profit for the financial period from the discontinued   2   2   2   37   31     Operations   9   2   2   3   3   3   3   3   3   3   3	Order book		4 696	4 882	4 530	4 311	4 492
Share of result of associates and joint ventures	From the consolidated statement of income						
Comparable operating result as a percentage of net sales   %   12.1   12.2   11.9   12.1   10.9   10.0	Depreciation, amortisation and impairment		138	124	115	120	139
As a percentage of net sales	Share of result of associates and joint ventures		14	17	26	28	9
Departing result	Comparable operating result		583	612	569	557	517
as a percentage of net sales         %         11.1         11.7         10.9         11.7         10.2           Comparable adjusted EBITA         618         643         594         589         552           as a percentage of net sales         %         12.9         12.8         12.4         12.8         11.7           Financial income and expenses         -53         -54         -28         -19         -31           Net income from available-for-sale financial assets         -         -         -         -         25         1           Profit for the financial period from the continuing operations         357         429         389         425         -           Profit for the financial period from the discontinued operations         357         451         351         393         344           Net profit for the financial period         357         451         351         393         344           Net profit for the financial period         357         451         351         393         344           Return consolidated statement of financial position         8         7.4         9.0         7.7         8.5         7.3           From the consolidated statement of financial position         2116         2215         1884<	as a percentage of net sales	%	12.1	12.2	11.9	12.1	10.9
Comparable adjusted EBITA as a percentage of net sales as percentage of net sales   %   12.9   12.8   12.4   12.8   11.7   12.8   11.8   11.8   12.			532	587	522	537	483
Comparable adjusted EBITA as a percentage of net sales   96   12.9   12.8   12.4   12.8   11.7   Financial income and expenses   -53   -34   -28   -19   -31   Net income mand expenses   -53   -34   -28   -19   -31   Net income from available-for-sale financial assets   -7   -7   -25   1   Profit before taxes   479   553   494   544   453   as a percentage of net sales   96   10.0   11.0   11.0   10.3   11.8   9.6   Profit for the financial period from the continuing operations   357   429   389   425   -7   Profitifoss for the financial period from the discontinued operations   -7   -7   -7   -7   -7   -7   Net profit for the financial period from the discontinued operations   -7   -7   -7   -7   -7   -7   Net profit for the financial period   -7   -7   -7   -7   -7   -7   -7   Net profit for the financial period   -7   -7   -7   -7   -7   -7   -7   -		%	11.1	11.7	10.9	11.7	10.2
Financial income and expenses   -53   -34   -28   -19   -31     Net income from available-for-sale financial assets   -			618	643	594	589	552
Financial income and expenses   -53   -34   -28   -19   -31     Net income from available-for-sale financial assets   -   -   -   -   25   1     Profit before taxes   479   553   494   544   543     as a percentage of net sales   9%   10.0   11.0   10.3   11.8   9.6     Profit for the financial period from the continuing operations   357   429   389   425   -     Profit/loss for the financial period from the discontinued operations   357   451   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   351   393   344     as a percentage of net sales   9%   7.4   501   301   301   301     Router assets   2116   2215   1884   1935   2000     Current assets   3275   3374   3294   3274   3030     Current assets   3275   3374   3294   3274   3030     Current assets   9%   241   455   401   401   401     Current assets   9%   241   2623   2554   2660   2451     Catal equity attributable to equity holders of the parent company   2288   2201   1960   1844   1766     Non-interest-bearing liabilities   2441   2623   2554   2660   2451     Liabilities directly attributable to assets held for sale   241   2623   2554   2660   2451     Catal flow from operating activities   931   255   452   578   153     Cash flow from investing activities   98   245   257   267   270   270     Cash flow from investing activities   98   270   270   270   270   270     Cash flow from investing activities   98   270	· · · · · · · · · · · · · · · · · · ·	%	12.9	12.8	12.4	12.8	11.7
Net income from available-for-sale financial assets			-53	-34	-28	-19	-31
Profit before taxes   479   553   494   544   453     as a percentage of net sales   76   10.0   11.0   10.3   11.8   9.6     Profit for the financial period from the continuing operations   357   429   389   425     Profit/loss for the financial period from the discontinued operations   - 22   -37   -31     Profit/loss for the financial period from the discontinued operations   - 22   -37   -31     Net profit for the financial period   357   451   351   393   344     as a percentage of net sales   96   7.4   9.0   7.4   8.5   7.3     Profit be consolidated statement of financial position   - 216   2215   1884   1935   2000     Non-current assets   216   2215   1884   1935   2000     Current assets   216   2215   1884   1935   2000     Assets held for sale   - 102   - 102   - 102   - 102     Current assets   3275   3374   3294   3274   3036     Assets held for sale   - 102   - 102   - 102   - 102     Total equity attributable to equity holders of the parent company   2288   2201   1960   1844   1766     Non-interest-bearing debt   629   724   666   665   794     Non-interest-bearing liabilities   2411   2623   2554   2600   2451     Liabilities directly attributable to assets held for sale   - 10   589   589   5280   5030     From the consolidated statement of cash flows   5391   5593   5280   5280   5030     From the consolidated statement of cash flow from investing activities   5391   5491   5491   5491   5491     Cash flow from investing activities   339   210   210   291   291   291     Gross capital expenditure   146   346   101   134   513     as a percentage of net sales   96   2.7   2.6   2.9   3.0   4.0     Dividends paid   5891   5891   5891   5891   5991   5991   5991   5991     Financial ratios   1391   1392   139   138   188     Carrings pers hare (EPS), basic and diluted   EUR   1.79   2.25   1.76   1.98   1.72     Dividend per earnings   96   72.8**   53.3   65.4   53.0   58.1     Interest coverage   18.6   15.9   15.1   1.05   1.05     Return on investment (ROI), continuing operations   96	·						
as a percentage of net sales         %         10.0         11.0         10.3         11.8         9.8           Profit for the financial period from the continuing operations         357         429         389         425         -           Profit/loss for the financial period from the discontinued operations         2         -37         -31         -           Net profit for the financial period         357         451         351         393         344           as a percentage of net sales         %         7.4         9.0         7.4         8.5         7.3           From the consolidated statement of financial position         Non-current assets         2116         2215         1884         1935         2000           Current assets         3275         3374         3294         3274         3036           Assets held for sale         -         -         102         -         -           Total equity attributable to equity holders of the parent company         2288         2201         1960         1844         1766           Non-controlling interests         34         41         45         40         26           Interest-bearing debt         629         724         666         665         794 <td></td> <td></td> <td>479</td> <td>553</td> <td>494</td> <td></td> <td>453</td>			479	553	494		453
Profit for the financial period from the continuing operations         357         429         389         425         -           Profit/Joss for the financial period from the discontinued operations         -         22         -37         -31         -           Net profit for the financial period         357         451         351         393         344           as a percentage of net sales         %         7.4         9.0         7.4         8.5         7.3           From the consolidated statement of financial position         Non-current assets         2 116         2 215         1 884         1 935         2 000           Current assets         2 216         2 215         1 884         1 935         2 000           Assets held for sale         -         -         -         102         -         -           Total equity attributable to equity holders of the parent company         2 288         2 201         1 960         1 844         1 766           Non-controlling interests         34         41         45         40         26           Interest-bearing debt         629         724         666         665         794           Non-interest-bearing liabilities         5 391         5 589         5 280         5 209 </td <td>as a percentage of net sales</td> <td>%</td> <td></td> <td></td> <td></td> <td></td> <td></td>	as a percentage of net sales	%					
Profit/loss for the financial period from the discontinued operations   2	·						-
Net profit for the financial period as a percentage of net sales   %   7.4   9.0   7.4   8.5   7.3	·						
Reserve	operations		-	22	-37	-31	-
Prom the consolidated statement of financial position   Non-current assets   2 116   2 215   1 884   1 935   2 000     Current assets   3 275   3 374   3 294   3 274   3 036     Assets held for sale   -   102   -   -     Total equity attributable to equity holders of the parent company   2 288   2 201   1 960   1 844   1 766     Non-controlling interests   34   41   45   40   26     Interest-bearing debt   629   724   666   665   794     Non-interest-bearing liabilities   2 441   2 623   2 554   2 660   2 451     Liabilities directly attributable to assets held for sale   -   55   -     Total equity and liabilities   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   5 391   5 589   5 280   5 209   5 036     From the consolidated statement of cash flows   6 32   5 452   5 78   153     Cash flow from investing activities   613   255   452   578   153     Cash flow from investing activities   13 2 25   452   578   153     Cash flow from investing activities   13 2 25   1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Net profit for the financial period		357	451	351	393	344
Non-current assets   2 116	as a percentage of net sales	%	7.4	9.0	7.4	8.5	7.3
Current assets         3 275         3 374         3 294         3 274         3 036           Assets held for sale         -         -         102         -         -           Total equity attributable to equity holders of the parent company         2 288         2 201         1 960         1 844         1 766           Non-controlling interests         34         41         45         40         26           Interest-bearing labilities         629         724         666         665         794           Non-interest-bearing liabilities         2 441         2 623         2 554         2 660         2 451           Liabilities directly attributable to assets held for sale         -         -         55         -         -           Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         5 391         5 589         5 280         5 209         5 036           Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities	From the consolidated statement of financial position						
Assets held for sale	Non-current assets		2 116	2 215	1 884	1 935	2 000
Total equity attributable to equity holders of the parent company         2 288         2 201         1 960         1 844         1 766           Non-controlling interests         34         41         45         40         26           Interest-bearing debt         629         724         666         665         794           Non-interest-bearing liabilities         2 441         2 623         2 554         2 660         2 451           Liabilities directly attributable to assets held for sale         -         -         55         -         -           Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         5 391         5 589         5 280         5 209         5 036           Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sa	Current assets		3 275	3 374	3 294	3 274	3 036
Non-controlling interests         34         41         45         40         26           Interest-bearing debt         629         724         666         665         794           Non-interest-bearing liabilities         2 441         2 623         2 554         2 600         2 451           Liabilities directly attributable to assets held for sale         -         -         555         -         -           Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         -         -         -         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         -         -         -         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         -         -         -         -         -         5 589         5 280         5 209         5 036           Cash flow from operating activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146	Assets held for sale		-	-	102	-	-
Non-interest-bearing liabilities	Total equity attributable to equity holders of the parent company		2 288	2 201	1 960	1 844	1 766
Non-interest-bearing liabilities         2 441         2 623         2 554         2 660         2 451           Liabilities directly attributable to assets held for sale         -         -         55         -         -           Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         8         5 391         5 589         5 280         5 209         5 036           Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           Dividends paid         256****         237         227         207         197           Francings per share (EP	Non-controlling interests		34	41	45	40	26
Liabilities directly attributable to assets held for sale         -         -         55         -         -           Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         From the consolidated statement of cash flows           Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         EUR         1.79         2.25         1.76         1.98         1.72           Earnings per share (EPS), basic and diluted	Interest-bearing debt		629	724	666	665	794
Total equity and liabilities         5 391         5 589         5 280         5 209         5 036           From the consolidated statement of cash flows         613         255         452         578         153           Cash flow from operating activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %<	Non-interest-bearing liabilities		2 441	2 623	2 554	2 660	2 451
From the consolidated statement of cash flows           Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from investing activities         -339         -210         -210         -324         -47           Gash flow from investing activities         -339         -210         -210         -324         -47           Gash flow from investing activities         -339         -210         -210         -324         -47           Gash flow from investing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         EUR         1.79         2.25         1.76         1.98 <td>Liabilities directly attributable to assets held for sale</td> <td></td> <td>-</td> <td>-</td> <td>55</td> <td>-</td> <td>-</td>	Liabilities directly attributable to assets held for sale		-	-	55	-	-
Cash flow from operating activities         613         255         452         578         153           Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8****         53.3         65.4         53.0         58.1 <td>Total equity and liabilities</td> <td></td> <td>5 391</td> <td>5 589</td> <td>5 280</td> <td>5 209</td> <td>5 036</td>	Total equity and liabilities		5 391	5 589	5 280	5 209	5 036
Cash flow from investing activities         -126         -288         -71         -79         -471           Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         Eurnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30***         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9	From the consolidated statement of cash flows						
Cash flow from financing activities         -339         -210         -210         -324         -47           Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         Eurnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4 </td <td>Cash flow from operating activities</td> <td></td> <td>613</td> <td>255</td> <td>452</td> <td>578</td> <td>153</td>	Cash flow from operating activities		613	255	452	578	153
Gross capital expenditure         146         346         101         134         513           as a percentage of net sales         %         3.0         6.9         2.1         2.9         10.9           Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8****         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Cash flow from investing activities		-126	-288	-71	-79	-471
as a percentage of net sales       %       3.0       6.9       2.1       2.9       10.9         Research and development expenses       131       132       139       138       188         as a percentage of net sales       %       2.7       2.6       2.9       3.0       4.0         Dividends paid       256***       237       227       207       197         Financial ratios       Earnings per share (EPS), basic and diluted       EUR       1.79       2.25       1.76       1.98       1.72         Dividend per share       EUR       1.30****       1.20       1.15       1.05       1.00         Dividend per earnings       %       72.8****       53.3       65.4       53.0       58.1         Interest coverage       18.6       15.9       15.9       18.1       13.9         Return on investment (ROI)       %       -       -       18.7       21.2       20.4         Return on investment (ROI), continuing operations       %       17.1       21.0       20.3       22.6       -	Cash flow from financing activities		-339	-210	-210	-324	-47
Research and development expenses         131         132         139         138         188           as a percentage of net sales         %         2.7         2.6         2.9         3.0         4.0           Dividends paid         256***         237         227         207         197           Financial ratios         Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30***         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Gross capital expenditure		146	346	101	134	513
as a percentage of net sales       %       2.7       2.6       2.9       3.0       4.0         Dividends paid       256***       237       227       207       197         Financial ratios         Earnings per share (EPS), basic and diluted       EUR       1.79       2.25       1.76       1.98       1.72         Dividend per share       EUR       1.30****       1.20       1.15       1.05       1.00         Dividend per earnings       %       72.8****       53.3       65.4       53.0       58.1         Interest coverage       18.6       15.9       15.9       18.1       13.9         Return on investment (ROI)       %       -       -       18.7       21.2       20.4         Return on investment (ROI), continuing operations       %       17.1       21.0       20.3       22.6       -	as a percentage of net sales	%	3.0	6.9	2.1	2.9	10.9
Dividends paid         256***         237         227         207         197           Financial ratios         Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Research and development expenses		131	132	139	138	188
Financial ratios           Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8****         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	as a percentage of net sales	%	2.7	2.6	2.9	3.0	4.0
Earnings per share (EPS), basic and diluted         EUR         1.79         2.25         1.76         1.98         1.72           Dividend per share         EUR         1.30***         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Dividends paid		256***	237	227	207	197
Dividend per share         EUR         1.30****         1.20         1.15         1.05         1.00           Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Financial ratios						
Dividend per earnings         %         72.8***         53.3         65.4         53.0         58.1           Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Earnings per share (EPS), basic and diluted	UR	1.79	2.25	1.76	1.98	1.72
Interest coverage         18.6         15.9         15.9         18.1         13.9           Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Dividend per share	UR	1.30***	1.20	1.15	1.05	1.00
Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Dividend per earnings	%	72.8***	53.3	65.4	53.0	58.1
Return on investment (ROI)         %         -         -         18.7         21.2         20.4           Return on investment (ROI), continuing operations         %         17.1         21.0         20.3         22.6         -	Interest coverage		18.6	15.9	15.9	18.1	13.9
Return on investment (ROI), continuing operations % 17.1 21.0 20.3 22.6 -		%	-	_	18.7	21.2	20.4
		%	17.1	21.0	20.3	22.6	-
		%	-	-	18.0	21.4	20.1

Return on equity (ROE), continuing operations	%	15.6	20.2	20.0	23.1	-
Solvency ratio	%	47.6	44.6	43.5	43.9	41.3
Gearing		0.07	0.17	0.05	0.15	0.32
Equity per share	EUR	11.60		9.94	9.35	8.95
Working capital (WCAP)	EUR	490	543	251	313	465

<sup>\*</sup> Figures related to the statement of income in the comparison period 2013 have been restated during year 2014 due to the two-stroke business being classified as discontinued operations. Figures in the comparison period 2012 have not been restated.

#### Calculations of financial ratios

#### Return on investment (ROI)

Profit before taxes + interest and other financial expenses

Total equity and liabilities - non-interest-bearing liabilities - provisions, average over the financial period

- x 100

#### Return on equity (ROE)

Net profit for the financial period

Equity, average over the financial period x 100

#### Interest coverage

Profit before taxes + depreciation, amortisation and impairment + interest and other financial expenses

Interest and other financial expenses

#### Solvency ratio

Equity

Total equity and liabilities – advances received

- x 100

#### Gearing

Interest-bearing liabilities – cash and cash equivalents

Equity

#### Earnings per share (EPS), basic and diluted

Net profit for the financial period attributable to equity holders of the parent company

Adjusted number of shares, average over the financial period

#### Equity per share

Equity attributable to equity holders of the parent company

Adjusted number of shares at the end of the financial period

<sup>\*\*</sup> Figures in the comparison period 2012 have been restated during year 2013 according to the revised IAS 19.

<sup>\*\*\*</sup> Proposal of the Board of Directors.

#### Dividend per share

Dividends paid for the financial period

Adjusted number of shares at the end of the financial period

#### Dividend per earnings

Dividend per share

Earnings per share (EPS), basic and diluted x 100

#### Effective dividend yield

Dividend per share

Adjusted share price at the end of the financial period x 100

#### Price/earnings (P/E)

Adjusted share price at the end of the financial period

Earnings per share (EPS), basic and diluted

#### Price/carrying amount per share (P/BV)

Adjusted share price at the end of the financial period

Equity per share

#### Working capital (WCAP)

(Inventories + trade receivables + current tax receivables + other non-interest-bearing receivables)

– (trade payables + advances received + pension obligations + provisions + current tax liabilities + other non-interest-bearing liabilities)

#### Comparable adjusted EBITA

Operating result - items affecting comparability - purchase price allocation amortisation

#### Comparable operating result

Operating result - items affecting comparability

#### Items affecting comparability

Items affecting comparability are related to restructuring measures and one-time charges for events or activities, which are not part of the normal business operations

#### **Consolidated statement of income**

MEUR	2016	2015	Note
Continuing operations			
Net sales	4 801	5 029	<u>1</u> <u>4</u>
Change in inventories of finished goods & work in progress	-134	-77	
Work performed by the Group and capitalised	2	6	
Other operating income	55	51	<u>5</u>
Material and services	-2 353	-2 603	<u>6</u>
Employee benefit expenses	-1 159	-1 159	<u>7</u>
Depreciation, amortisation and impairment	-138	-124	<u>8</u>
Other operating expenses	-556	-553	
Share of result of associates and joint ventures	14	17	<u>15</u>
Operating result	532	587	
as a percentage of net sales	11.1	11.7	
Financial income	19	11	<u>10</u>
Financial expenses	-72	-45	<u>10</u>
Profit before taxes	479	553	
Income taxes	-123	-124	<u>11</u>
Profit for the financial period from the continuing operations	357	429	
Profit for the financial period from the discontinued operations		22	3
Net profit for the financial period	357	451	
Attributable to:			
equity holders of the parent company	352	444	12
non-controlling interests	4	7	
	357	451	
Earnings per share attributable to equity holders of the parent company (basic and diluted):			
Earnings per share, continuing operations, EUR	1.79	2.14	
Earnings per share, discontinued operations, EUR		0.11	
Earnings per share (EPS), basic and diluted, EUR	1.79	2.25	

The notes are an integral part of these consolidated financial statements.

