

# **Sustainability**

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# **Sustainability**

### 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

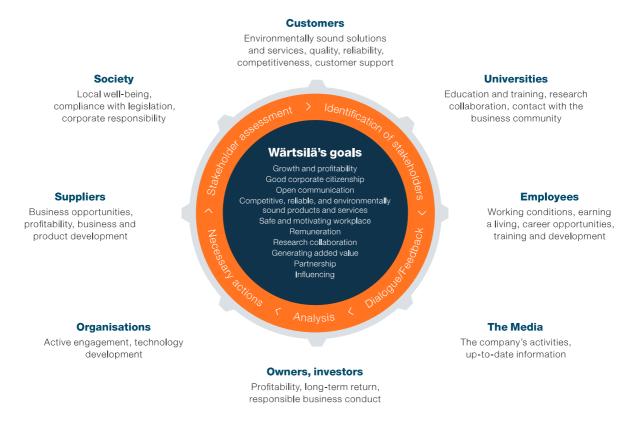
For the sustainability reporting purposes Wärtsilä has identified the following aspects as material: Environmental impacts of Wärtsilä's products and services, compliance with laws and regulations, economic impacts to stakeholders, personnel skills and development, anti-corruption and -bribery, and occupational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

- Introduction
- Openhese
- Openness
- Respect for human and labour rights
- Fair employment practices
- Conflict of interes
- Anti-corruption
- Environment
- Occupational health and safety
- Relationships with authorities and loca communities
- Innovation and protection of proprietary information
- Accuracy of accounting records
- Competition and fair dealing
- Anti-fraud
- Implementation
- Reporting violations
- Sanctions

#### **POLICIES**

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

### COMMUNICATION AND TRAINING

- Group-wide e-learning programmes for Code of Conduct and for Anticorruption Policy
- Information on intranet: dedicated pages for Code of Conduct and Compliance with information packages and presentation sets in multiple leavescent.
- Trainings via Skype meetings for implementing the Policies
- Tailored classroom trainings and trainings and trainings are trainings.

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	2012	2012
Customers	2016	2015	2014	2013	2012
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 *	5 025	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		140 713	143 833	143 810
Purchased electricity (MWh)	132 771	131 501	131 896	136 098	125 761
Generated electricity (MWh)		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		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 2016	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	Rate (%)
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			•
	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	UNGC
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		•

G4-50 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	Materials	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	Water		•	
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)	Emissions		•	
G4-EN17 Other indirect greenhouse gas emissions (scope 3)	<u>Emissions</u>		•	
G4-EN18 Greenhouse gas emissions intensity	Emissions		•	
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	1	'		
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 BARGA	INING			
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		•	

HUMAN RIGHTS GRIEVANCE MECHANISMS				
G4-HR12 Number of grievances about human rights filed, addressed, and resolved through formal grievance mechanisms	Compliance		•	
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	Compliance		•	
ANTI-COMPETITIVE BEHAVIOR		'		
G4-SO7 Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	<u>Compliance</u>			
Material aspect: COMPLIANCE		<u>'</u>		
G4-SO8 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	<u>Compliance</u>			•
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	<u>Compliance</u>			
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	<u>Compliance</u>			

CUSTOMER PRIVACY				
G4-PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Compliance			
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			•