

Wärtsilä Corporation Annual report 2013

Sustainability

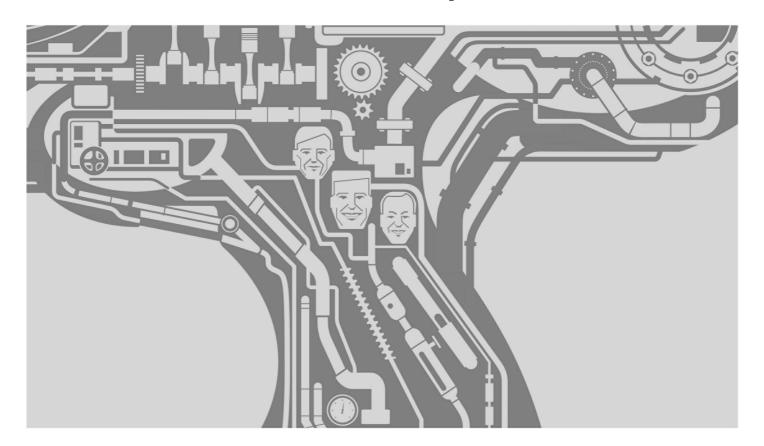




Table of contents

03	SUSTAINABILITY	43	Wärtsilä's R&D focus
		44	Ensuring reliability and safety
03	WÄRTSILÄ AND SUSTAINABILITY	45	Improving efficiency
03	Wärtsilä's sustainability goals	47	Reducing emissions to air
09	The value of sustainable innovation	50	Reducing emissions to water
10	Creating new solutions	51	Long-term research activities
13	Sustainability highlights 2013	52	Environmental performance indicators
20	SUSTAINABILITY MANAGEMENT	53	Materials, energy and water
20	Roles and responsibilities	56	Emissions and wastes
20	Guiding principles	60	Compliance with legislation
21	Code of conduct	61	Environmental costs and liabilities
24	QEHS Policy	62	PERSONNEL AND SOCIAL
24	Employee practices		PERFORMANCE
26	Tools and processes	62	Personnel
27	Management system	68	Occupational health and safety
28	Supply chain management	70	Human and labour rights
29	Local community approach	71	Preventing corruption and bribery
30	Security management	72	Political lobbying
30	Product design principles	72	Competition regulation
31	Stakeholder relations	72	Supplier development and performance
33	ECONOMIC PERFORMANCE	73	Product liability
34	Customers	73	Customer satisfaction
36	Suppliers	74	OUR FIGURES
36	Employees	74	Economic data
37	Public sector	75	Environmental data
38	Creditors and shareholders	76	Social data
39	Community support	77	REPORT SCOPE
39	Wärtsilä and emission trading	80	Reporting principles
39	ENVIRONMENTAL PERFORMANCE	81	Independent Assurance Report
42	Lifecycle approach	82	GRI AND UNGC INDEX

Wärtsilä and sustainability

As a global leader in complete lifecycle solutions for the marine and energy markets, Wärtsilä has a key role in providing sustainable solutions for the shipping and energy sectors. We support our solutions globally during their entire lifecycle. This creates the basis for our sustainability work, which is supported by our commitment to responsible business conduct.

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, Smart Power Generation, gas as a fuel and environmental solutions, all of which contribute to a more sustainable future in both the energy and the shipping industry.

Our strength is our technological leadership and therefore technology plays a central role in our sustainability work. The Power Plants and Ship Power 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 annual basis. Based on the current assessment, the sustainability risks are considered to be at low level. Generally speaking sustainability can be seen as an opportunity for Wärtsilä.