#### Consolidated statement of comprehensive income

MEUR	2016	2015
Net profit for the financial period	357	451
Other comprehensive income, net of taxes:		
Items that will not be reclassified to the statement of income		
Remeasurements of defined benefit liabilities	-12	7
Tax on items that will not be reclassified to the statement of income	3	-2
Total items that will not be reclassified to the statement of income	-9	5
Items that may be reclassified subsequently to the statement of income		
Exchange rate differences on translating foreign operations		
for equity holders of the parent company	-52	20
for non-controlling interests	-1	2
Associates and joint ventures, share of other comprehensive income	1	3
Cash flow hedges		
measured at fair value	-16	-23
transferred to the statement of income	58	21
Tax on items that may be reclassified to the statement of income		
Cash flow hedges		
measured at fair value	4	4
transferred to the statement of income	-14	-5
Total items that may be reclassified to the statement of income	-21	21
Other comprehensive income for the financial period, net of taxes	-30	26
Total comprehensive income for the financial period	327	477
Total comprehensive income attributable to:		
equity holders of the parent company	323	468
non-controlling interests	3	9
	327	477

The notes are an integral part of these consolidated financial statements.

## Consolidated statement of financial position, assets

MEUR	31.12.2016	31.12.2015	Note
Non-current assets			_
Goodwill	1 112	1 103	<u>13</u>
Intangible assets	322	361	<u>13</u>
Property, plant and equipment	394	418	14
Investment properties	12	13	<u>14</u>
Investments in associates and joint ventures	84	89	<u>15</u>
Available-for-sale financial assets	15	15	<u>16</u> <u>18</u>
Interest-bearing investments	6	17	<u>18</u>
Deferred tax assets	141	157	<u>21</u>

Trade receivables	13	14	<u>18</u>
Other receivables	18	28	<u>19</u>
Total non-current assets	2 116	2 215	
Current assets			
Inventories	1 042	1 200	<u>17</u>
Trade receivables	1 220	1 394	<u>18</u>
Current tax receivables	46	51	
Other receivables	494	396	<u>19</u>
Cash and cash equivalents	472	334	<u>20</u>
Total current assets	3 275	3 374	
Total assets	5 391	5 589	

The notes are an integral part of these consolidated financial statements.

#### Consolidated statement of financial position, equity and liabilities

MEUR	31.12.2016	31.12.2015		Note
Equity				
Share capital	336	336		23
Share premium	61	61		23
Translation differences	-57	-6		23
Fair value reserve	-39	-70		23
Remeasurements of defined benefit liabilities	-45	-36		22
Retained earnings	2 032	1 916		
Total equity attributable to equity holders of the parent company	2 288	2 201		
Non-controlling interests	34	41		
Total equity	2 321	2 242		
Liabilities				
Non-current liabilities				
Interest-bearing debt	520	492	<u>18</u>	<u>25</u>
Deferred tax liabilities	93	102		21
Pension obligations	168	161		22
Provisions	44	46		24
Advances received	58	77		
Other liabilities	1	2		26
Total non-current liabilities	884	880		
Current liabilities				
Interest-bearing debt	108	232	<u>18</u>	25
Provisions	206	223		24
Advances received	458	487		
Trade payables	502	510	<u>18</u>	<u>25</u>

Current tax liabilities	78	82	
Other liabilities	833	933	<u>26</u>
Total current liabilities	2 186	2 467	
Total liabilities	3 070	3 347	
Total equity and liabilities	5 391	5 589	

The notes are an integral part of these consolidated financial statements.

#### **Consolidated statement of cash flows**

MEUR	2016	2015		Note
Cash flow from operating activities:				
Net profit for the financial period	357	451		
Adjustments for:				
Depreciation, amortisation and impairment	138	124		<u>8</u>
Financial income and expenses	53	34		10
Gains and losses on sale of intangible assets and property, plant and equipment and other changes	-6	-27		
Share of result of associates and joint ventures	-14	-17		<u>15</u>
Income taxes	123	124		<u>11</u>
Cash flow before changes in working capital	650	688		
Changes in working capital:				
Receivables, non-interest-bearing, increase (-) / decrease (+)	89	-193		
Inventories, increase (-) / decrease (+)	162	79		<u>17</u>
Liabilities, non-interest-bearing, increase (+) / decrease (-)	-167	-229		
Changes in working capital	84	-343		
Cash flow from operating activities before financial items and taxes	734	346		
Financial items and taxes:				
Interest and other financial income	36	45		
Interest and other financial expenses	-31	-29		
Income taxes paid	-127	-108		
Financial items and paid taxes	-121	-91		
Cash flow from operating activities	613	255		
Cash flow from investing activities:				
Acquisitions	-81	-258		<u>2</u>
Investments in associates and joint ventures	-9	-9		<u>15</u>
Investments in property, plant and equipment and intangible assets	-55	-79	<u>13</u>	<u>14</u>
Proceeds from sale of property, plant and equipment and intangible assets	18	13		
Proceeds from sale of available-for-sale financial assets	1	1		<u>16</u>
Disposal of discontinued operations, net of cash		44		
Cash flow from investing activities	-126	-288		· <del></del>

Cash flow after investing activities	487	-33	
Cash flow from financing activities:			
Proceeds from non-current debt	131	50	<u>25</u>
Repayments and other changes in non-current debt	-91	-112	<u>25</u>
Loan receivables, increase (-) / decrease (+)	-4	-16	
Current loans, increase (+) / decrease (-)	-125	110	
Dividends paid	-250	-242	
Cash flow from financing activities	-339	-210	
Change in cash and cash equivalents, increase (+) / decrease (-)	148	-243	
Cash and cash equivalents at the beginning of the financial period	334	571	
Exchange rate changes	-9	5	
Cash and cash equivalents at the end of the financial period	472	334	

The notes are an integral part of these consolidated financial statements.

### Consolidated statement of changes in equity

	Total	equity att	ributable to	equity h	olders of th	ne parent c	ompany	Non- controlling interests	Total equity
MEUR	Share capital	Share premium	Transla- tion dif- ference	Fair value reserve	Remea- sure- ments of defined benefit liabilities	Retained earnings	Total		
Equity on 1 January 2015	336	61	-30	-66	-65	1 723	1 960	45	2 005
Translation differences			23				23	2	25
Cash flow hedges									
net change in fair value, net of taxes				-20			-20		-20
transferred to the statement of income, net of taxes				16			16		16
Defined benefit plans					29	-24	5		5
Other comprehensive income			23	-4	29	-24	24	2	26
Profit for the financial period						444	444	7	451
Total comprehensive income for the financial period			23	-4	29	420	468	9	477
Total transactions with the owners of the company									
dividends paid						-227	-227	-13	-240
Equity on 31 December 2015	336	61	-6	-70	-36	1 916	2 201	41	2 242

	Total	equity att	ributable to	equity h	olders of th	ne parent c	ompany	Non- controlling interests	Total equity
MEUR	Share capital	Share premium	Transla- tion dif- ference	Fair value reserve	Remea- sure- ments of defined benefit liabilities	Retained earnings	Total		
Equity on 1 January 2016	336	61	-6	-70	-36	1 916	2 201	41	2 242
Translation differences			-51				-51	-1	-52
Cash flow hedges									
net change in fair value, net of taxes				-13			-13		-13
transferred to the statement of income, net of taxes				44			44		44
Defined benefit plans					-9		-9		-9
Other comprehensive income			-51	31	-9		-29	-1	-30
Profit for the financial period						352	352	4	357
Total comprehensive income for the financial period			-51	31	-9	352	323	3	327
Total transactions with the owners of the company									
dividends paid						-237	-237	-11	-247
Equity on 31 December 2016	336	61	-57	-39	-45	2 032	2 288	34	2 321

Additional information on share capital, share premium, translation difference and fair value reserve is presented in Note 23. Equity.

# Accounting principles for the consolidated financial statements

#### **BASIC INFORMATION**

Wärtsilä Corporation is a Finnish listed company organised under the laws of Finland and domiciled in Helsinki. The address of its registered office is John Stenbergin ranta 2, 00530 Helsinki. Wärtsilä Corporation is the parent company in Wärtsilä Group.

Wärtsilä is a global leader in advanced technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers.

In 2016, Wärtsilä's net sales totalled EUR 4.8 billion with approximately 18,000 employees. The company has operations in over 200 locations in more than 70 countries around the world. Wärtsilä is listed on the Nasdaq Helsinki.

These consolidated financial statements were authorised for release by the Board of Directors of Wärtsilä Corporation on 26 January 2017, after which, in accordance with the Finnish Corporate Act, the shareholders have a right to approve or reject the financial statements in the Annual General Meeting. The Annual General Meeting also has a possibility to decide upon changes in the financial statements.

#### **BASIS OF PREPARATION**

The consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) by applying IAS and IFRS standards and their SIC and IFRIC interpretations, which were in force on 31 December 2016. International Financial Reporting Standards refer to the standards, and their interpretations, approved for application in the EU in accordance with the procedures stipulated in the EU's regulation (EC) No. 1606/2002 and embodied in Finnish accounting legislation and the statutes enacted under it. The notes to the consolidated financial statements also comply with the Finnish accounting and corporate legislation.

Reporting is based on the historical cost convention. Exceptions are the available-for-sale financial assets, the financial assets and liabilities at fair value through the statement of income, hedged items under fair value hedging and the cash-settled share-based payment transactions which are measured at fair value. The figures are in millions of euros.

#### **IFRS AMENDMENTS**

In 2016, the Group has applied the amendment to **IAS 1 Presentation of Financial Statements** - Disclosure Initiative. The amendments clarify the application of the materiality concept and judgement when determining where and in what order information is presented in the financial disclosures. This has some effect on the notes of the financial statements.

#### **MANAGEMENT JUDGEMENT AND USE OF ESTIMATES**

The preparation of the financial statements in accordance with the IFRS requires management to make judgements, estimates and assumptions that affect the valuation of the reported assets and liabilities and other information, such as contingent assets and liabilities and the recognition of income and expenses in the statement of income. Although these estimates and assumptions are based on management's best knowledge of current events and actions, actual results may differ from the estimates. The most important

items in the consolidated statements, which require management's judgements and which may include uncertainty, consist of the following:

Sales revenue is typically recognised when the product or service has been delivered, its value has been determined, and it is probable that the trade receivable will be collected. These estimates affect the amount of sales revenue recognised. Revenue from long-term projects and long-term operations and maintenance agreements is recognised according to their percentage of completion when the profit on the project or agreement can be reliably determined. The percentage of completion and the profit are based on management's estimates as to the realisation of the project or agreement. These estimates are reviewed regularly. Recognised sales revenue and costs recorded are adjusted during the project when assumptions concerning the outcome of the entire project are updated. Changes in assumptions relate to changes in the project's or agreement's schedule, scope of supply, technology, costs, and any other relevant factors.

Warranty provisions are recorded on the recognition of sales revenue. The provision is based on the accumulated experience of the level of warranty needed to manage future and current cost claims. Products can contain new and complex technology that can affect warranty estimates with the result that earlier recognised provisions are not always sufficient.

The Group is a defendant in several legal cases arising from its business operations. A provision for a court case is recorded when an unfavourable result is probable and the loss can be determined with reasonable certainty. The final result can differ from these estimates.

The recoverable amounts of goodwill are determined for all cash-generating units annually, or more often if there is an indication of an impairment, where its value in use is determined. The value in use is determined using estimates of future market development, such as growth and profitability, as well as other significant factors. The most important factors underlying such estimates are the net sales growth in the market area, the operating margin, the useful life of the assets, future investment needs and the discount rate. Changes in these assumptions can significantly affect the expected future cash flows.

Estimates of pension obligations regarding defined benefit plans are based on actuarial estimates of factors including future salary increases, discount rates and return on plan assets. Changes in these assumptions can significantly affect the Group's pension obligations and pension costs.

#### PRINCIPLES OF CONSOLIDATION

#### **Subsidiaries**

The consolidated financial statements include the parent company Wärtsilä Corporation and all subsidiaries in which the parent company directly or indirectly holds more than 50% of the voting rights or in which Wärtsilä is otherwise in control on the reporting date. Being in control means the power to govern the financial and operating policies of the company to obtain benefits from its activities.

Accordingly, the purchase price and the acquired company's identifiable assets, liabilities and contingent liabilities are measured at fair value on the date of acquisition. In the acquisition of non-controlling interests, if the Group already has control, the non-controlling interest is measured either at fair value or at the non-controlling interests' proportionate share of the identifiable net assets. The difference between the purchase price, possible equity belonging to the non-controlling interests and the acquired company's net identifiable assets, liabilities and contingent liabilities measured at fair value is goodwill. Goodwill is tested for impairment at least annually. The purchase price includes the consideration paid, measured at fair value. The consideration does not include transaction costs, which are recognised in the statement of income. The transaction costs are expensed in the same financial period in which they occur, except the costs resulting from issued debt or equity instruments.

Any contingent consideration (additional purchase price) related to the combination of businesses is measured at fair value on the date of acquisition. It is classified either as a liability or equity. Contingent consideration classified as a liability is measured at fair value on the last day of each financial period, and the resulting loss or gain is recognised through profit or loss. Contingent consideration classified as equity is not remeasured.

For the acquisitions which occurred before 1 January 2010, the accounting principles valid at the time of the acquisition have been applied.

The acquired subsidiaries are included in the consolidated financial statements from the day the Group has control, and disposed subsidiaries until the control ends. All intragroup transactions, dividend distributions, receivables and liabilities as well as unrealised margins are eliminated in the consolidated financial statements. In the consolidated statements of income and comprehensive income, non-controlling interests have been separated from the profit and the total comprehensive income for the financial period. In the consolidated statement of financial position, non-controlling interests are shown as a separate item under equity.

#### **Associated companies and joint ventures**

Companies, in which the Group usually holds voting rights of between 20% and 50% and in which the Group has a significant influence but no control over the financial and operating policies, are consolidated as associated companies. In joint ventures, the Group has joint control with another party, established by contractual agreement.

Associated companies and joint ventures are included in the consolidated financial statements using the equity method from the date the Group's significant influence or joint control commences until the date it ceases. The Group's share of the associated company's or joint venture's profit for the financial period are shown as a separate item before the Group's operating result, on the line Share of result of associates and joint ventures. The Group's share of the associated company's or joint venture's changes recorded in other comprehensive income is recorded in the Group's other comprehensive income. Wärtsilä's proportion of the associated company's or joint venture's post-acquisition accumulated equity is included in the Group's equity. If the Group's share of the associated company's or joint venture's losses exceeds its interest in the company, the carrying amount is written down to zero. After this, losses are only recognised if the Group has incurred obligations from the associated company or joint venture.

#### Assets held for sale and discontinued operations

Non-current assets and assets and liabilities related to discontinued operations are classified as held for sale if their carrying amounts are expected to be recovered primarily through sale rather than through continuing use. Classification as held for sale requires that the following criteria are met; the sale is highly probable, the asset is available for immediate sale in its present condition subject to usual and customary terms, the management is committed to the sale, and the sale is expected to be completed within one year from the date of classification.

Prior to classification as held for sale, the assets or assets and liabilities related to a disposal group in question are measured according to the respective IFRS standards. From the date of classification, non-current assets held for sale are measured at the lower of the carrying amount and the fair value less costs to sell, and the recognition of depreciation and amortization is discontinued. A discontinued operation is a component of an entity that either has been disposed of, or is classified as held for sale, and represents a separate major line of business or geographical area of operations, is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations or is a subsidiary acquired exclusively with a view to resale.

The result from the discontinued operations is shown separately in the consolidated statement of income and the comparative figures are restated accordingly. Non-current assets held for sale are presented in the statement of financial position separately from other items. The comparative figures for the statement of financial position are not restated.

#### TRANSLATING THE TRANSACTIONS IN FOREIGN CURRENCIES

The items included in the financial statements are initially recognised in the functional currency, which is defined for each group company based on its primary economic environment. The presentation currency of the consolidated financial statements is the euro, which is also the functional and presentation currency of Wärtsilä Corporation.

#### Foreign subsidiaries

The income and expenses for statements of income and statements of comprehensive income of foreign subsidiaries are translated into euros at the quarterly average exchange rates. Statements of financial position are translated into euros at the exchange rates prevailing at the end of the financial period. The translation of the profit for the financial period and other comprehensive income using different exchange rates in the statement of comprehensive income and the statement of financial position causes translation differences, which are recognised in equity and in other comprehensive income as change. Translation differences of foreign subsidiaries' acquisition cost eliminations and post-acquisition profits and losses are recognised in other comprehensive income and are presented as a separate item in equity. The goodwill generated in the acquisition of foreign entities and their fair value adjustments of assets and liabilities are considered as assets and liabilities of foreign entities, which are translated into euros using the exchange rates prevailing at the end of the financial period.

#### **Transactions in foreign currencies**

Transactions denominated in a foreign currency are translated into the functional currency using the exchange rate prevailing at the dates of the transactions. Receivables and liabilities are translated at the exchange rate prevailing at the end of the financial period. Exchange rate gains and losses related to trade receivables and liabilities are reported on the applicable line in the statement of income and are included in operating result. Exchange rate differences related to financial assets and financial liabilities are reported as financial items in the statement of income, except exchange rate differences related to non-current debt that is part of the Group's net investment in a subsidiary. Those are recognised in other comprehensive income and reported in translation differences in equity.

#### **NET SALES AND REVENUE RECOGNITION**

Sales are presented net of indirect sales taxes and discounts. Sales are recognised when the significant risks and rewards connected with ownership have been transferred to the buyer. This typically means that revenue recognition occurs when a product or service is delivered to the customer in accordance with the terms of delivery.

Revenue from long-term construction contracts and long-term operating and maintenance agreements is recognised in accordance with the percentage of completion method when the outcome of the contract can be estimated reliably. The percentage of completion is usually based on the ratio of costs incurred to total estimated costs to date for long-term construction contracts. In some gas solution projects where the key value drivers are engineering, procurement and project management, and where the manufacturing is outsourced, the percentage of completion is assessed with reference to surveys of work performed. For long-term operating and maintenance agreements the percentage of completion is calculated on the basis of the proportion of the contracted services performed. When the final outcome of a long-term project cannot be reliably determined, the costs arising from the project are expensed in the same financial period in which they occur, but the revenue from the project is recorded only to the extent that the company will receive an amount corresponding to actual costs. Any losses due to projects are expensed immediately.

#### **EMPLOYEE BENEFITS**

#### Pension and other long-term employee benefits

#### **Pension plans**

Group companies in different countries have various pension plans in accordance with local conditions and practices. These pension plans are classified either as defined contribution or defined benefit plans. The fixed contributions to the defined contribution plans are expensed in the year to which they relate. The Group has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay employee benefits. All other plans are defined benefit plans.

Defined benefit plans are funded through contributions to pension funds or pension insurance companies. Defined benefit plans may be unfunded or wholly or partly funded. The present value of the obligation arising from the defined benefit plans is determined per each plan using actuarial techniques, the projected unit

credit method. The Group recognises the defined benefit obligation net of fair value of the plan assets at the end of the financial period.

Actuarial gains and losses and other remeasurements of the net defined benefit obligation are recognised immediately in the statement of other comprehensive income. Current service cost is the present value of the post employment benefit, which is earned by the employees during the year. The Group determines the net interest expense on the net defined benefit plan by applying the discount rate used to measure the defined benefit obligation. Service cost is recognised in employee benefit expenses and the net interest in financial expenses. The defined benefit plans are calculated by qualified actuaries.

#### Other long-term employee benefits

In addition to defined benefit plans, Wärtsilä has other long-term employee benefits. They are presented separately from the defined benefit plans. Similarly to the accounting for a defined benefit plan, for any other long-term benefit the Group recognises a liability for the obligation net of the fair value of plan assets, if any. Changes in other long-term employee benefits are recognised in the statement of income.

#### **SHARE-BASED PAYMENTS**

The company's bonus scheme, which is fixed to share value, is measured at the fair value of the share on the reporting date and reported in the statement of income for the term-to-maturity of the bonus scheme.

#### **GOODWILL AND OTHER INTANGIBLE ASSETS**

#### Goodwill

Goodwill is the difference between the aggregate of the acquisition-date fair value of the consideration transferred and the acquirer's share of the company's net identifiable assets and liabilities measured at fair value on the acquisition date. The consideration transferred is measured at fair value, including also the acquirer's previously held equity interest.

#### **Research and development costs**

Research costs are expensed in the financial period during which they occur. Development costs are capitalised when it is probable that the development project will generate future economic benefits for the Group and when the related criteria, including commercial and technological feasibility, have been met. These projects involve the development of new or significantly improved products or production processes. Earlier expensed development costs are not capitalised.

Capitalised development costs are measured at cost less accumulated amortisations and impairment. Capitalised development costs are amortised and the cost of buildings, machinery and facilities for development depreciated on a straight-line basis over their expected useful lives, 5-10 years. Amortisations are started when the asset is finished and can be taken into use. Before that, the asset is tested for impairment annually. Grants received for research and development are reported as other operating income. Grants related to capitalised development costs are netted with the costs occurred before the capitalisation.

#### Other intangible assets

Other intangible assets are recorded at cost if the cost is reliably measurable and the future economic benefits for the Group are probable. Wärtsilä's other intangible assets include patents, licenses, software, customer relations and other intellectual property rights that can be transferred to a third party. These are measured at cost, except for intangible assets identified in connection with acquisitions, which are measured at the fair value at the acquisition date. The cost of intangible assets comprises the purchase price and all costs that can be directly attributed to preparing an asset for its intended use.

Other intangible assets are amortised on a straight-line basis over their estimated useful lives. Intangible assets, for which the time limit for the right of use is agreed, are amortised over the life of the contract. Intangible assets identified in connection with acquisitions are amortised over their delivery times or estimated useful lives.

The general guidelines for scheduled amortisation are:

- Software 3-7 years
- Development expenses 5-10 years
- Other intangible assets 5-20 years

The estimated useful lives and the residual values are reviewed at least at the end of each financial year, and if they differ significantly from previous estimates, amortisation periods are adjusted accordingly. Amortisation of intangible assets is stopped when an item is classified as held for sale.

A gain or loss arising from the sale of intangible assets is recognised in other operating income or other operating expenses in the statement of income.

#### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment acquired by the Group are measured in the statement of financial position at cost less accumulated depreciation and impairment losses. The cost of an asset includes costs directly attributed to preparing an asset for its intended use. Grants received are reported as a reduction in costs. The property, plant and equipment of acquired subsidiaries are measured at their fair value at the acquisition date. The borrowing costs that are directly attributable to the asset acquisition, construction or production and to completion of the asset for its intended use or sale requiring necessarily a considerable length of time will be capitalised in the statement of financial position as part of the cost of the asset. Other than directly attributable borrowing costs are expensed in the period in which they are incurred.

Subsequent expenditure is included in the cost of an asset only if the future economic benefits for the Group are probable and the costs are reliably measurable. Expenditure related to regular, extensive inspections and maintenance is treated as an investment, capitalised and depreciated during the useful life. All other expenditure such as ordinary maintenance and repairs is recognised in the statement of income as an expense as incurred.

Depreciation is based on the following estimated useful lives:

- Buildings 10-40 years
- Machinery and equipment 5-20 years
- Other tangible assets 3-10 years

Depreciation is charged to the statement of income on a straight-line basis over the estimated useful lives of the assets. Land is not depreciated, as its useful life is considered as infinite. The estimated useful lives and the residual values are reviewed at least at the end of each financial year, and if they differ significantly from previous estimates, depreciation periods are adjusted accordingly. Depreciation of property, plant and equipment is stopped when an item is classified as held for sale.

A gain or loss arising from the sale of property, plant and equipment is recognised in other operating income or other operating expenses in the statement of income.

# IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

The carrying amounts of assets are reviewed regularly for signs of possible impairment. If any such indication exists, the recoverable amount of the asset is estimated. The recoverable amount is estimated annually also for the goodwill whether or not there are signs of impairment. In order to define a possible impairment, the Group's assets are divided up into the smallest possible cash-generating units which are mainly independent of other units and the cash flows of which are separately identifiable and to a large extent independent of the cash flows of other similar units.

An impairment loss is recorded when the carrying amount of an asset is greater than its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. The value in use is based on the expected discounted future net cash flows resulting from the asset or cash-generating unit. A pre-tax rate which reflects the markets' position on the time value of money and asset-specific risks is used as the discount rate.

An impairment loss is recognised immediately in the statement of income. In connection with the recognition of the impairment loss, the useful life of the amortisable/depreciable asset is reassessed. An earlier impairment loss recognised for an asset other than goodwill is reversed if the estimates used to determine the recoverable amount change. However, reversal of impairment shall not exceed the asset's carrying amount less impairment loss. An impairment loss recognised for goodwill is not reversed under any circumstances.

# DETERMINATION OF THE FAIR VALUE OF ASSETS ACQUIRED THROUGH BUSINESS COMBINATIONS

In significant business combinations, the Group has used external advisors when estimating the fair values of property, plant and equipment and intangible assets. For property, plant and equipment, comparisons have been made of the market prices of similar assets, and the depreciation of the acquired assets due to aging, wear and other similar factors has been estimated. The fair value measurement of intangible assets is based on estimates of the future cash flows associated with the assets. The acquired identifiable intangible assets include typically technology, customer relationships, and trademarks.

#### **INVESTMENT PROPERTIES**

Properties that are not used in the Group's operating activities or that are held to earn rental income or for capital appreciation, or both, are classified as investment properties. Investment properties are presented in the statement of financial position on a separate line in non-current assets and measured at cost less accumulated depreciations and impairment. A gain or loss arising from the sale of investment properties is recognised in other operating income or other operating expenses in the statement of income.

#### **LEASES**

Leases related to property, plant and equipment in which all material rewards and risks of ownership have been transferred to the Group are classified as finance leases. Assets acquired under a finance lease are recognised as property, plant and equipment at the lower of the fair value of the leased asset and the estimated present value of the underlying lease payments. The corresponding rental obligation, net of finance charge, is included in interest-bearing debt with the interest element of the finance charge being recognised in the statement of income over the lease period. Assets acquired under a finance lease are depreciated over their estimated useful lives in accordance with the same principles that apply to the Group's other similar property, plant and equipment. The shorter alternative of the following is selected: either the useful life of the leased asset or the lease term.

Leases in which the rewards and risks of ownership have not been transferred to the Group are classified as operating leases. Rental payments under operating leases are charged in the statement of income on a straight-line basis over the lease term.

#### **INVENTORIES**

Inventories are carried at the lower of cost and net realisable value. Costs include allocated purchasing and manufacturing overhead costs in addition to direct manufacturing costs. Inventory valuation is primarily based on the weighted average cost.

#### **FINANCIAL ASSETS AND LIABILITIES**

#### **Financial assets**

Financial assets are classified into the following categories: financial assets at fair value through the statement of income, investments held to maturity, loans and receivables, and available-for-sale financial assets. Financial assets are classified on the basis of their purpose of use upon initial recognition.

At the end of the financial period, the Group assesses whether objective indication exists of impairment of an individual financial asset other than those measured at fair value through the statement of income. There is impairment in a financial asset if objective indication exists thereof and if it has an effect on expected future cash flows from the financial asset that can be reliably evaluated. A significant decline in a counterparty's

result, a debtor's breach of contract, and for equity instruments, a significant or persistent decline in value below its cost, for example, can be considered as objective indication of impairment.

#### Financial assets at fair value through the statement of income

The financial assets at fair value through the statement of income category includes derivatives that do not qualify for hedge accounting and are not financial guarantee agreements, as well as other financial assets recognised at fair value through the statement of income, which are financial assets held for trading.

Derivatives are initially recognised at cost in the statement of financial position and are thereafter measured at their fair value at the end of each financial period. Realised and unrealised gains and losses from changes in fair values are recognised in the statement of income in the period in which they have arisen. Derivatives held for trading, as well as financial assets maturing within 12 months after the end of the financial period, are included in current assets.

#### **Investments held to maturity**

Investments held to maturity are financial assets with fixed or determinable payments that mature on a fixed date and which the Group has the positive intention and ability to hold until maturity. They are measured at amortised cost using the effective interest rate method, less any impairment losses.

#### **Loans and receivables**

Loans and receivables are non-derivative financial assets that have fixed or determinable payments and that are not quoted on active markets. They arise when the Group provides a loan or delivers products and services directly to a debtor. Loans and receivables are measured at amortised cost using the effective interest rate method. They are included in non-current receivables, unless they have a maturity of less than 12 months from the reporting date. Such items are classified as current receivables.

Trade receivables are recognised at their anticipated realisable value, which is the original invoiced amount less an estimated valuation allowance for impairment. Trade receivables are measured individually. Credit losses are expensed immediately when indication exists that the Group is not able to collect its trade receivables according to initial agreements. Examples of events giving rise to impairment include a debtor's serious financial problems, a debtor's probable bankruptcy or other financial arrangement. The Group may sell undivided interests in trade receivables on an ongoing and one-time basis to other lending institutions.

Financial assets sold under these arrangements are excluded from trade receivables in the Group's consolidated statement of financial position at the time of payment from the acquirer, considering that substantially all risks and rewards have been transferred. If the acquirer has not settled the payment to the extent that the ownership, risk and control over the receivable have been substantially transferred then such financial assets sold are re-recognised in the consolidated statement of financial position at the end of the financial period.

#### **Available-for-sale financial assets**

Available-for-sale financial assets are non-derivative financial assets allocated to this category. They are included in non-current assets unless the Group intends to dispose of the investment within 12 months from the reporting date.

Wärtsilä's investments in other companies are classified as available-for-sale financial assets, including investments in listed and unlisted shares. Listed shares are measured at fair value, based on their market value. Unlisted shares for which the fair value cannot be reliably measured are valued at cost less impairment.

Changes in the fair value of shares measured at fair value are recognised in other comprehensive income and reported in fair value reserve in equity with the tax impact, until the shares are disposed of or written down, at which point the accumulated fair value changes are released from equity to the statement of income.

Gains and losses on disposal and impairments of shares that are attributable to operating activities are included in operating income, while gains and losses on disposal and impairments of other shares are included in financial income and expenses.

#### Cash and cash equivalents

Cash comprises cash in hand, deposits held at call with banks and similar investments. Cash equivalents comprise short-term, highly liquid investments that are subject to only minor fluctuations in value. Cash equivalents have a maturity of up to three months on the date of acquisition. Credit accounts related to the Group's cash pool accounts are included in current financial liabilities.

#### **Financial liabilities**

The Group's financial liabilities are classified either into financial liabilities recognised at amortised cost or financial liabilities recognised at fair value through the statement of income. Financial liabilities are classified as current unless the Group has the unconditional right to defer the payment of the debt to at least 12 months from the end of the financial period. Financial liabilities (or parts thereof) are only derecognised once the debt has extinguished, i.e. once the contractually specified obligation is discharged, cancelled or expires.

#### Financial liabilities recognised at amortised cost

The loans raised by the Group are included in financial liabilities recognised at amortised cost. They are measured at their initial recognition at fair value using the effective interest rate method. After the initial recognition, loans are measured at amortised cost. Interests on loans are expensed through the statement of income over the maturity of the debt using the effective interest rate method.

#### Financial liabilities recognised at fair value through the statement of income

In the Wärtsilä Group, financial liabilities recognised at fair value through the statement of income include derivatives that are not eligible for hedge accounting. Realised and unrealised gains and losses from changes in fair values of derivatives are recognised in the statement of income in the period in which they have arisen.

#### **Derivatives and hedge accounting**

Derivatives are measured at fair value. Gains and losses from fair value measurement are treated as determined by the purpose of the derivatives. The effects on results of changes in the value of derivatives that are eligible for hedge accounting and that are effective hedging instruments are presented consistently with the hedged item. Impact from ineffective hedging instruments is recognised in financial income and expenses.

For derivatives eligible for hedge accounting, the Group documents the relationship between each hedging instrument and the hedged asset upon entering into a hedging arrangement, along with the risk management objective and the strategy applied. Through this process, the hedging instrument is linked to the relevant assets and liabilities, projected business transactions or binding contracts. The Group also documents its ongoing assessment of the effectiveness of the hedge regarding the relationship between a change in the derivative's fair value and a change in the value of the hedged cash flows or transactions.

#### **Hedging of sales and purchases**

Wärtsilä hedges its sales and purchases in foreign currencies with foreign exchange derivatives or currency options. Certain foreign exchange derivatives are eligible for hedge accounting. Changes in the fair value of derivative contracts designated to hedge future cash flows are recognised in other comprehensive income and presented in the fair value reserve in equity, provided that the hedging is effective. The ineffective portion is immediately recognised in the statement of income in the financial period. Changes in fair value due to interest rate differences are recognised in the statement of income. Any gain or loss in the fair value reserve accumulated through other comprehensive income is reported as an adjustment to net sales or material and services in the same period as any transactions relating to the hedged obligations or estimates. Currency forwards are measured at forward rates at the end of the financial period and currency options at their market value at the end of the financial period.

#### Hedges of net investments in foreign operations (equity hedging)

Wärtsilä decided to discontinue hedging the net investments in its foreign subsidiaries and joint ventures in June 2012. Prior to that, the changes in the fair values of instruments determined as equity hedging were recognised in other comprehensive income.

#### **Derivatives not included in hedge accounting**

For derivatives not included in hedge accounting, changes in fair value are immediately recognised in financial income or expenses in the statement of income. For example, interest rate swap hedges belong to this group. The fair value of interest rate swaps is calculated by discounting the future cash flows.

#### Fair value hierarchy

Financial instruments measured at fair value are classified according to the following fair value hierarchy: instruments measured using quoted prices in active markets (level 1), instruments measured using inputs other than quoted prices included in level 1 observable either directly or indirectly (level 2), and instruments measured using inputs that are not based on observable market data (level 3). Financial instruments measured at fair value include financial assets and liabilities at fair value through the statement of income and available-for-sale financial assets.

#### **PROVISIONS AND CONTINGENT LIABILITIES**

Provisions are recognised in the statement of financial position when the Group has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions can arise, for example, from warranties, environmental risks, litigation, foreseeable losses on projects and restructuring costs. The amount to be recognised as provisions corresponds to the management's best estimate of the expenses that will be necessary to meet the existing obligation at the end of the financial period.

Estimated future warranty costs relating to products delivered are recorded as provisions. The amount of future warranty costs is based on accumulated experience.

Provisions for restructuring costs are made once the restructuring plan has been approved and the implementation started or the personnel concerned have been informed of the terms. The plan must indicate which activities and personnel will be affected and the timing and cost of implementation.

Contingent liabilities are possible obligations resulting from previous events, the existence of which will only be ascertained once the uncertain event that is beyond the Group's control materialises. Existing obligations that are not likely to require the fulfilment of a payment obligation or the amount of which cannot be reliably determined are also considered contingent liabilities. Contingent liabilities are presented in the notes.

#### **INCOME TAXES**

The statement of income includes taxes on the Group's consolidated taxable income for the financial period in accordance with local tax regulations, tax adjustments for previous financial periods and changes in deferred taxes. Tax effects related to transactions recognised through the statement of income and other events are recognised in the statement of income. Tax effects related to transactions or other events to be presented as components of other comprehensive income or directly in equity are also recognised, respectively, in other comprehensive income or directly in equity.

Deferred tax liabilities and assets are calculated on temporary differences arising from the difference between the tax basis of assets and liabilities and the carrying values using the enacted tax rates at the end of the financial period. The statement of financial position includes deferred tax liabilities in their entirety and deferred tax assets at their estimated probable amount.

#### **DIVIDENDS**

The dividend proposed by the Board of Directors is deducted from distributable equity when approved by the company's Annual General Meeting.

#### **ADOPTION OF NEW AND UPDATED IFRS STANDARDS**

In 2017, the Group will adopt the following new and amended standards issued by the IASB.

New IFRS 9 Financial Instruments replaces the existing guidance in IAS 39 Financial Instruments - Recognition and Measurement. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, including new general hedge accounting requirements and a new expected credit loss model for calculating impairment on financial assets. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39.

The Group has assessed the impact of IFRS 9 and foresees some changes in the hedging processes and presentation. The new model aligns the accounting treatment with risk management activities and allows net hedging, from which the gains or losses will be presented on a separate line in the consolidated statement of income. Regarding impairment of financial assets, the change mainly concerns trade receivables where the credit losses will be recognised based on the expected lifetime credit losses. The Group estimates the restatement impact to equity and trade receivables to remain insignificant. Other figures on the comparative period will not be restated.

Amendments to **IAS 7 Statement of Cash Flows\*** - Disclosure Initiative clarify IAS 7 to improve information provided to users of financial statements about an entity's financing activities e.g. by providing a reconciliation between the opening and closing balances in the statement of financial position for liabilities arising from financing activities (separately from changes in other assets and liabilities). The amendments will have an impact on the notes of the consolidated financial statements.

Amendments to **IAS 12 Income Taxes\*** - Recognition of Deferred Tax Assets for Unrealised Losses clarify the requirements on recognition of deferred tax assets for debt instruments measured at fair value. The amendments will have no significant impact on consolidated financial statements.