Wärtsilä's sustainability goals

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:

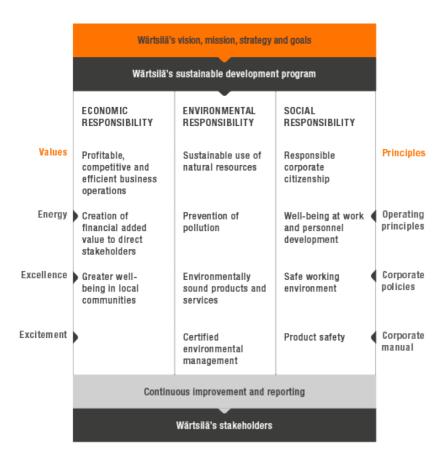
- Economic: profitability
- Environment: environmentally sound products and services
- Social: responsible business conduct

The other core areas of sustainability are 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 sustainability targets for the core areas.

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

Sustainability impact	Local	Global
Economic	×	
Environmental		
- Product related	×	X
- Operational	×	
Social	X	

Wärtsilä's sustainability approach



Sustainability targets

Wärtsilä's targets for reducing GHG and other emissions

Target	Schedule	Status
To reduce energy consumption by at least 10% in terms of absolute consumption (GWh) by 2016 compared to mean energy consumption in 2005.	2016	The Wärtsilä energy audit scheme was completed during 2013. The energy audits identified the savings potential and measures to improve energy efficiency. During 2013, Wärtsilä continued to conduct energy reviews for identifying energy saving potential for companies outside the audit scope. Energy saving actions are monitored on an annual basis. By 2013, energy savings of 35.6 GWh have been reached, which represents about 76% of the final target.
To create solutions for enabling medium-sized LNG to replace liquid fuel infrastructure.	2015	The operation of a biogas liquefaction plant producing biofuel for busses in Oslo has started. The plant can replace diesel in up to 135 busses, and reduce CO ₂ emissions by 10,000 tonnes a year. A turnkey contract signed for a LNG terminal to be built in Tornio.
To enable emission reductions through gas conversion projects.	2015	Since 2004, Wärtsilä has performed gas conversions for more than 23 power plants and one marine installation, totalling 886 MW. In 2013 several customer seminars were held regarding gas conversions as well as one global webinar concentrating on gas as a fuel and gas conversions.
To increase total net electrical efficiency in simple and combined cycle power plants in cyclic operations.	2015	Wärtsilä has continued developing fast starting and stopping capabilities of engines. Significant improvements in both starting and stopping times have been reached. Thereby also the cyclic efficiency of the power plants has increased, both in simple and combined cycle mode. Fast start up and loading released for W34 engine based plants. Start to full load now achieved in 2 minutes. Wärtsilä has also developed concepts for minimising the environmental impact depending on the amount of operating cycles per year. This has been achieved by minimising the stand by energy consumption through the utilisation of new technologies and improved engine control systems. Furthermore, major developments have been achieved in ramp up and ramp down rates, enabling optimal fuel economy at transient loads and maximum revenues from reserve markets.

To influence developing dynamic power markets in order to enable wide scale renewable integration.	2015	Wärtsilä has participated in many studies which have assessed the value of flexibility for the power systems. Wärtsilä has also assessed various power market models and their ability to secure adequate flexibility in the power systems. Wärtsilä has conducted an active dialogue with various stakeholders concerning dynamic power markets.
To enable the reduction of power losses by 3-5% in electrical propulsion using medium voltage system.	2015	A solution released for pilot sales. Full scale validation and verification of MV frequency converter will start in first-half of 2014, and of MV LLC in second-half of 2014.
To develop performance management solutions for different vessel types enabling better efficiency of the plant.	2012	Development of LNG carrier energy efficiency concept proceeding according to schedule. Concept piloting will be executed during 2014.
To develop 10 new Wärtsilä Optimiser solutions enabling customer to optimise the lifecycle performance.	2015	Global platform roll-out was delayed in 2013, but individual solution development continued. Platform development focus was placed on supporting W3C and other energy efficiency advisory applications and services, such as SEEMP reporting as part of Marine Agreements offering development.
To reduce GHG emissions by 3% through improving the engine efficiency.	2015	Technology has been tested in the laboratory during 2013. The release of the new technology is scheduled for 2014.
To expand the gas portfolio.	2015	LNGPac sold to 8 installations in 2013.
To stimulate growth for LNG-fuelled OSV's.	2015	Wärtsilä received: - additional orders for LNG powered OSVs in the Gulf of Mexico market - additional orders for LNG powered OSVs in the North Sea market - additional orders for LNG carriers for global trade - repeat order for Oil&Gas FPSO topside power module application.
To expand the field of LNG applications beyond present vessel types and to facilitate LNG re-engining.	2015	Orders for vessels for regional trade: - dual-fuel engines, propulsion equipment and cargo handling package for Evergas. Order for passenger ferries: - Societe des Traversies Quebec passenger ferries - first gas fuelled ferry for a domestic route in Denmark for Danish municipality Samsø Kommune.
To deliver environmental and energy efficiency consultancy projects: 10 projects.	2015	During 2013 Wärtsilä has focused mostly on consultancy projects related to reduction of air and water pollution. Altogether over 10 environmental and energy efficiency consultancy projects have been sold.