The following new and amended standards and interpretations already issued by the IASB will be adopted in 2018 or later, depending on the effective date.

New IFRS 15 Revenue from Contracts with Customers (effective for financial periods beginning on or after 1 January 2018): IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue guidance, including IAS 18 Revenue, and IAS 11 Construction Contracts. Under IFRS 15 an entity shall recognise revenue in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

The Group has assessed the impacts of IFRS 15 and foresees provisional changes in the revenue recognition method in two business lines. These are long-term service and maintenance agreements and oil and gas business related construction contracts.

In long-term service and maintenance agreements, the customer value is created over time during the contract period. Currently, the percentage of completion is calculated on the basis of the proportion of the contracted services performed. In accordance with IFRS 15, the revenue will be recognised over time based on costs incurred. Due to the standard maintenance schedules this typically delays the revenue recognition in a contract. However, the impact on Group net sales is in large extend mitigated with wide portfolio of agreements in different stages of lifetime.

The key value drivers in oil and gas business construction contracts are engineering, procurement, and project management, and the manufacturing is usually outsourced. The revenue will be recognised over time based on project progress, measured with costs incurred. Typically this delays the revenue recognition of a project significantly compared to the current method, which is measuring the progress based on surveys of work performed. Also in oil and gas business construction contracts the wide portfolio of projects in different stages should mitigate the impact on Group net sales.

The two business lines together represent, depending on the year, approximately 10-15% of the group's net sales. The estimated combined restatement impact in equity is approximately EUR -10 million.

Amendments to **IFRS 2 Share-based Payment\*** - Clarification and Measurement of Share-based Payment Transactions (effective for financial periods beginning on or after 1 January 2018). The amendments are intended to eliminate the diversity in the classification and measurement of particular share-based payment transactions (accounting for cash-settled share-based payment transactions that include a performance

condition, share-based payments in which the manner of settlement is contingent on future events, share-based payments settled net of tax withholdings and modification of share-based payment transactions from cash-settled to equity-settled). The amendments will have no impact on consolidated financial statements.

Amendments to **IFRS 4 Insurance Contracts**\* - Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts (effective for financial periods beginning on or after 1 January 2018): Applying IFRS 9 Financial Instruments with IFRS 4. The amendments bring certainty to insurers on whether, and how, they should apply IFRS 9 before they apply the forthcoming insurance contracts standard. The amendments will have no impact on consolidated financial statements.

New IFRS 16 Leases\* (effective for financial periods beginning on or after 1 January 2019): IFRS 16 changes the accounting for operating leases by requiring companies to recognise lease assets and lease liabilities in the balance sheet, initially measured at the present value of unavoidable future lease payments, and to depreciate those assets and interest on lease liabilities in the income statement over the lease term. Whether a contract contains a lease is determined on the basis of whether the customer has the right to control the use of an identified asset for a period of time. When adapting IFRS 16, the portion of the lease payments currently included in operating expenses in the consolidated statement of income will be transferred to amortisations and depreciations and the interest portion to financial expenses. Also balance sheet totals will change, leading to some changes in key figures. The Group is assessing the impact of IFRS 16.

<sup>\*</sup> Not yet endorsed for use by the European Union as of 31 December 2016.

#### 1. Segment information

The business of Wärtsilä consists of one business area, the Power Business. The Power Business is subdivided into two mutually supportive market areas, Marine Solutions and Energy Solutions. These offer customers the same product concept modified for specific applications. The main products for both these markets are gas and diesel engines and related services. The market areas are highly dependent on each other.

In the Power Business, the design-related research and development and manufacturing required for the engines sold to both markets take place in the same R&D centres and factories. The manufacturing process is the same for each market. Similarly, the same Group companies are responsible for the distribution of these products and the services related to them. Capacity costs cannot be reliably allocated to the two different markets. These costs are significant and vary between the two units in different years. Customers in both markets are capital-intensive corporations with global operations. The development of the two market areas is strongly linked to global economic trends.

As geographical information, Wärtsilä reports the geographical areas Finland, other European countries, Asia, the Americas and other continents. In the geographical information net sales is split by the customer's destination and non-current assets by origin.

#### **Geographical information**

MEUR	Net sales	2016 Non- current assets*	Net sales	2015 Non- current assets*
Finland	121	264	109	284
Other European countries	1 460	1 388	1 457	1 462
Asia	1 774	134	2 051	143
The Americas	1 039	131	1 006	89
Other	407	6	407	6
Total	4 801	1 923	5 029	1 984

<sup>\*</sup> Non-current assets consist of goodwill, intangible assets, property, plant and equipment, investment properties and investments in associates and joint ventures.

#### **Business area information**

Internal management reporting is used to monitor the development of operations on the basis of market-based business areas. Reporting serves internal goal setting and strategic follow up, and is thus a management tool rather than an actual external economic indicator.

Wärtsilä's highest operative decision maker (CODM, Chief Operating Decision Maker) is the President and CEO with the support of the Board of Management, and in some cases, the Board of Directors. The President and CEO assesses the Group's financial position and its development as a whole, not based on the results of the business areas. As the Group's level of integration is high, the reported indicators from business areas do not give a true picture of the business areas' financial position and development.

Against this background, Wärtsilä's business cannot be divided into separate operating segments with individual reporting.

During the financial period 1 January-31 December 2016 and 1 January-31 December 2015, Wärtsilä did not have any individual significant customers or countries.

#### Net sales

MEUR	2016	2015
Energy Solutions	943	1 126
Marine Solutions	1 667	1 720
Services	2 190	2 184
Total	4 801	5 029

#### 2. Acquisitions

#### **Acquisitions 2016**

#### **American Hydro Corporation**

On 30 June 2016, Wärtsilä acquired a USA- and Canada-based company, American Hydro Corporation, from the Weir Group plc.

American Hydro is a leading supplier and installer of large equipment upgrades and servicing for the hydroelectric and water distribution industries, specialising in consultancy, design and precision performance enhancements for hydro-turbines and pumps. This acquisition will enable Wärtsilä to grow and expand its existing global Hydro and Industrial service offering.

The following tables summarise the preliminary amounts for the consideration paid for American Hydro, the cash flow from the acquisition, and the amounts of the assets acquired and liabilities assumed recognised at the acquisition date.

Consideration transferred	40
Consideration transferred	46
Preliminary consideration	MEUR

Preliminary cash flow from the acquisition	MEUR
Consideration paid in cash	45
Contingent consideration	1
Cash and cash equivalents of the acquired companies	-4
Total cash flow from the acquisition	42

Provisional values of the assets and liabilities arising from the acquisition	MEUR
Intangible assets	5
Property, plant and equipment	14
Inventories	1
Trade and other receivables	8
Cash and cash equivalents	4
Total assets	33
Provisions	1
Trade payables and other liabilities	7
Total liabilities	8
Total net assets	24
Preliminary goodwill	22

The preliminary fair values of acquired identifiable intangible assets at the date of acquisition (including customer relationships and order book) amounted to EUR 5 million. The fair value of current trade receivables and other receivables is approximately EUR 8 million. The fair value of trade receivables does not include any significant risk.

The preliminary goodwill of EUR 22 million reflects the value of know-how and expertise in hydroelectric and water distribution industries. Wärtsilä foresees that the acquisition will strengthen its presence in hydro and industrial services as well as support the growth strategy and expansion in renewables, improving Wärtsilä's offering and services towards customers. The goodwill recognised for American Hydro is expected to be mainly tax deductible.

During 2016, the Group incurred acquisition-related costs of EUR 1 million related to external legal fees and due diligence costs. The costs have been included in the other operating expenses in the consolidated statement of income.

#### **Eniram Group**

On 30 June 2016, Wärtsilä signed an agreement to acquire Eniram, a Finland-based technology company providing the marine industry with energy management and analytics solutions. Ownership of the company transferred to Wärtsilä with effect from 1 July 2016.

Eniram provides the maritime industry with energy management technology to reduce fuel consumption and emissions. Eniram's solutions range from single onboard applications for trim, speed and engine optimisation to comprehensive fleet analysis. The company's solutions are installed in over 270 vessels; saving fuel, increasing profitability and reducing harmful emissions. Eniram is headquartered in Helsinki, Finland and has subsidiaries in the UK, the USA, Germany and Singapore. The acquisition of Eniram will enable Wärtsilä to grow and strengthen its existing digital offering and in-house capabilities, specifically in data analytics, modelling and performance optimisation.

The following tables summarise the preliminary amounts for the consideration paid for Eniram Group, the cash flow from the acquisition, and the amounts of the assets acquired and liabilities assumed recognised at the acquisition date.

Preliminary consideration	MEUR
Consideration transferred	41
Total consideration transferred	41

Preliminary cash flow from the acquisition	MEUR
Consideration paid in cash	41
Cash and cash equivalents of the acquired companies	-1
Total cash flow from the acquisition	40

Provisional values of the assets and liabilities arising from the acquisition	MEUR
Intangible assets	11
Trade and other receivables	3
Cash and cash equivalents	1
Total assets	14
Provisions	2
Trade payables and other liabilities	4
Deferred tax liabilities	2
Total liabilities	8
Total net assets	7
Preliminary goodwill	34

The preliminary fair values of acquired identifiable intangible assets at the date of acquisition (including technology) amounted to EUR 11 million. The fair value of current trade receivables and other receivables is approximately EUR 3 million. The fair value of trade receivables does not include any significant risk.

The preliminary goodwill of EUR 34 million reflects the value of know-how and expertise in energy management technology. Wärtsilä foresees that the acquisition will enable customers to optimise their assets and improve predictability, as well as support them with real-time analytics. Through this acquisition Wärtsilä takes a solid lead in marine digitalisation.

During 2016 the Group incurred acquisition-related costs of EUR 1 million related to external legal fees and due diligence costs. The costs have been included in the other operating expenses in the consolidated statement of income.

#### Pro forma

If the acquisitions had occurred on 1 January 2016, management estimates that consolidated net sales would have been EUR 4,826 million. The impact in the consolidated operating result would not have been significant. In determining these amounts, management has assumed that the fair value adjustments, which arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2016.

#### **Acquisitions 2015**

#### L-3 Marine Systems International

On 31 May 2015, Wärtsilä acquired L-3 Marine Systems International (MSI) from NYSE-listed L-3 Communications Holdings Inc. The total consideration of the transaction was EUR 293 million.

MSI has extensive experience in supplying automation, navigation and electrical systems, dynamic positioning technology, as well as sonar and underwater communications technology for a variety of vessel types and offshore installations. Wärtsilä's strong position in the development of technologies that enhance operational efficiency will be further strengthened with the addition of MSI's broad range of capabilities.

The following tables summarise the consideration paid for MSI, the cash flow from the acquisition, and the amounts of the assets acquired and liabilities assumed recognised at the acquisition date.

Total consideration	MEUR
Consideration transferred	293
Total consideration transferred	293

Cash flow from the acquisition	MEUR
Consideration paid in cash	293
Cash and cash equivalents of the acquired companies	-36
Total cash flow from the acquisition	258

The assets and liabilities arising from the acquisition at fair value	MEUR
Intangible assets	132
Property, plant and equipment	8
Inventories	129
Trade and other receivables	70
Deferred tax assets	23
Cash and cash equivalents	36
Total assets	398
Provisions	19
Pension obligations	65
Trade payables and other liabilities	146
Deferred tax liabilities	46
Total liabilities	277
Total net assets	121
Goodwill	172

The fair values of acquired identifiable intangible assets at the date of acquisition (including technology, customer relationships and trademarks) amounted to EUR 132 million. The fair value of current trade receivables and other receivables is approximately EUR 70 million. The fair value of trade receivables does not include any significant risk.

The goodwill of EUR 172 million reflects the value of know-how and expertise in marine electrical & automation. Wärtsilä foresees that the new unit will capture new market opportunities and improve the operational efficiency of its customers. The goodwill recognised for MSI is not tax deductible.

During 2015, the Group incurred acquisition-related costs of EUR 2 million related to external legal fees and due diligence costs. The costs have been included in the other operating expenses in the consolidated statement of income. The total acquisition-related costs were EUR 4 million.

#### Pro forma

During June-December 2015, MSI contributed EUR 264 million to order intake and EUR 263 million to net sales. Contribution to the operating result of the Group was EUR 14 million. If the acquisition had occurred on 1 January 2015, management estimates that consolidated net sales would have been EUR 5,197 million. The impact in the consolidated operating result would not have been significant. In determining these amounts, management has assumed that the fair value adjustments, which arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2015.

#### 3. Disposals

#### Disposals 2016

On 30 June 2016, Wärtsilä sold its majority interest in Wärtsilä Ship Design Serbia doo to the operative management of the company. The consideration received and the impact on net profit for the financial period were not significant.

On 31 October 2016, Wärtsilä divested its power drives business to Finland-based The Switch. The consideration paid and the impact on net profit for the financial period were not significant.

#### Disposals 2015

Wärtsilä sold the two-stroke engine business to the joint venture Winterthur Gas & Diesel Ltd (WinGD) in January 2015. Until that, the two-stroke business was classified as discontinued operation, including the transfer of non-current assets held for sale and liabilities directly attributable to them on separate rows in the statement of financial position. As a result of the sale transaction, a profit of EUR 24 million was recognised in profit for the financial period from the discontinued operations.

#### Profit for the financial period from the discontinued operations

MEUR	2015
Discontinued operations	
Expenses	-2
Total	-2
Profit on sale of shares	24
Operating result	22
Profit for the financial period	22
Earnings per share, discontinued operations, EUR	0.11

#### Cash flows from the discontinued operations

MEUR	2015
Cash flow from investing activities	44
Total	44

#### 4. Long-term construction contracts and operating and maintenance agreements

MEUR	2016	2015
Net sales recognised for the financial period		
From long-term construction contracts	813	940
From long-term operating and maintenance agreements	331	355
Long-term construction contracts in progress		
Aggregated amount of costs incurred and recognised profits	2 213	2 229
Advances received at 31 December	1 965	2 011
Receivables from the revenue recognition netted with the advances received at 31 December	249	218

Revenue from long-term construction contracts and long-term operating and maintenance agreements is recognised in accordance with the percentage of completion method. The percentage of completion is usually based on the ratio of costs incurred to total estimated costs to date for long-term construction contracts. In some gas solution projects where the key value drivers are engineering, procurement and project management, and where the manufacturing is outsourced, the percentage of completion is assessed with reference to surveys of work performed. For long-term operating and maintenance agreements the percentage of completion is calculated on the basis of the proportion of the contracted services performed.

#### 5. Other operating income

MEUR	2016	2015
Capital gains	7	4
Government grants	8	10
Sale of scrapped material	3	4
Income related to cancelled orders*	9	4
Insurance indemnities	7	5
Other	21	25
Total	55	51

 $<sup>^{\</sup>star}$  Expenses related to cancelled orders are recorded on respective expense accounts.

#### 6. Material and services

MEUR	2016	2015
Purchases during the financial period	-1 207	-1 406
Change in inventories	-27	-11
External services	-1 119	-1 186
Total	-2 353	-2 603

#### 7. Employee benefit expenses

MEUR	2016	2015
Wages and salaries	939	935
Pension costs		
Defined benefit plans	10	12
Defined contribution plans	63	65
Other compulsory personnel costs	147	148
Total	1 159	1 159

Management remuneration is specified in Note 29. Related party disclosures.

#### Long-term incentive schemes

Wages and salaries include a provision for expenses arising from bonus schemes 2013, 2014 and 2015, totalling EUR 5 million (15). These bonus schemes are tied to the price development of the Company's share during a pre-determined timeframe, and an upper limit is set for the bonus.

The bonus payment for bonus schemes is based on the share price development during a three-year period. The 2013 bonus scheme comprises 1,755,000 bonus rights, the 2014 bonus scheme 2,076,000 bonus rights and the 2015 bonus scheme 1,962,000 bonus rights. For the bonus scheme 2013 the basis of a share price is EUR 37.05, for the bonus scheme 2014 EUR 44.25 and for the bonus scheme 2015 EUR 47.47. The 2013 bonus scheme takes into account 50% of dividends paid, and the paid bonus cannot exceed EUR 10.00 per bonus right. The 2014 and 2015 bonus schemes take into account 100% of dividends paid, and the paid bonus cannot exceed EUR 10.60 per bonus right in the 2014 bonus scheme or EUR 13.84 in the 2015 bonus scheme.

	2016	2015
Personnel on average	18 332	18 565
Personnel at the end of the financial period	18 011	18 856

#### 8. Depreciation, amortisation and impairment

MEUR	2016	2015
Intangible rights	9	9
Purchase price allocation amortisation	35	32
Other intangible assets	15	20
Buildings and structures	15	15
Machinery and equipment	46	47
Other tangible assets	1	1
Impairments	17	
Total	138	124

#### 9. Measures of profit and items affecting comparability

MEUR	2016	2015
Comparable adjusted EBITA	618	643
Purchase price allocation amortisation	-35	-32
Comparable operating result	583	612

Items affecting comparability:		
Social plan costs	-22	-16
Impairment and write-downs	-22	-1
Other costs	-7	-8
Items affecting comparability, total	-51	-25
Operating result	532	587

In 2016, items affecting comparability amounted to EUR 51 million (25), of which EUR 48 million (19) related to restructuring costs, and EUR 3 million (6) to other costs.

#### 10. Financial income and expenses

MEUR	2016	2015
Interest income on loans and receivables	2	2
Interest income on financial assets at fair value through the statement of income	5	7
Exchange rate differences*	8	
Other financial income	4	3
Total financial income	19	11
Interest expenses on financial liabilities recognised at amortised cost	-13	-13
Interest expenses on financial liabilities at fair value through the statement of income	-11	-9
Net interest from defined benefit plans	-3	-3
Write-down of financial receivables	-36	
Exchange rate differences*		-12
Other financial expenses	-8	-8
Total financial expenses	-72	-45
Total	-53	-34

<sup>\*</sup> In 2016, the result from the ineffective portion of cash flow hedges related to cancelled orders, EUR -8 million (-1) and exchange rate differences from unhedged internal loans, EUR 14 million (-15) were included in exchange rate differences in the consolidated statement of income.

#### 11. Income taxes

MEUR	2016	2015
Income taxes		
for the financial period	-121	-127
for prior financial periods		-1
Change in deferred tax		
origination and reversal of temporary differences	-1	3
Total	-123	-124
Reconciliation of effective tax rate:		
Profit before taxes	479	553
Tax calculated at the domestic corporate tax rate 20.0%	-96	-111
Effect of changed tax rates	-3	-1

Effect of different tax rates in foreign subsidiaries	2	5
Effect of income not subject to tax and non-deductible expenses	-7	-2
Effect of share of result of associates and joint ventures	3	3
Utilisation of previously unrecognised tax losses carried forward	1	7
Unrecognised taxes on losses carried forward	-6	-21
Other taxes*	-12	-11
Other temporary differences	-4	8
Income taxes for prior financial periods		-1
Tax charge in the consolidated statement of income	-123	-124
Effective tax rate (%)	25.6	22.5

<sup>\*</sup> Other taxes consist mainly of witholding taxes not utilised and taxes not related to income.

Income taxes related to other comprehensive income are presented in Consolidated statement of comprehensive income. Changes in deferred tax assets and liabilities are presented in Note 21. Deferred taxes.

Wärtsilä is subject to tax audits in some countries, which can result in tax reassessment decisions and obligations to pay additional taxes and related payments.

#### 12. Earnings per share

Earnings per share is calculated by dividing the net profit for the financial period attributable to equity holders of the parent company by the weighted average number of shares outstanding. During the financial periods there were no programmes with dilutive effect.

MEUR	2016	2015
Net profit for the financial period attributable to equity holders of the parent company	352	444
Thousands of shares		
weighted average number of shares outstanding*	197 241	197 241
Earnings per share attributable to equity holders of the parent company (basic and diluted):		
Earnings per share, continuing operations, EUR	1.79	2.14
Earnings per share, discontinued operations, EUR		0.11
Earnings per share (EPS), basic and diluted, EUR	1.79	2.25

 $<sup>^{\</sup>ast}$  Additional information on the number of shares is presented in Note 23. Equity.

#### 13. Intangible assets

#### Impairment testing of goodwill

Goodwill from acquisitions is allocated to the Group's cash-generating units (CGUs). CGUs are the lowest level of assets for which there are separately identifiable cash flows. Currently Wärtsilä identifies 3 (2) separate independent cash inflow CGUs to which goodwill can directly be linked as per the below table.

#### Cash-generating units

#### Goodwill

MEUR	2016	2015
Marine Systems International		172
American Hydro	23	
Eniram	34	
Power Business, other	1 056	931
Total	1 112	1 103

The recoverable amounts from the CGUs are determined based on value-in-use calculations. The calculations are made on a discounted cash flow method basis, derived from the order book and five-year cash flow projections from management approved strategic plans. The estimated cash flows of CGUs are based on utilisation of the existing property, plant and equipment in their current condition with normal maintenance capital expenditure, excluding any potential future acquisitions. Cash flows beyond the five-year period are calculated using the terminal value method. The terminal growth rate used in projections is based on management's assessment on conservative long-term growth. The terminal growth rate used is 2%.

The key driver for the valuation is the growth in the global economy and in particular the development of the global power market, the global shipbuilding industry and the demand for related services. The projected development of total costs in the market affects the profitability, whereas no single cost item is considered to have a material impact. The valuation driver for the new equipment sales is the growth in the global economy, whereas for after sales the drivers are also the demand for related services and the projected development in labour cost.

The applied discount rate is the weighted average pre-tax cost of capital (WACC) as defined by Wärtsilä. The components of the WACC are risk-free rate, market risk premium, industry specific beta, cost of debt and debt equity ratio. When defining the WACC for 2016, it has been considered that the general interest rate is currently on a lower level. Wärtsilä has used a WACC of 9.6% (8.9) in the calculations.

As a result of the impairment test, no impairment losses for the CGUs were recognised for the financial periods ended 31 December 2016 and 2015 respectively. The recoverable amounts from all CGUs exceeded their carrying values remarkably.

#### Sensitivity analysis

Sensitivity analyses have been carried out for the valuation of the recoverable amounts for the CGUs by changing the assumptions used in the calculations. A change in an assumption that would cause the recoverable amount to equal the carrying amount is presented in the table below.

	Change
Pre-tax discount rate:	
American Hydro	increase more than 3 percentage points
Eniram	increase more than 3 percentage points
Power Business, other	increase more than 18 percentage points
Terminal growth rate:	
American Hydro	decrease more than 5 percentage points
Eniram	decrease more than 4 percentage points
Power Business, other	decrease more than 90 percentage points
Profitability:	
American Hydro	decrease more than 25 percentage
Eniram	decrease more than 40 percentage
Power Business, other	decrease more than 60 percentage

In management's opinion, the changes in the basic assumptions shall not be seen as an indication that these factors are likely to materialise. The sensitivity analyses are hypothetical and should therefore be treated with caution.

#### 2016

MEUR	Develop- ment expenses	Construc- tion in progress and advances paid	Other intangible assets	Goodwill	Total
Cost on 1 January 2016	114	33	730	1 108	1 986
Changes in exchange rates	1		-15	-46	-60
Acquisitions			16	55	71
Additions		11	5		16
Disposals	-8		1		-8
Reclassifications		-3	5		2
Cost on 31 December 2016	107	41	743	1 118	2 008
Accumulated amortisation and impairment on 1 January 2016	-66		-450	-5	-522
Changes in exchange rates			8		8
Accumulated amortisation on disposals and other changes	4		-2		2
Amortisation during the financial period	-9		-50		-59
Impairments	-3				-3
Accumulated amortisation and impairment on 31 December 2016	-73		-495	-5	-574
Carrying amount on 31 December 2016	33	41	248	1 112	1 434

Development costs for internally generated assets capitalised during the financial period amounted to EUR 6 million (6). The carrying amount was EUR 68 million (80).

Purchase price allocation amortisation amounted to EUR 35 million (32) and the carrying amount was EUR 209 million (236).

#### 2015

MEUR	Develop- ment expenses	Construc- tion in progress and advances paid	Other intangible assets	Goodwill	Total
Cost on 1 January 2015	84	55	607	914	1 658
Changes in exchange rates	3	2	5	21	31
Acquisitions			132	172	304
Additions	1	8	6		14
Disposals			-20		-21
Reclassifications	27	-31	1		-1
Cost on 31 December 2015	114	33	730	1 108	1 986
Accumulated amortisation and impairment on 1 January 2015	-55		-421	-5	-479
Changes in exchange rates			-2		-2
Accumulated amortisation on disposals and other changes	-2		22		20
Amortisation during the financial period	-9		-51		-60
Accumulated amortisation and impairment on 31 December 2015	-66		-450	-5	-522
Carrying amount on 31 December 2015	48	33	280	1 103	1 464

### 14. Property, plant & equipment

### 2016

MEUR	Land and water	Build- ings and struc- tures	Machin- ery and equip- ment	Construction in progress and advances paid	Other tangible assets	Invest- ment proper- ties	Total
Cost on 1 January 2016	32	343	800	33	24	13	1 246
Changes in exchange rates		5	7				13
Acquisitions	1	6	6				14
Additions		3	28	7			38
Disposals		-9	-28			-1	-38
Reclassifications			23	-29			-5
Cost on 31 December 2016	34	349	834	12	25	12	1 266
Accumulated depreciation and impairment on 1 January 2016	-1	-162	-630		-20		-815
Changes in exchange rates		-2	-5				-8
Accumulated depreciation on disposals		8	26				33
Depreciation during the financial period		-15	-46		-1		-62
Impairments		-8	-6				-14
Reclassifications		1	1				4
Accumulated depreciation and impairment on 31 December 2016	-1	-179	-660		-21		-861
Carrying amount on 31 December 2016	33	170	174	12	4	12	405
Value of finance-leased assets included in carrying amount							1

Investment properties include land areas not used by the Group. Their estimated fair value is around EUR 21 million (23). During the financial period, investment properties were sold totalling EUR 1 million (1) generating a gain of EUR 1 million (1).

MEUR	Land and water	Build- ings and struc- tures	Machin- ery and equip- ment	Construc- tion in progress and advances paid	Other tangible assets	Invest- ment proper- ties	Total
Cost on 1 January 2015	26	319	806	53	27	14	1 247
Changes in exchange rates		1	7	-2			7
Acquisitions		1	5				8
Additions		11	29	25			65
Disposals	1	-17	-49		-1	-1	-67
Reclassifications	4	27	2	-42	-2		-12
Cost on 31 December 2015	32	343	800	33	24	13	1 246
Accumulated depreciation and impairment on 1 January 2015	-1	-159	-630		-23		-813
Changes in exchange rates		-3	-4				-7
Accumulated depreciation on disposals		13	45		1		58

Depreciation during the financial period		-15	-47		-1		-63
Reclassifications		2	6		1		10
Accumulated depreciation and impairment on 31 December 2015	-1	-162	-630		-20		-815
Carrying amount on 31 December 2015	33	181	168	32	4	13	431
Value of finance-leased assets included in carrying amount		1					1

### 15. Investments in associates and joint ventures

MEUR	2016	2015
Carrying amount on 1 January	89	90
Investments	9	9
Share of result	14	17
Dividends	-29	-32
Translation differences	1	3
Disposal of shares	-1	
Carrying amount on 31 December	84	89

In 2016, Wärtsilä invested EUR 9 million (9) in the joint venture CSSC Wärtsilä Engine (Shanghai) Co., Ltd and sold its 40% share in the China-based associated company Cosco-Shipyard Total Automation Co Ltd. The consideration received and the impact on net profit for the financial period were not significant.

### Summary of financial information (100%):

### 2016

MEUR		Holding %	Assets	Equity	Liabilities	Net sales	Profit for the financial period
Joint ventures							
Wärtsilä Qiyao Diesel Company Ltd.	China	50.0	30	21	9	19	
Wärtsilä Hyundai Engine Co Ltd.	South Korea	50.0	232	111	122	221	32
CSSC Wärtsilä Engine (Shanghai) Co., Ltd.	China	49.0	52	32	20		-4
Repropel Sociedad de reparacao de helices	Portugal	50.0	1	1		2	
Associated companies							
Wärtsilä Land & Sea Academy, Inc.	Philippines	40.0		-2	2		
Neptun Maritime AS	Norway	40.0	1	1		1	

CSSC Wärtsilä Engine (Shanghai) Co. Ltd factory is manufacturing medium and large bore medium speed diesel and dual-fuel engines at Lingang, Shanghai. Wärtsilä Hyundai Engine Co Ltd. manufactures Wärtsilä 50DF dual-fuel engines for LNG carriers and other marine application in Mokpo, South Korea.

MEUR		Holding %	Assets	Equity Li	abilities	Net sales	Profit for the financial period
Joint ventures							
Wärtsilä Qiyao Diesel Company Ltd.	China	50.0	34	24	10	25	
Wärtsilä Hyundai Engine Co Ltd.	South Korea	50.0	281	132	149	273	34
CSSC Wärtsilä Engine (Shanghai) Co., Ltd.	China	49.0	19	19			

Repropel Sociedad de reparacao de helices	Portugal	50.0	2	1	1	1	
Associated companies							
Wärtsilä Land & Sea Academy, Inc.	Philippines	40.0		-2	2		
Cosco-Shipyard Total Automation Co Ltd.	China	40.0	8	5	3	8	
Neptun Maritime AS	Norway	40.0	1	1		1	

### 16. Available-for-sale financial assets

Available-for-sale financial assets include unlisted shares. The fair value cannot be reliably measured for the unlisted shares, so the investment is carried at cost.

MEUR	2016	2015
Carrying amount on 1 January	15	16
Disposal of shares		-1
Carrying amount on 31 December	15	15

		2016		2015
MEUR	Cost	Market value	Cost	Market value
Unlisted shares (level 3)				
Other shares	15	15	15	15
Total shares	15	15	15	15

### 17. Inventories

MEUR	2016	2015
Materials and consumables	432	460
Work in progress	532	655
Finished products	36	41
Advances paid	42	44
Total	1 042	1 200

In 2016, EUR 17 million (22) impairment for obsolete inventories has been recognised in the consolidated statement of income. Acquisition-related increase in inventories is EUR 1 million (129).

### 18. Financial assets and liabilities by measurement category

MEUR	Financial assets/ liabilities at fair value through Cash the flow statement hedges of income	Loans and	financial	measured at	statement of financial position	Fair value
Non-current financial assets						
Available-for-sale financial assets			15		15	15
Interest-bearing investments		6			6	6
Other receivables		6			6	6

Current financial assets							
Trade receivables			1 220			1 220	1 220
Derivatives	9					9	9
Other receivables		10				10	10
Cash and cash equivalents			472			472	472
Carrying amount by category	9	10	1 704	15		1 738	1 738
Non-current financial liabilities							
Interest-bearing debt					520	520	531
Current financial liabilities							
Interest-bearing debt					108	108	108
Trade payables					502	502	502
Derivatives	31	13				45	45
Other liabilities					6	6	6
Carrying amount by category	31	13			1 136	1 181	1 192

### 2015

MEUR		Financial assets/ liabilities at fair value through the statement of income	Loans and receivables	for-sale	Financial liabilities measured at amortised cost	Carrying amounts of the statement of financial position items	Fair value
Non-current financial assets							
Available-for-sale financial assets				15		15	15
Interest-bearing investments			17			17	17
Other receivables			28			28	28
Current financial assets							
Trade receivables			1 394			1 394	1 394
Derivatives	9					9	9
Other receivables		11				11	11
Cash and cash equivalents			334			334	334
Carrying amount by category	9	11	1 772	15		1 807	1 807
Non-current financial liabilities							
Interest-bearing debt					492	492	503
Current financial liabilities							
Interest-bearing debt					232	232	232
Trade payables					510	510	510
Derivatives	28	4				32	32
Other liabilities					2	2	2
Carrying amount by category	28	4			1 236	1 268	1 279

Fair values of available-for-sale financial assets per hierarchies is presented in Note 16. Available-for-sale financial assets. Other financial assets and liabilities are included in level 2. Additional information on financial liabilities is presented in Note 25. Financial liabilities.

### 19. Other receivables

MEUR	2016	2015
Derivatives	9	9
Interest and other financial items	10	11

Insurance receivables	10	15
Rental accruals	5	8
Project accruals	10	14
Accruals from long-term contracts	295	172
Other accruals	47	39
Loan receivables	6	6
Defined benefit plans	1	1
VAT receivables	71	76
Other*	49	73
Total	512	424
Non-current	18	28
Current	494	396

<sup>\*</sup> Includes payroll related tax receivables of EUR 11 million (8) in Brazil, which cannot be utilised within a year, and for comparison period 2015 also a receivable of EUR 21 million from the disposal of the two-stroke engine business.

### 20. Cash and cash equivalents

MEUR	2016	2015
Cash and bank balances*	450	311
Current deposits	22	22
Total	472	334

 $<sup>^{\</sup>star}$  EUR 132 million (147) of cash and bank balances was not immediately available to the parent company.

### 21. Deferred taxes

### Changes in deferred taxes during 2016

MEUR	1 January 2016	Recognised in the consolidated statement of income		Translation differences		31 December 2016
Deferred tax assets						
Tax loss carry-forwards	26	-8		1		19
Pension obligations	23	-1	3			25
Provisions	32			1		32
Intragroup margin in inventories	10	-2				9
Fair value reserve	24		-11	1		12
Other temporary differences	42	1		1		44
Total	157	-9	-8	3		141
Deferred tax liabilities						
Intangible assets and property, plant and equipment	64	-7			2	59
Fair value reserve	1					1
Other temporary differences	36	-1				35
Total	102	-8			2	93
Net deferred tax assets/liabilities	55	-1	-8	3	-2	48

On 31 December 2016, the Group had temporary differences on which no deferred tax assets were booked totalling EUR 45 million (47), as it is uncertain if they will be realised. Most of the unrecognised deferred tax assets are related to cumulative tax losses. Of these, EUR 12 million (17) will expire within the next five years and the rest will expire later or never. The cumulative tax losses on which deferred tax assets have been booked will never expire.

### Changes in deferred taxes during 2015

MEUR	1 January 2015	Recognised in the consolidated statement of income		Translation differences		31 December 2015
Deferred tax assets						
Tax loss carry-forwards	27	-4		-1	2	24
Pension obligations	23	-1	-2	1	6	28
Provisions	27	-5			3	26
Intragroup margin in inventories	9					10
Fair value reserve	24			-1		24
Other temporary differences	35	-3		2	14	46
Total	144	-12	-2	2	23	157
Deferred tax liabilities						
Intangible assets and property, plant and equipment	30	-10		2	42	65
Fair value reserve	5		1	1		7
Other temporary differences	28	-5		2	4	29
Total	64	-15	1	4	46	102
Net deferred tax assets/liabilities	80	3	-3	-2	-24	55

### 22. Pension obligations

MEUR	2016	2015
Net defined benefit liabilities on 31 December	168	161
Liability for other long term employee benefits on 31 December	10	8

Wärtsilä has defined benefit plans for its employees mainly in Europe and Asia. The major plans are located in Switzerland, Germany, Great Britain and Sweden. The Swiss defined benefit plan accounts for 31% of the Group's total defined benefit obligations and 52% of the plans' assets. Most of the plans provide a lifetime pension to the members at the normal retirement age but there are also plans, which provide a lump sum payment at the retirement date. Most of these defined benefit pension plans are managed by pension funds. Their assets are not included in the Group's assets. The plans' assets are typically invested according to the investment strategies approved by the funds' Board of Trustees, or in some cases they are completely administered by insurance companies. Wärtsilä's subsidiaries make their payments to pension funds in accordance with the local legislation and practice. Authorised actuaries in each country have performed the actuarial calculations required for the defined benefit plans.

### The Swiss Plan

Wärtsilä operates a defined benefit plan in Switzerland in accordance with the local pension laws and regulations. The plan provides benefits to the members in the form of a pension payable after retirement. The level of benefits provided depends on the accrued retirement savings capital, which is a result of contributions paid up to retirement plus respective interest. The plan is run as a pension fund by the Board of Trustees separately from the company.

Contributions to the plan are paid both by the employees as well as by the employers based on a percentage of the insured salary as defined in the pension fund regulations. Contributions by the employers vary depending on the age of the employee and cover on average two thirds of the total contributions.

The investment strategy for a pension fund's asset is the responsibility of the Board of Trustees. Assets are invested in accordance with the strategy and the corridors for different investment categories as defined by local laws. Other risks of the plan are longevity of plan members as well as death or disability of employees before their retirement. The pension plan is reinsured

for the risk of death and disability until 31 December 2016. Inflationary increases for pensions in payment are at the discretion of the Board of Trustees as benefits paid by the plan are exceeding the minimum level required by law.

### The German Plans

Wärtsilä operates defined benefit plans in Germany in accordance with the local pension laws and regulations. The plans provide benefits to the members in the form of a pension payable after retirement. The level of benefits provided depends on the accrued retirement savings capital, which is a result of contributions paid up to retirement plus respective interest. The plans vary from unfunded plans to a plan run as a pension fund.

In some of the plans, contributions are paid to the plan both by the employees and the employers based on a percentage of the insured salary as defined in the pension fund regulations. However, in some plans only the employer is obliged to make the payments. Contributions by the employers vary depending on the age of the employee, the duration of the employment and also on the position of the employee.

The main risks of the plans are longevity of plan members and death or disability of employees before their retirement. In a funded plan, also the investment strategy chosen includes certain risk. Inflationary increases for pensions in payment are valuated on a yearly basis.