In addition to the targets presented above, Wärtsilä has set internal sales targets for its environmental products.

Wärtsilä's targets for reducing the emissions to the water

Target	Schedule	Status
To develop further dry concepts for high-efficiency combined cycle solutions.	2015	The dry concepts for high efficiency combined cycle solutions have been developed with promising results. The dry concept for Flexicycle has been developed and optimised. Cost and performance has been verified with information from latest Flexicycle projects. Efficient steam turbine performance has also been verified in delivered project.

Wärtsilä's targets for improving the overall performance

Target	Schedule	Status
To conduct 3 lifecycle assessments.	2015	The potential product categories for the lifecycle assessment have been reviewed. First lifecycle assessment started in 2013.

Wärtsilä's social targets

Target	Schedule	Status
To make Wärtsilä a workplace where all employees have the	Continuous	Open vacancies filled: 54% internal selections and 46% external selections.
opportunity to show their best and develop their career – to build a		4.1 trainings days/employee during 2013.
company of equal opportunities.		
- Target 2013: More than 50% of the open vacancies* filled from		
vacancies illed from		

internal applicant pool including promotions and lateral moves. - Target 2013: An average of 5 training days/employee per year.		
To develop a new way of working in supplier relations, safeguarding Wärtsilä's sustainability commitment. - Target 2013: Implementation of revised model for supplier assessment and development.	2015	The model for supplier assessment and development was reviewed in 2012, and the process has been updated and applied in 2013. As a result of this review, periodical assessment of key suppliers is now required. In 2013, a Supplier Handbook was issued and communicated to suppliers better addressing Wärtsilä's requirements to suppliers. A noteable part of this handbook describes sustainability related requirements for suppliers.
Development discussion coverage 100%.	Continuous	91% of all personnel have completed development discussions in 2013.
To implement certified EHS management systems in all subsidiaries (excluding purely sales offices).	Continuous	3 new OHSAS 18001 certified companies and 2 new ISO 14001 certified company during 2013. The management system coverage is presented in the management system section.
To reach the long-term goal for zero lost time injuries.	Continuous	In 2013, Wärtsilä continued improving, consolidating and spreading the safety culture. Over 6,900 employees completed the 4-hour elearning focusing on Wärtsilä's Zero Injury approach. The positive trend continued, the lost-time injury frequency rate was 4.4 compared to the previous year's 5.5.
To ensure Code of Conduct commitment throughout the organisation. - Target 2012-2013: 95% coverage of participation in Code of Conduct learning module.	2013	At the end of 2013 16,950 employees covering 91% of total employees has successfully participated in the training.
To reinforce the Anti- corruption/broker training of key employee groups and obtaining anti-	2014	The Anti-Corruption ABC e-learning course was tailored and launched first in English and later in 10 additional languages both as online and offline versions in 2013.