MEUR	2016	2015
Present value of unfunded defined benefit obligations	119	114
Present value of funded defined benefit obligations	206	200
Fair value of plan assets	-156	-152
Net liability in the statement of financial position	168	161

%	Present value of defined benefit obligations	Fair value of plan assets
Switzerland	31	52
Germany	22	4
Other Europe	38	34
Asia	8	10
Total	100	100

	Present value of		
	defined		Net defined
MEUR	benefit obligation	Fair value of plan assets	benefit liability
Balance on 1 January 2015	236	-136	100
Changes in exchange rates	9	-5	4
Acquisitions	75	-10	65
Recognised in the statement of income:			
Current service cost	11		11
Gains (-) / losses (+) on curtailments and settlements	-3	3	
Interest cost (+) / interest income (-)	6	-3	3
Remeasurements recognised in other comprehensive income:			
Return on plan assets, excluding interest income		-8	-8
Changes in demographic assumptions	-1		-1
Changes in financial assumptions	1		1
Contribution paid by the plan members	1	-1	
Contribution paid by the employer		-9	-9
Benefits paid	-24	17	-7
Balance on 31 December 2015	313	-152	161
Balance on 1 January 2016	313	-152	161
Changes in exchange rates	-4	2	-2
Recognised in the statement of income:			
Current service cost	9		10
Gains (-) / losses (+) on curtailments and settlements	-1	1	
Interest cost (+) / interest income (-)	6	-2	3

Remeasurements recognised in other comprehensive income:			
Return on plan assets, excluding interest income		-10	-10
Experience adjustments	-1		-1
Changes in financial assumptions	24		24
Contribution paid by the plan members	1	-1	
Contribution paid by the employer		-10	-10
Benefits paid	-24	16	-8
Balance on 31 December 2016	323	-156	168

### Plan assets invested in:

%	2016	2015
Shares and other equity instruments	23	26
Bonds and other debt instruments	31	32
Property	15	14
Other assets	30	28

### The main actuarial assumptions at the end of the financial period are (expressed as weighted averages):

%	2016	2015
Discount rate	1.51	2.06
Future salary growth	2.05	2.23
Future pension growth	1.17	1.14

On 31 December 2016, the weighted average duration of the defined benefit obligation was 12 years. The Group expects to contribute EUR 8 million to the plans during the next financial period.

Assumptions regarding future mortality are set based on actuarial advice in accordance with the published statistics and experience in each country. These assumptions translate into a weighted average life expectancy in years for a pensioner at the retirement age as follows:

	2016	2015
Plan participants retiring at the end of the financial period:		
Male	17.2	17.7
Female	19.4	19.6
Plan participants retiring 20 years after the end of the financial period:		
Male	18.2	19.5
Female	20.2	21.9

The following table presents a sensitivity analysis for each significant actuarial assumption showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the end of the financial period. This sensitivity analysis applies to the defined benefit obligation only and not to the net defined benefit pension liability in its entirety.

### Sensitivity analysis

### Effect to defined benefit obligation, MEUR

	Change in assumption	2016	2015
Discount rate	increase 1%	-35	-36
Discount rate	decrease 1%	47	46
Future salary growth	increase 1%	13	12
Future salary growth	decrease 1%	-7	-7
Future pension growth	increase 1%	30	31
Future pension growth	decrease 1%	-16	-16

### 23. Equity

Equity consists of share capital, share premium, translation differences, fair value reserve, remeasurements of defined benefit liabilities and retained earnings.

### Share capital and number of shares

### **MEUR**

Share capital	Number of shares and votes	Share capital	Share premium	Total
1 January 2015	197 241 130	336	61	397
31 December 2015	197 241 130	336	61	397
31 December 2016	197 241 130	336	61	397

Wärtsilä's share does not have a nominal value.

### **Share Capital**

The subscription price of a share received by the Company in connection with share issues is credited to the share capital, unless it is provided in the share issue decision that a part of the subscription price is to be recorded in the fund for invested non-restricted equity.

#### **Share Premium**

Share premium is restricted equity. It may be reduced in accordance with the rules applying to decreasing share capital in accordance with Finnish Limited Liability Companies Act. It can also be used to increase the share capital.

### **Translation differences**

Translating foreign subsidiaries' financial statements by using different exchange rates in the statement of comprehensive income and in the statement of financial position causes translation differences, which are recognised in equity. Translation differences of foreign subsidiaries' acquisition cost eliminations and post acquisition gains and losses are also presented in equity. The change in translation differences is recognised in other comprehensive income.

### Fair value reserve

Fair value reserve includes the change in the fair value of available-for-sale financial assets. Also the change in fair value in derivative financial instruments is included in fair value reserve, if the hedging is effective and eligible for hedge accounting. The change in items included in fair value reserve are recognised in other comprehensive income.

MEUR	Cash flow hedges
Difference between fair value and carrying amount on 1 January 2015	-89
Taxes related to fair value adjustments	23
Fair value reserve on 1 January 2015	-66
Transferred to the statement of income, net of taxes	16
Fair value adjustments	-23
Taxes related to fair value adjustments	4
Fair value reserve on 31 December 2015	-70
Transferred to the statement of income, net of taxes	44
Fair value adjustments	-16
Taxes related to fair value adjustments	4
Fair value reserve on 31 December 2016	-39

### Parent company's distributable funds

After the balance sheet date, the Board of Directors proposed that a dividend of EUR 1.30 per share be paid for the financial period 2016, total dividend payable being EUR 256 million. The remaining part of the retained profits will be carried further in the unrestricted equity. For the profit for the financial period 2015, a dividend of EUR 1.20 per share was distributed, totalling EUR 237 million, and the rest of the retained profits were carried further in the unrestricted equity.

Additional information on equity is presented in Notes to the parent company financial statements, in Note 10. Shareholders' equity.

### 24. Provisions

### 2016

MEUR	Litigation	Warranties	Onerous contracts	Restruc- turing	Other provisions	Total
Provisions on 1 January 2016	15	187	17	15	35	269
Changes in exchange rates		1				1
Additions	6	48	10	22	7	94
Used provisions	-1	-66	-9	-18	-8	-103
Released provisions	-2		-2	-2	-5	-11
Provisions on 31 December 2016	17	170	17	18	29	250
Non-current						44
Current						206

### 2015

MEUR	Litigation	Warranties	Onerous contracts		Other provisions	Total
Provisions on 1 January 2015	25	190	24	24	28	292
Changes in exchange rates		2				2
Acquisitions	6	8			7	19
Additions	2	84	11	11	16	123
Used provisions	-14	-97	-13	-17	-12	-154
Released provisions	-3		-4	-2	-6	-15
Provisions on 31 December 2015	15	187	17	15	35	269
Non-current						46
Current						223

Warranty provisions include estimated future warranty costs relating to products delivered. The amount of future warranty costs is based on accumulated historical experience. The standard warranty period is one year from the delivery onwards.

The Group is a defendant in a number of legal cases which arise out of, or are incidental to, the ordinary course of its business. These lawsuits concern mainly issues such as contractual and other liability, labour relations, property damage and regulatory matters. The Group receives from time to time claims of different amounts and with varying degrees of substantiation. There is currently one unusually sizeable claim. It is the Group's policy to provide for amounts related to the claims as well as for the litigation and arbitration matters when an unfavourable outcome is probable and the amount of loss can be reasonably estimated.

### 25. Financial liabilities

	Current	Non-current			
MEUR	< 1 year	1-3 years	3-5 years	> 5 years	Total
Loans from pension insurance companies*	10	8			18
Loans from other financial institutions*	95	137	187	186	606
Finance lease liabilities*	1				1
Other interest-bearing debt*	3				4
Trade payables	502				502
Derivatives	45				45
Other liabilities	6				6
Total	662	145	187	186	1 181
* Estimated interest expenses, total	8	12	10	5	34

Estimated contractual cash flows	670	157	197	191	1 215

### 2015

	Current	Non-current			
MEUR	< 1 year	1-3 years	3-5 years	> 5 years	Total
Loans from pension insurance companies*	27	18			45
Loans from other financial institutions*	72	170	112	189	544
Finance lease liabilities*	1				1
Other interest-bearing debt*	133				134
Trade payables	510				510
Derivatives	32				32
Other liabilities	2				2
Total	777	188	112	189	1 268
* Estimated interest expenses, total	8	10	8	8	34
Estimated contractual cash flows	785	198	120	197	1 302

Fair values of financial liabilities are presented in Note 18. Financial assets and liabilities by measurement category.

### 26. Other liabilities

MEUR	2016	2015
Project costs	479	557
Personnel costs	158	189
Derivatives	45	32
Interest and other financial items	6	2
Other accruals	63	68
VAT liabilities	25	18
Other	58	69
Total	834	935
Non-current	1	2
Current	833	933

### 27. Derivative financial instruments

The Group applies hedge accounting to significant foreign currency forward contracts. Detailed financial information is presented in Note 30. Financial risks.

MEUR	2016	of which closed	2015	of which closed
Nominal values of derivative financial instruments (level 2)				
Interest rate swaps	165		185	
Cross currency swaps	81			
Inflation hedges			1	
Currency forwards, transaction risk	2 788	478	2 205	678
Total	3 034	478	2 390	678

Fair values of derivative financial instruments (level 2)		
Interest rate swaps	-4	-4
Cross currency swaps	-10	
Currency forwards, transaction risk	-22	-18
Total	-35	-22

Foreign currency forward contracts are against transactional risks and fall due during the following 12 months. Interest rate swaps are denominated in euros and their average maturity is 26 months. The average maturity for cross currency swaps is 53 months.

Normally all of the Groups' derivatives are done under International Swaps and Derivatives Association's Master Agreements (ISDA). In case of an event of default under these agreements the non-defaulting party may request early termination and set-off of all outstanding transactions. These agreements do not meet the criteria for offsetting in the statement of financial position. The following table sets out the carrying amounts of recognised financial instruments that are subject to the above agreements.

MEUR	2016	2015
Gross fair values of derivative financial instruments subject to ISDAs		
Assets		
Currency forwards	9	8
Total	9	9
Liabilities		
Interest rate swaps	-13	-4
Currency forwards	-31	-27
Total	-44	-31
Net fair values of derivative financial instruments subject to ISDAs		
Assets	3	1
Liabilities	-38	-23
Total	-35	-22

### **Currency distribution of currency forwards**

MEUR	Order book	Net loans
Currency forwards		
USD	562	75
NOK	296	40
CHF	56	279
CNY	46	
JPY	34	
SGD		7
DKK	14	5
GBP	5	19
SEK	11	1
Other*	26	25
Total	1 049	451

<sup>\*</sup> Other does not include any material single currencies.

### 28. Collateral, contingent liabilities and other commitments

	Debt in the statement of	2016	Debt in the statement of	2015
MEUR	financial position	Collateral	financial position	Collateral
Mortgages given as collateral for liabilities and commitments				
Other commitments	19	10	20	10
Total	19	10	20	10
Chattel mortgages and other pledges and securities given as collateral for liabilities and commitments				
Loans from credit institutions	15	6	18	7
Other commitments		20		20
Total	15	26	18	27

MEUR	2016	2015
Guarantees and contingent liabilities		
on behalf of Group companies	921	743
Total	921	743
Nominal amounts of rents according to leasing contracts		
Payable within one year	34	29
Payable between one and five years	84	76
Payable later	30	29
Total	148	133

### 29. Related party disclosures

Related parties comprise the Board of Directors, the President and CEO, the Board of Management, the associated companies, and joint ventures.

### Management remuneration

	Benefits sta	Benefits recognised in the statement of income		
TEUR	2016	2015		
President and CEO				
Salaries and other short-term benefits	781	878		
Bonuses	179	342		
Share based bonuses	216	732		
Statutory pension costs	135	169		
Voluntary pension costs	182	404		
Deputy of President and CEO				
Salaries and other short-term benefits	386	562		
Bonuses	114	37		
Share based bonuses	216	531		
Statutory pension costs	32	70		
Voluntary pension costs	61	216		

81 74 86	
81 74 86	73 85 2 2
81 74	73 85
81 74	79 73 85
81 74	73
81	
	79
77	74
74	73
82	81
107	106
155	152
6 141	9 471
480	426
277	298
836	2 651
366	303
1 878	1 852
	366 836 277 480 6 141 155 107

The holdings of Wärtsilä shares of the President and CEO, and the members of the Board of Directors and Board of Management at the year end were 88,529 shares (68,834).

The President and CEO is entitled to retire on reaching 63 years of age. The members of the Board of Management are entitled to retire on reaching the statutory retirement age. One member of the Board of Management is entitled to retire earlier, on reaching 60 years of age. The Group has no loan receivables from the executive management or the Board of Directors. No pledges or other commitments have been given on behalf of management or shareholders.

### Business transactions with the associated companies and joint ventures

MEUR	2016	2015
Sales to the associates and joint ventures	42	46
Purchases from the associates and joint ventures	63	32
Receivables from the associates and joint ventures	7	11
Advances paid to the associates and joint ventures	19	25
Payables to the associates and joint ventures	12	19

Detailed financial information on the associated companies and joint ventures is presented in Note 15. Investments in associates and joint ventures.

### 30. Financial risks

### General

Wärtsilä has a centralised Group Treasury with two main objectives: 1) to arrange adequate funding for the Group's underlying operations on competitive terms and 2) to identify and evaluate the financial risks within the Group and implement the hedges for the Group companies.

The objective is to hedge against unfavorable changes in the financial markets and to minimise the impact of foreign exchange, interest rate, credit and liquidity risks on the Group's cash reserves, profits and shareholders' equity.

The Financial Risk Policy is approved by the Board of Directors. The Treasury employs only such instruments whose market value and risk profile can be reliably monitored.

### Foreign exchange risk

Foreign exchange exposures are monitored at the Business level and then netted and hedged at Group level. All fixed sales and purchase contracts are hedged. The estimated future commercial exposures are evaluated by the Businesses, and the level of hedging is decided by the Board of Management. Hedge accounting in accordance with IFRS is applied to most of the hedges of these exposures. The hedges cover such time periods that both the prices and costs can be adjusted to new exchange rates. These periods vary among Group companies from one month to two years. The Group also hedges its position of the statement of financial position, which includes receivables and payables denominated in foreign currencies. The Group does not expect significant losses from foreign exchange rate changes in 2017. The cancellation of orders could lead to ineffective currency hedge. Approximately 67% (64) of sales and 59% (57) of operating costs in 2016 were denominated in euros. The Group's profits and competitiveness are also indirectly affected by the home currencies of its main competitors: USD, GBP, JPY and KRW.

The instruments, their nominal values, and currency distribution used to hedge the Group's foreign exchange exposures are listed in Note 27. Derivative financial instruments.

Some Group companies in countries whose currencies are not fully convertible like Brazil have unhedged, intercompany loans nominated either in EUR or USD. Total amount of the loans is EUR 109 million (96).

Since Wärtsilä has subsidiaries and joint ventures outside the euro zone, the Group's equity, goodwill and purchase price allocations are sensitive to exchange rate fluctuations. At the end of 2016, the net assets of Wärtsilä's foreign subsidiaries and joint ventures outside the euro zone totalled EUR 1,071 million (1,036). In addition, goodwill and purchase price allocations from acquisitions nominated in foreign currencies amounted to EUR 613 million (591). In 2016, the translation differences recognised in OCI mainly come from changes in GBP exchange rate.

IFRS hedge accounting has been applied to EUR 1,468 million (1,837) currency forwards. A 10% change in the exhange rates would cause from these currency forwards an approximately EUR 109 million (147) net of tax impact on the equity. In 2016, EUR -16 million (-23) fair value adjustments related to cash flow hedges were recognised in equity. EUR -58 million (-21) of the fair value adjustments were transferred from equity to the statement of income as net sales or operating expenses during 2016. In 2016, the result from ineffective portion of the cash flow hedges was EUR -8 million (-1), which was booked in financial items and specified in Note 10. Financial income and expenses.

### **Currency distribution 2016**

%	Net sales	Operating costs	Trade receivables	Trade payables
EUR	67	59	68	76
USD	20	8	17	6
NOK	2	5	1	2
GBP	2	3	1	3
CHF		1		3
Other EU currencies	1	3		1
SGD	1	2	1	1
BRL	1	1	1	
INR	1	1	1	
CNY	1	3	1	3
JPY	1	1	1	2
Other currencies	4	11	6	3
Total	100	100	100	100

### Interest rate risk

Wärtsilä is exposed to interest rate risk primarily through market value changes to the net debt portfolio (price risk) and also through changes in interest rates (re-fixing on rollovers). Wärtsilä hedges interest rate exposure by using derivative instruments such as interest rate swaps, futures and options. Changes in the market value of these derivatives are recognised directly in the statement of income. Interest rate risk is managed by constantly monitoring the market value of the financial instruments and by using sensitivity analysis.

Interest-bearing loan capital at the end of 2016 totalled EUR 629 million (724). The average interest rate was 1.3% (1.3) and the average re-fixing time 25 months (20). At the end of 2016, a one percentage point parallel decrease/increase of the yield curve would have resulted in a EUR 15 million (15) increase/decrease in the value of the net debt portfolio, including derivatives.

Wärtsilä spreads its interest rate risk exposure by taking both fixed and floating rate loans. The share of floating rate loans as a proportion of the total debt can vary between 30–70%. At the end of 2016, the fixed rate portion of total loans was 69% (58) after

. . . . .

adjustment for interest rate derivatives. A one percentage point change in the interest level would cause a EUR 2 million (3) change in the following year's interest expenses of the debt portfolio, including derivatives.

Additional information related to loans can be found in Note 18. Financial assets and liabilities by measurement category and Note 25. Financial liabilities.

### Liquidity and refinancing risk

Wärtsilä ensures sufficient liquidity at all times by efficient cash management and by maintaining sufficient committed and uncommitted credit lines available.

The existing funding programmes include:

- Committed Revolving Credit Facilities totalling EUR 640 million (629).
- Finnish Commercial Paper programmes totalling EUR 800 million (800).

The average maturity of the non-current debt is 43 months (43) and the average maturity of the confirmed credit lines is 33 months (33). Additional information in Note 25. Financial liabilities.

At the year end, the Group had cash and cash equivalents totalling EUR 472 million (334) as well as EUR 640 million (679) non-utilised committed credit facilities. On 31 December 2016, Commercial Paper Programme was not utilised. On 31 December 2015, utilisation amounted to EUR 130 million. Wärtsilä minimises its refinancing risk by having a balanced and sufficiently long loan portfolio.

### **Revolving credit facilities**

#### **MEUR**

Year	Maturing	Available (end of period)
2016		640
2017	70	570
2018	160	410
2019	110	300
2020	110	190
2021	130	60
2022	60	

### Credit risk

The responsibility for managing the credit risks associated with ordinary commercial activities lies with the Businesses and the Group companies. Major trade and project finance credit risks are minimised by transferring risks to banks, insurance companies and export credit organisations.

The credit risks related to the placement of liquid funds and to trading in financial instruments are minimised by setting explicit limits for the counterparties and by making agreements only with the most reputable domestic and international banks and financial institutions.

The Group companies deposit the maximum amount of their liquid financial assets with the centralised treasury when local laws and central bank regulations allow it. The Group's funds are placed in instruments with sufficient liquidity (current bank deposits or Finnish Commercial Papers) and rating (at least single-A rated instruments or other instruments approved by the Group's CFO). These placements are constantly monitored by the Group Treasury, and Wärtsilä does not expect any future defaults from the placements.

### Aging of trade receivables

		2016		2015
MEUR	Trade receivables	of which impaired	Trade receivables	of which impaired
Not past due	763	1	957	2
Past due 1–30 days	124		121	
Past due 31-180 days	154	3	173	5

Past due 181-360 days	59	3	43	6
Past due 1 year	191	51	176	50
Total	1 291	58	1 470	63

In 2016, the result impact of write-offs was EUR -10 million (-12).

The Group sells trade receivables in an amount that is currently not significant compared to the trade receivables as a whole. Sold receivables have been de-recognised in the consolidated statement of financial position.

### **Equity price risk**

Wärtsilä has equity investments totalling EUR 12 million (11) in power plant companies, most of which are located in developing countries and performing well according to expectations. Additional information in Note 16. Available-for-sale financial assets.

### Capital risk management

Wärtsilä's policy is to secure a strong capital base to keep the confidence of investors and creditors and for the future development of the business. The capital is defined as total equity including non-controlling interests and net interest-bearing debt. The target for Wärtsilä is to maintain gearing below 0.50 and to pay a dividend equivalent to 50% of operational earnings per share.

MEUR	31.12.2016	31.12.2015
Interest-bearing liabilities, non-current	520	492
Interest-bearing liabilities, current	108	232
ash and cash equivalents	-472	-334
	157	390
Loan receivables	-7	-18
Net interest-bearing debt	150	372
Total equity	2 321	2 242
Gearing	0.07	0.17
In the capital management Wärtsilä also follows the gearing development:		
Equity and liabilities	5 391	5 589
Advances received	-516	-564
	4 874	5 025
Solvency ratio, %	47.6	44.6

### 31. Auditors' fees and services

The following remuneration was paid to auditors and accounting firms for audit based on applicable legislation and for other services.

In 2016, the AGM appointed the audit firm KPMG Oy Ab as Wärtsilä Corporation's auditor.

		2016		2015
MEUR	KPMG	Others	KPMG	Others
Audit	3.3	0.2	3.1	0.2
Tax advisory	0.9	0.2	0.8	0.2
Other services	0.4	0.1	0.4	0.1
Total	4.6	0.5	4.3	0.4

### 32. Exchange rates

In the consolidated financial statements there are approximately 60 currencies consolidated. The most significant currencies are presented here.

			Closing rates		Average rates
		31 December 2016	31 December 2015	2016	2015
AED	United Arab Emirates Dirham	3.87108	3.99814	4.05145	4.05655
BRL	Brazil Real	3.43050	4.31170	3.86195	3.68980
CHF	Switzerland Franc	1.07390	1.08350	1.09018	1.06763
CNY	China Yuan Renminbi	7.32020	7.06080	7.34958	6.97307
DKK	Danish krone	7.43440	7.46260	7.44536	7.45865
GBP	United Kingdom Pound	0.85618	0.73395	0.81890	0.72600
INR	India Rupee	71.59350	72.02150	74.35528	71.17370
JPY	Japan Yen	123.40000	131.07000	120.31377	134.28214
NOK	Norway Krone	9.08630	9.60300	9.29269	8.94169
SAR	Saudi Arabian Riyal	3.95361	4.08644	4.13639	4.14356
SEK	Sweden Krona	9.55250	9.18950	9.46731	9.35401
SGD	Singapore Dollar	1.52340	1.54170	1.52778	1.52507
USD	United States Dollar	1.05410	1.08870	1.10660	1.10962

### 33. Subsidiaries

Geographical area	Company name	Location	Activities	Share %
Europe	Wärtsilä Technology Oy Ab	Finland	Holding	100.0
	Wärtsilä Finland Oy	Finland	Production, sales and services	100.0
	Wärtsilä Projects Oy	Finland	Sales and services	100.0
	Wärtsilä Solutions Oy	Finland	Sales and services	100.0
	Wärtsilä Sweden AB	Sweden	Production, sales and services	100.0
	Wärtsilä Norway AS	Norway	Production, sales and services	100.0
	Wärtsilä Ship Design Norway AS	Norway	Sales and services	100.0
	Wärtsilä Moss AS	Norway	Production, sales and services	100.0
	Wärtsilä Oil & Gas Systems AS	Norway	Sales and services	100.0
	Wärtsilä Danmark A/S	Denmark	Sales and services	100.0
	Wärtsilä Svanehøj A/S	Denmark	Production, sales and services	100.0
	Wärtsilä Italia S.p.A.	Italy	Production, sales and services	100.0
	Wärtsilä France S.A.S.	France	Sales and services	100.0
	Wärtsilä Services Switzerland AG	Switzerland	Sales and services	100.0
	Wärtsilä Netherlands B.V.	The Netherlands	Production, sales and services	100.0
	Wärtsilä Kampen Real Estate B.V.	The Netherlands	Real estate	100.0
	Wärtsilä Ibérica S.A.	Spain	Production, sales and services	100.0
	Wärtsilä Portugal Lda.	Portugal	Sales and services	100.0
	Wärtsilä Deutschland GmbH	Germany	Sales and services	100.0
	Wärtsilä Serck Como GmbH	Germany	Production, sales and services	100.0
	Wärtsilä UK Ltd	Great Britain	Production, sales and services	100.0
	Wärtsilä Hamworthy Ltd	Great Britain	Sales and services	100.0
	Wärtsilä Valves Ltd	Great Britain	Production, sales and services	100.0
	Wärtsilä Water Systems Ltd	Great Britain	Production, sales and services	100.0
	Wärtsilä Greece S.A.	Greece	Sales and services	100.0
	Wärtsilä Polska Sp.z.o.o.	Poland	Sales and services	100.0
	Wärtsilä Ship Design Poland Sp.z.o.o.	Poland	Sales and services	100.0
	Wärtsilä Baltic Design Centre Sp.z.o.o.	Poland	Sales and services	100.0

	Wärtsilä-Enpa A.S.	Turkey	Sales and services	51.0
	Wärtsilä BLRT Estonia Oü	Estonia	Sales and services	51.7
	Wärtsilä Vostok, LLC	Russia	Sales and services	100.0
	Wärtsilä Hungary Kft	Hungary	Sales and services	100.0
	Wärtsilä Cyprus Limited	Cyprus	Sales and services	100.0
	Quantiparts B.V.	The Netherlands	Sales and services	100.0
	Wärtsilä SAM Electronics Nederland B.V.	Germany	Sales and services	100.0
	Wärtsilä JOVYATLAS EUROATLAS GmbH	Germany	Sales and services	100.0
	Wärtsilä ELAC Nautik GmbH	Germany	Sales and services	100.0
	Wärtsilä SAM Electronics GmbH	Germany	Sales and services	100.0
	Wärtsilä Funa International GmbH	Germany	Sales and services	100.0
	Wärtsilä APSS Srl	Italy	Sales and services	100.0
	Wärtsilä Lyngsø Marine A/S	Denmark	Sales and services	100.0
	Wärtsilä Valmarine AS	Norway	Sales and services	100.0
	Vulcan Insurance PCC Limited	Great Britain	Licensed insurer	100.0
	Eniram Oy	Finland	Sales and services	100.0
	Eniram Germany GmbH	Germany	Sales and services	100.0
	Eniram UK Ltd.	Great Britain	Sales and services	100.0
	Wärtsilä Malta Ltd.	Malta	Sales and services	100.0
The Americas	Wärtsilä North America, Inc.	USA	Sales and services	100.0
The Americas	Wärtsilä Defence Inc.	USA	Sales and services	100.0
			Sales and services Sales and services	
	Wärtsilä Canada Inc.	Canada		100.0
	Wärtsilä de Mexico SA	Mexico	Sales and services	100.0
	Wärtsilä Caribbean, Inc.	Puerto Rico	Sales and services	100.0
	Wärtsilä Dominicana Inc.	Dominican Republic	Sales and services	100.0
	Wärtsilä Guatemala S.A.	Guatemala	Sales and services	100.0
	Wärtsilä Chile Ltda.	Chile	Sales and services	100.0
	Wärtsilä Ecuador S.A.	Ecuador	Sales and services	100.0
	Wärtsilä Brasil Ltda.	Brazil	Production, sales and services	100.0
			Sales and services	
	Wärtsilä Colombia S.A.	Colombia		100.0
	Wärtsilä Peru S.A.C.	Peru	Sales and services	100.0
	Wärtsilä Argentina S.A.	Argentina	Sales and services	100.0
	Wärtsilä Venezuela, C.A.	Venezuela	Sales and services	100.0
	Antigua Energy Operators Ltd	Antigua and Barbuda	Sales and services	100.0
	Wärtsilä Panama Services S.A.	Panama	Sales and services	100.0
	Wärtsilä Operations Guyana Inc.	Guyana	Sales and services	100.0
	Wärtsilä Uruguay S.A.	Uruguay	Sales and services	100.0
	Wärtsilä FUNA International Inc.	USA	Sales and services	100.0
	Wärtsilä Dynamic Positioning Inc.	USA	Sales and services	100.0
	American Hydro Corporation	USA	Sales and services	100.0
	Eniram, Inc.	USA	Sales and services	100.0
Asia	Wärtsilä China Ltd.	Hong Kong	Sales and services	100.0
	Wärtsilä-CME Zhenjiang Propeller Co. Ltd.	China	Production, sales and services	55.0
	Wärtsilä Services (Shanghai) Co. Ltd.	China	Sales and services	100.0
	Wärtsilä Propulsion (Wuxi) Co. Ltd.	China	Production, sales and services	100.0
	Wärtsilä Suzhou Ltd.	China	Production, sales and services	100.0
	Wärtsilä Ship Design (Shanghai) Co., Ltd	China	Sales and services	95.0
	Wärtsilä Yuchai Engine Co. Ltd.	China	Production, sales and services	50.0
	Wärtsilä Singapore Pte Ltd	Singapore	Sales and services	100.0
	Wärtsilä Ship Design Singapore Pte Ltd	Singapore	Sales and services	100.0
	Wärtsilä Pumps Pte. Ltd.	Singapore	Production, sales and services	100.0
	Wärtsilä Japan Ltd.	Japan	Production, sales and services	99.7
	Wärtsilä India Ltd.	India	Production, sales and services	100.0
	Wärtsilä Vietnam Co Ltd.	Vietnam	Sales and services	100.0
	Wärtsilä Korea Ltd.	South Korea	Sales and services	100.0

	Wärtsilä Taiwan Ltd.	Taiwan	Sales and services	100.0
	Wärtsilä Philippines Inc.	Philippines	Sales and services	100.0
	PT. Wärtsilä Indonesia	Indonesia	Sales and services	100.0
	Wärtsilä Lanka Ltd.	Sri Lanka	Sales and services	100.0
	Wärtsilä Pakistan (Pvt.) Ltd.	Pakistan	Sales and services	100.0
	Wärtsilä Bangladesh Ltd.	Bangladesh	Sales and services	100.0
	Wärtsilä Azerbaijan LLC	Azerbaijan	Sales and services	100.0
	Wärtsilä Power Contracting Saudi Arabia Ltd.	Saudi Arabia	Sales and services	60.0
	Wärtsilä Gulf FZE	United Arab Emirates	Sales and services	100.0
	Wärtsilä LLC	United Arab Emirates	Sales and services	100.0
	Wärtsilä Ships Repairing & Maintenance LLC	United Arab Emirates	Sales and services	100.0
	Wärtsilä Hamworthy Middle East (FZE)	United Arab Emirates	Sales and services	100.0
	Wärtsilä (Malaysia) Sdn Bhd	Malaysia	Sales and services	100.0
	Wärtsilä Doha WLL	Qatar	Sales and services	100.0
	Wärtsilä Muscat LLC	Oman	Sales and services	100.0
	Wärtsilä SAM Electronics (Taizhou) Co., Ltd.	China	Sales and services	100.0
	Wärtsilä Marine Systems Korea Co Ltd.	South Korea	Sales and services	100.0
	Eniram Singapore Pte Ltd.	Singapore	Sales and services	100.0
Other	Wärtsilä Australia Pty Ltd.	Australia	Sales and services	100.0
	Wärtsilä New Zealand Ltd	New Zealand	Sales and services	100.0
	Wärtsilä PNG Ltd	Papua New Guinea	Sales and services	100.0
	Wärtsilä Egypt Power S.A.E	Egypt	Sales and services	100.0
	Wärtsilä South Africa (Pty) Ltd.	South Africa	Sales and services	100.0
	Wärtsilä Eastern Africa S.A.	Kenya	Sales and services	100.0
	Wärtsilä Uganda Ltd.	Uganda	Sales and services	100.0
	Wärtsilä West Africa S.A.	Senegal	Sales and services	100.0
	Wärtsilä Central Africa Ltd.	Cameroon	Sales and services	100.0
	Wärtsilä Central Africa Gabon	Gabon	Sales and services	100.0
	Wärtsilä West Africa Guinea	Guinea	Sales and services	100.0
	Wärtsilä Tanzania Ltd	Tanzania	Sales and services	100.0
	Wärtsilä Mocambique LDA	Mozambique	Sales and services	100.0
	Wärtsilä Marine & Power Services Nigeria Limited	Nigeria	Sales and services	100.0

Non-controlling interests are not significant in the Group's activities and cash flows in individual subsidiaries.

The list excludes subsidiaries, which do not have an impact on the profit or assets of the Group. A complete list of shares and securities in accordance with the Finnish Accounting Ordinance is included in the official financial statements of the parent company prepared with the Finnish Accounting Standards (FAS).

## **Parent company financial statements**

### Parent company income statement (FAS)

MEUR	2016	2015	Note
Other operating income	74	78	1
Personnel expenses	-33	-43	<u>2</u>
Depreciation, amortisation and impairments	-6	-8	<u>3</u>
Other operating expenses	-75	-80	
Operating result	-40	-52	
Financial income and expenses			<u>4</u>
Income from financial assets	286	270	
Interest income and other financial income	39	38	
Exchange gains and losses	2	4	
Interest expenses and other financial expenses	-36	-37	
	290	276	
Result before appropriations and taxes	250	224	
Change in depreciation difference	1	3	
Group contribution	34	53	
Result before taxes	286	279	
Income taxes	-4	-2	<u>5</u>
Result for the financial period	282	277	

### Parent company balance sheet (FAS)

MEUR	2016	2015	Note
ASSETS			
Fixed assets			<u>6</u>
Intangible assets			
Other long-term expenditure	9	12	
Construction in progress		1	
	9	13	
Tangible assets			
Land and water	7	8	
Buildings and structures	1	1	
Machinery, equipment and other tangible assets	1	1	
	9	10	
Financial assets			
Shares in Group companies	950	950	
Other shares and securities	2	2	
Cities shares and securities	951	951	
Total fixed assets	969	975	
Non-current receivables			
Receivables from Group companies	103	114	<u>7</u>
Loan receivables	1	2	<del>-</del> -
	104	116	
Current receivables			
	1,000	2 148	
Receivables from Group companies	1 996		8
Other receivables	7	2	
Prepaid expenses and accrued income	2 020	2 186	9
	2 020	2 100	
Cash and bank balances	304	159	
Total current assets	2 428	2 461	
Assets	3 398	3 436	

MEUR	2016	2015	Note
EQUITY AND LIABILITIES			
Equity			<u>10</u>
Share capital	336	336	
Share premium reserve	61	61	
Retained earnings	816	776	
Result for the financial period	282	277	
Total equity	1 494	1 450	
Accumulated appropriations			
Depreciation difference	2	3	
Provisions	19	20	
Liabilities			<u>11</u>
Non-current			
Loans from credit institutions	500	457	
Loans from pension insurance companies	8	18	
	508	475	
Current			
Loans from credit institutions	88	66	
Loans from pension insurance companies	10	27	
Trade payables	6	12	
Liabilities to Group companies	1 207	1 189	<u>13</u>
Other current liabilities	2	131	
Accrued expenses and deferred income	62	62	<u>12</u>
	1 374	1 487	
Total liabilities	1 882	1 963	
Equity and liabilities	3 398	3 436	

### Parent company cash flow statement (FAS)

MEUR	2016	2015
Cash flow from operating activities:		
Cash now from operating activities.		
Result before appropriations and taxes	250	224
Adjustments for:		
Depreciation and amortisation	6	8
Gains and losses on sale of intangible and tangible assets	-1	-1
Financial income and expenses	-289	-276
Cash flow before changes in working capital	-35	-46
Changes in working capital:		
Assets, non-interest-bearing, increase (-) / decrease (+)	18	37
Liabilities, non-interest-bearing, increase (+) / decrease (-)	-27	-39
	-9	-2
Cash flow from operating activities before financial items and taxes	-44	-48
Interest and other financial expenses	-35	-33
Dividends received from operating activities	286	270
Interest and other financial income from operating activities	39	38
Income taxes paid	9	-2
	298	273
Cash flow from operating activities	254	226
Cash flow from investing activities:		
Investments in shares		
Investments in tangible and intangible assets	-3	-3
Proceeds from sale of tangible and intangible assets	3	2
Cash flow from investing activities	1	-1
Cash flow after investing activities	255	225

Cash flow from financing activities:		
Loans receivables, increase (-) / decrease (+)	130	-923
Current loans, increase (+) / decrease (-)	-103	649
Proceeds from non-current borrowing	130	50
Repayments and other changes of non-current loans	-84	-123
Group contributions	53	112
Dividends paid	-237	-227
Cash flow from financing activities	-110	-461
Change in cash and bank balances, increase (+) / decrease (-)	145	-236
Cash and bank at beginning of period	159	395
Cash and bank at end of period	304	159

# Accounting principles for the parent company

The financial statements of the parent company, Wärtsilä Corporation, have been prepared in accordance with the provisions of the Finnish Accounting Standards (FAS).

The preparation of the financial statements requires management, in compliance with the regulations in force and good accounting practice, to make estimates and assumptions that affect the measurement and timing of the reported information. Actual results may differ from these estimates.

### Transactions denominated in foreign currencies and derivatives

Business transactions in foreign currencies are recorded at the rates of exchange prevailing on the transaction date. Receivables and payables on the balance sheet date are valued at the exchange rates prevailing on that date. Exchange gains and losses related to business operations are treated as adjustments to other operating income and operating expenses. Exchange gains and losses related to financing operations are entered under financial income and expenses.

Derivatives are measured at fair value. Open currency derivatives, including interest components, are valued at the balance sheet date. The fair value of interest rate swaps is calculated by discounting the future cash flows. Derivative changes in fair value are immediately recognised in financial income or expenses in the statement of income.

### **Research and development costs**

Research and development costs are expensed in the financial period in which they occur.

### **Receivables**

Receivables are valued to acquisition cost or to a lower probable value.

### Fixed assets and depreciation and amortisation

Fixed assets are valued in the balance sheet at their direct acquisition cost less accumulated depreciation and amortisation. Certain land areas also include revaluations.

Depreciation and amortisation is based on the following useful lives:

Other long-term expenditure 3–10 years
Buildings 20–40 years
Machinery and equipment 5–20 years

### Leasing

Lease payments are treated as rentals.

### **Provisions**

Provisions in the balance sheet comprise those items which the company is committed to covering either through agreements or otherwise, but which are not yet realized. Changes to provisions are included in the income statement.

### **Income taxes**

Income taxes in the income statement include taxes calculated for the financial year based on Finnish tax provisions, as well as adjustments to taxes in prior years. Taxes allocated to extraordinary items are shown in the notes to the financial statements.

### **Dividends**

Dividends proposed by the Board of Directors are not recorded in the financial statements until they have been approved by the Annual General Meeting.

## Notes to the parent company financial statements

### 1. Other operating income

MEUR	2016	2015
Rental income	1	1
Services to Group companies	71	75
Profit on sales of fixed assets	1	1
Other	1	2
Total	74	78

### 2. Personnel expenses

MEUR	2016	2015
Wages and salaries	27	36
Pension costs	4	5
Other compulsory personnel costs	2	2
Total	33	43

Salaries and remunerations paid to senior management

The President and CEO and his deputy and members of the Board of Directors

1 5

The President and CEO has the right to retire at the age of 63 years. The members of the Board of Management are entitled to retire on reaching the statutory retirement age. One member of the Board of Management is entitled to retire earlier, on reaching 60 years of age.

The Company's Board of Directors decides the remunerations of the President and CEO and his immediate subordinates.

Additional information about Management remuneration can be found in Consolidated Financial Statements Note 29.

Personnel on average during the year

282

279

### 3. Depreciation and amortisation

2016	2015
5	7
6	8
5	5
1	3

Depreciation difference		
Depreciation difference on 1 January	3	6
Change in the depreciation difference	-1	-3
Depreciation difference on 31 December	2	3

### 4. Financial income and expenses

MEUR	2016	2015
Dividend income		
From Group companies	286	270
Total	286	270
Other interest income		
From Group companies	23	20
Total	23	21
Other financial income		
From Group companies	9	11
From other companies	6	7
Total	15	17
Exchange gains and losses	2	4
Interest expenses		
To Group companies	-5	-4
To other companies	-9	-10
Total	-14	-14
Other financial expenses		
To Group companies	-7	-10
To other companies	-16	-13
Total	-22	-23
Financial income and expenses, total	290	276

### 5. Income taxes

MEUR	2016	2015
Income taxes		_
For the financial period	-2	-2
For prior financial periods	-2	
Total	-4	-2

### 6. Fixed assets

### Intangible assets

	Other intangible	Other	Construction		
MEUR			in progress	<b>Total 2016</b>	Total 2015
Acquisition cost at January 1	1	124	1	126	136
Additions		1		1	2
Disposals	-1			-1	-12
Reclassifications		1	-1		
Acquisition cost at December 31		126		126	126
Accumulated amortisation at January 1	-1	-112		-113	-119
Accumulated amortisation on disposals and other changes	1			1	12
Amortisation during the financial period		-5		-5	-7
Accumulated amortisation at December 31		-117		-117	-113
Carrying amount at 31 December 2016		9		9	
Carrying amount at 31 December 2015		12	1		13

### Tangible assets

MEUR	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Total 2016	Total 2015
				assets		
Acquisition cost at January 1	8	11	5	I	27	31
Additions			1		1	1
Disposals	-1		-1		-5	-5
Reclassifications						
Acquisition cost at December 31	7	11	5	1	27	27
Accumulated depreciation at January 1		-10	-5	-1	-16	-21
Accumulated amortisation on disposals and other changes						5
Accumulated depreciation at December 31		-10	-5	-1	-16	-16
Carrying amount at 31 December 2016	7	1	1		10	
Carrying amount at 31 December 2015	8	1	1			10

### Shares and securities

MEUR	Shares in Group companies	Shares in other companies	Total 2016	Total 2015
Acquisition cost at January 1	950	2	951	952
Additions				
Acquisition cost at December 31	950	2	951	951
Carrying amount at 31 December 2016	950	2	951	
Carrying amount at 31 December 2015	950	2		951

### 7. Non-current receivables

MEUR	2016	2015
Receivables from Group companies		
Loan receivables	103	114
Total	103	114

### 8. Current receivables from Group companies

MEUR	2016	2015
Trade receivables	7	6
Loan receivables	1 928	2 099
Derivatives	24	40
Prepaid expenses and accrued income	37	3
Total	1 996	2 148

### 9. Prepaid expenses and accrued income

MEUR	2016	2015
Derivatives	11	12
Other financial items	1	3
Income and other taxes		12
Insurance receivables	1	6
Other	2	2
Total	16	36

### 10. Shareholders' equity

MEUR	2016	2015
Share capital		
Share capital on January 1	336	336
Share capital on December 31	336	336
Share premium reserve		
Share premium reserve on January 1	61	61
Share premium reserve on December 31	61	61
Retained earnings		
Retained earnings on January 1	1 053	1 003
Dividends paid	-237	-227
Result for the financial period	282	277
Retained earnings on December 31	1 097	1 053
Total shareholders' equity	1 494	1 450
Distributable equity	1 097	1 053

### 11. Liabilities

MEUR	2016	2015
Non-current		_
Interest-bearing	508	475
Total	508	475
Current		
Non-interest-bearing	84	101
Interest-bearing	1 290	1 387
Total	1 374	1 487

### Debt with maturity profile

2016	Current	Long-	term	
MEUR	<1 year	1-5 years	>5 years	Total
Loans from financial institutions	88	314	185	588
Loans from pension institutions	10	8		18
Total	99	322	185	606

2015	Current	Long-term	1	
MEUR	<1 year	1-5 years	>5 years	Total
Loans from financial institutions	66	271	186	523
Loans from pension institutions	27	18		45
Total	93	289	186	568

### 12. Accrued expenses and deferred income

MEUR	2016	2015
Derivatives	44	29
Personnel costs	12	21
Interest and other financial items	3	8
Other	3	4
Total	62	62

### 13. Liabilities to Group companies

MEUR	2016	2015
Trade payables	6	5
Other current liabilities	1 191	1 164
Derivatives	9	18
Accrued expenses and deferred income	1	1
Total	1 207	1 189

### 14. Derivative financial instruments

MEUR	With external financial institutions	With Group companies	Total 2016
Nominal values of derivative financial instruments			
Currency forwards, transaction risk	1 573	1 190	2 763
Interest rate swaps	165		165
Cross currency swaps	81		81
			3 009
Fair values of derivative financial instruments			
Currency forwards, transaction risk	-22	18	-4
Interest rate swaps	-4		-4
Cross currency swaps	-10		-10
Total			-18

MEUR	With external financial institutions	With Group companies	Total 2015
Nominal values of derivative financial instruments			
Currency forwards, transaction risk	2 165	1 646	3 811
Interest rate swaps	185		185
			3 996
Fair values of derivative financial instruments			
Currency forwards, transaction risk	-18	22	4
Interest rate swaps	-4		-4
Total			

Foreign currency forward contracts are against transactional risks and are matched against the hedged cashflows. Interest rate swaps are denominated in euros and their average interest-bearing period is 26 months. The average maturity for cross currency swaps is 53 months.

### 15. Collateral, contingent liabilities and other commitments

	2016	2015
MEUR	Debt in balance sheet	Debt in balance sheet
Guarantees and contingent liabilities		
On behalf of Group companies	921	743
Total	921	743
Future nominal lease payments		
Payable within one year	2	2
Payable after one year	13	16
Total	16	18

### 16. Related party loans and other commitments

There are no loans receivables from senior management and the members of the Board of Directors. No pledges or other commitments were given on behalf of senior management or shareholders. In Note 29 in Consolidated Financial Statements, related party disclosures are specified. Related parties comprise the Board of Directors, the President and CEO, the Board of Management as well as the associated companies and joint ventures. In Notes 8 and 13 in Parent Company financial statement, receivables and liabilities from Group companies are specified.

### 17. Auditors' fees and services

The following fees were paid to auditors and accounting firms for audits and other services.

In 2016, the AGM appointed the audit firm KPMG Oy Ab as Wärtsilä Corporation's auditor.

### Auditors' fees

TEUR	2016	2015
Audit	158	191
Tax advisory	200	201
Other services	116	138
Total	474	530

## **Proposal of the Board**

The parent company's distributable funds total EUR 1,097,420,182.01, which includes EUR 281,705,697.79 in net profit for the year. There are 197,241,130 shares with dividend rights.

The Board of Directors proposes to the Annual General Meeting that the company's distributable earnings be disposed of in the following way:

### **EUR**

A dividend of EUR 1.30 per share be paid, making a total of	256 413 469.00
That the following sum be retained in shareholders' equity	841 006 713.01
Totalling	1 097 420 182.01

The dividend shall be paid in two instalments. The first instalment, EUR 0.65 per share, shall be paid on 13 March 2017. The Board of Directors shall make a decision on the payment day of the second instalment of EUR 0.65 per share in its meeting scheduled for 12 September 2017. As per the current rules of the Finnish book-entry system the payment day of the second instalment shall then be 21 September 2017.

No significant changes have taken place in the company's financial position since the end of the financial year. The company's liquidity is good and in the opinion of the Board of Directors the proposed dividend will not put the company's solvency at risk.

Helsinki, Finland, 26 January 2017

Mikael Lilius Sune Carlsson

Maarit Aarni-Sirviö Kaj-Gustaf Bergh

Tom Johnstone Risto Murto

Gunilla Nordström Markus Rauramo

Jaakko Eskola, President and CEO

### **Auditor's report**

This document is an English translation of the Finnish auditor's report. Only the Finnish version of the report is legally binding.

## To the Annual General Meeting of Wärtsilä Corporation Report on the Audit of the Financial Statements

### **Opinion**

We have audited the financial statements of Wärtsilä Corporation (business identity code 0128631-1) for the year ended 31 December, 2016. The financial statements comprise the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial performance and financial position in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial
  position in accordance with the laws and regulations governing the preparation of financial statements in Finland
  and comply with statutory requirements.

### **Basis for Opinion**

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Materiality**

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

Valuation of goodwill (EUR 1,112 million) and acquisition related intangible assets (EUR 209 million) - refer to accounting principles for the consolidated financial statements and notes 2 and 13 of the consolidated financial statements

### Key audit matter

- In recent years the group has expanded its operations through acquisitions. At year-end, the group had EUR 1,112 million in goodwill and EUR 209 million in acquisition related intangible assets being, 25% of total assets and 57% of total equity. In 2016, these assets increased by EUR 56 million and EUR 16 million, respectively, as a result of the acquisitions of American Hydro and Eniram.
- Irrespective of whether there is any indication of impairment, goodwill acquired through a business combination is required to be tested for impairment annually. An impairment arises when the recoverable amount is less than the carrying value of the investment.
- In Wärtsilä, acquisition related intangible assets have a definitive useful life, however, the useful lives and related amortization periods are assessed annually.
- The assumptions used to support the valuation of goodwill (e.g. discount rates and growth rates) are judgmental.

### Our response

- We have assessed the impairment tests prepared by management and related supporting third party evidence.
- We have challenged the assumptions used in respect
  of the forecasted growth rates and involved KPMG
  valuation specialists to assess the appropriateness of
  the discount rates used. This included comparison to
  economic and industry forecasts, where appropriate,
  as well as assessment over the technical
  appropriateness of the calculations.
- We have applied professional judgment when evaluating the forecasts by stress testing key assumptions and assessing the impact on the sensitivity analysis.
- In addition, we have assessed the adequacy and appropriateness of the notes in the financial statements on goodwill and impairment testing.
- For acquisition related intangible assets, we have challenged management's assumptions regarding the remaining useful life of identified intangible assets based on our own expectations and on our knowledge of the client and experience of the industry in which it operates as well as external data sources.

Business combinations: Purchase price allocation on acquisitions - refer to accounting principles for the consolidated financial statements note 2 of the consolidated financial statements

### Key audit matter

- In 2016, Wärtsilä acquired American Hydro and Eniram for a total of EUR 87 million. Acquisition accounting requires the fair value of the acquired assets and liabilities at the acquisition date to be determined. This involved complex valuation considerations and required the use of specialists. Goodwill arising from acquisitions was EUR 56 million and EUR 16 million was allocated to separately identified intangible assets.
- There is a risk of inappropriate judgment in determining the fair value of assets acquire and use

### Our response

• The purchase price allocation includes significant judgments in assessing the fair values of the assets and liabilities acquired. The fair values are based on the anticipated future performance of the acquired entities. With the involvement of KPMG valuation specialists, we have challenged and evaluated key assumptions made by management and their advisors. This include the challenge of the key assumptions made by management, such as the discount rates, royalty rates applied, and the projected financial information. of inaccurate forecasted financial and operational data in the valuations. There is also a risk that costs are provided for before there is an obligation and accounting policy differences arising from the acquisitions are not identified.

- We have performed audit procedures on the acquired opening balances
- We have evaluated the adequacy of disclosures in the group's financial statements.

Revenue recognition of long-term contracts - refer to accounting principles for the consolidated financial statements and notes 1, 4, 19, 24, 26 and 30 of the consolidated financial statements

### Key audit matter

- Revenue and costs of long-term projects, long-term operations and maintenance agreements, which are recognised according to their percentage of completion, are highlighted as requiring management judgment and estimates in Wärtsilä's accounting policies.
- There is risk of inappropriate percentage of completion accounting as this involves judgement over cost forecasts, estimated profits and/ or contingencies.

### Our response

- We have performed audit procedures over the controls in place to assess whether the percentage of completion for each significant long-term contract has been appropriately applied
- Our audit procedures included testing the recoverability of unbilled receivable balances and the adequacy of cost accruals within the contracts.

Adequacy of contract related provisions, including warranty provisions - refer to accounting principles for the consolidated financial statements and notes 24 and 26 to the consolidated financial statements

### Key audit matter

- Contract related provisions comprise obligations and disputes with customer and other contractual obligations.
- Accounting for warranty provisions and the associated judgments over costs to manage the warranty claims is highlighted as a key estimate in Wärtsilä's accounting principles
- There is a risk of unrecorded liabilities for contractual obligations and disputes and warranty accounting is based on inaccurate data and assumptions.
- For those exposures where provision is made, the
  use of estimates within those provisions gives rise to
  inherent subjectivity in the amounts recorded in the
  financial statements.
- For those exposures where no provision has been made, the obligation to disclose the nature and estimate of its financial impact gives rise to further

### Our response

- We have challenged management in respect of the reasonableness of judgments made regarding the cost to complete and contingency provisions to mitigate contract specific risks based historical and project specific information.
- We have also assessed whether management's policies and processes for making these estimates continue to be appropriate in the light of previous performance and are applied consistently to all contracts of a similar nature.

judgement in the disclosure within the financial statements.

### Responsibilities of the Board of Directors and the President and CEO for the Financial Statements

The Board of Directors and the President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the President and CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the President and CEO are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

### **Auditor's Responsibilities in the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error,
  design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and
  appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud
  is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,
  misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
  appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
  parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the President and CEO's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities
  within the group to express an opinion on the consolidated financial statements. We are responsible for the
  direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### **Other Reporting Requirements**

### Other information

The Board of Directors and the President and CEO are responsible for the other information. The other information comprises information included in the report of the Board of Directors and in the Annual Report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the report of the Board of Directors and the Annual Report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### Other opinions

We support the adoption of the financial statements. The proposal by the Board of Directors regarding the treatment of distributable funds is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO be discharged from liability for the financial period audited by us.

Helsinki January 26, 2017

KPMG OY AB

Virpi Halonen

Authorised Public Accountant, KHT

### **Quarterly figures**

MEUR	10-12/ 2016	7-9/ 2016	4-6/ 2016	1-3/ 2016	10–12/ 2015	7-9/ 2015	4–6/ 2015	1-3/ 2015
Order intake								
Marine Solutions	258	287	362	379	465	407	392	336
Energy Solutions	501	330	304	312	366	167	188	287
Services	565	522	527	580	572	511	579	662
Total	1 324	1 139	1 194	1 271	1 403	1 086	1 159	1 285
Order book at the end of the financial period								
Marine Solutions	2 017	2 317	2 488	2 595	2 558	2 699	2 785	2 239
Energy Solutions	1 680	1 676	1 547	1 491	1 366	1 388	1 459	1 619
Services	999	1 031	1 048	1 017	958	1 026	1 081	1 073
Total	4 696	5 024	5 083	5 103	4 882	5 112	5 325	4 931
Net sales								
Marine Solutions	509	390	433	335	598	448	354	321
Energy Solutions	414	177	220	132	374	243	327	182
Services	636	512	542	500	619	531	548	485
Total	1 559	1 079	1 196	967	1 590	1 222	1 230	988
Share of result of associates and joint ventures	5	2	4	3	6	5	5	2
Comparable adjusted EBITA	262	132	131	93	224	170	144	106
as a percentage of net sales	16.8	12.3	10.9	9.6	14.1	13.9	11.7	10.7
Depreciation, amortisation and impairment	-34	-31	-42	-31	-33	-32	-30	-29
Purchase price allocation amortisation	-9	-9	-9	-9	-9	-9	-7	-6
i dichase price anocation amortisation	- <b>J</b>	-3		-5		-3	- <i>r</i>	-0
Comparable operating result	253	123	122	84	215	160	137	100
as a percentage of net sales	16.3	11.4	10.2	8.7	13.5	13.1	11.1	10.1
Items affecting comparability, total	-22	-2	-26	-1	-13	-11		
Operating result	231	122	96	83	202	149	137	100
as a percentage of net sales	14.8	11.3	8.0	8.6	12.7	12.2	11.1	10.1
Financial income and expenses	-5	-7	-38	-3	-2	-17	3	-18
Profit before taxes	226	115	58	80	199	132	140	82
Income taxes	-55	-31	-17	-20	-41	-35	-31	-18
Profit for the financial period from the continuing operations  Profit/loss for the financial period from the discontinued	172	84	41	60	159	97	109	64
operations								22
Net profit for the financial period	172	84	41	60	159	97	109	86
Earnings per share (EPS), basic and diluted, EUR	0.87	0.43	0.19	0.30	0.79	0.49	0.54	0.43
Gross capital expenditure	20	55	60	11	32	17	279	18
Investments in securities and acquisitions		42	49		5		262	
Cook flow from operating estimation	005	100	200	10	170		A 7	0.7
Cash flow from operating activities	235	189	202	-13	176	-5	47	37

Working capital (WCAP) at the end of the financial period	490	540	602	709	543	522	404	296
Personnel at the end of the financial period								
Marine Solutions	6 074	6 305	6 443	6 681	6 847	7 101	7 217	5 587
Energy Solutions	903	920	945	958	959	966	974	975
Services	10 567	10 648	10 575	10 331	10 592	10 714	10 785	10 711
Other	467	464	465	457	459	456	451	433
Total	18 011	18 337		18 427			19 427	17 707