corruption commitments from all key employees trained.		A total of 11,321 employees had completed the e-learning course by the end of 2013.
- Target 2012: To identify the key employees (all sales personnel, company presidents and controllers) to be included in the training by each business.		
- Target 2013: Training of key employees to achieve 85% completion rate.		
- Target 2014: Training of all employees to achieve 80% completion rate.		
To conduct three community support projects by 2015.	2015	Wärtsilä supported the building of school in South Sudan. The school was inaugurated in August 2013. Altogether 2 projects conducted. Wärtsilä ParticipAid framework was launched and first pilot company utilised the framework in UAE.
To improve well-being at work and increase productivity by reducing the sickness day cost.	2015	Analysis done, action plan agreed, and implementation in progress. Examples of actions taken: Individual health situation analysis every second year Co-operation with health care service provider.
- Target 2012: To conduct analysis and action plans for improvement in Germany, Finland, Spain, Norway and Italy.		
* Open vacancies in job le	evels 3-6	

The value of sustainable innovation

Our most important contribution to sustainability is to supply environmentally sound solutions and services, which enable our customers to develop their business in a sustainable way. This requires us to continuously invest in technology development and in an ongoing search for new solutions that are more efficient and environmentally sound.

Investing in research and product development benefits Wärtsilä's customers as well as the environment, both in the short-term and over a longer time span. The growth in the world's energy needs, combined with increasingly stringent environmental requirements and the scarcity of natural resources create a challenging operating climate for companies in Wärtsilä's line of business. Wärtsilä has responded to these challenges by improving the energy efficiency of its products while simultaneously reducing their emissions. As part of sustainable innovation approach Wärtsilä has also assessed the benefits of its existing solutions on the system level, e.g. for power systems.

Wärtsilä gives strong priority to developing and applying technologies that reduce the environmental impact of its products. In order to meet the needs of our customers, to be prepared for future requirements and to remain an industrial frontrunner, Wärtsilä's product development must be at all times innovative, determined and willing to explore new technologies. We strive to develop environmentally sound products and solutions across a wide front, including technologies related to efficiency improvement, the reduction of gaseous and liquid emissions, waste reduction, noise abatement as well as effluent and ballast water treatment. With a proactive approach to meeting future demands, Wärtsilä has developed both primary and secondary abatement technologies and broadened the range of usable fuels.

Key features of Wärtsilä's environmentally sound solutions include:

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

By combining the key features and by understanding system level benefits of our offering, we are able to provide solutions for enabling the development of sustainable shipping and sustainable power systems.

Creating new solutions

Enabling gas operations in ships

Wärtsilä's dual-fuel (DF) technology offers both flexibility in fuel choice and environmental advantages when operated in gas mode. Emissions of CO₂, NO_x, SO_x and particulates are significantly reduced, while the DF technology provides the possibility to run the engine on liquid fuel should gas not be available. It also allows a choice of fuel based on cost and availability. The use of DF technology with gas as a fuel option is an optimal solution for vessels that spend a lot of time in ECA zones, and for vessels that carry gas with them, such as LNG carriers. Wärtsilä is developing a complete portfolio of medium-speed gas engines and related fuel

handling systems for LNG tankers and gas-fuelled ships. In 2013, Wärtsilä introduced its 2-stroke dual-fuel engine technology. The Danish tanker operator Terntank Redri A/S selected Wärtsilä's new 2-stroke, low pressure, dual-fuel engine to power their two new tankers.

Enabling LNG as fuel on LPG carriers combined with an onboard cargo handling system lowers fuel consumption

Wärtsilä is developing a combined LNG fuel and cargo handling system for Liquefied Petroleum Gas carriers. The system utilises the cold energy from the LNG fuel to liquefy the cargo boil off vapor during the voyage. The expected emission reductions from the auxiliary engines alone are in the region of 3.5-4.5 tons/day/ship. Wärtsilä has also developed a solution to utilise associated gases, previously considered as waste, to be converted into a valuable resource of energy. This solution is based on patented Wärtsilä Gas Reformer technology.

Developing groundbreaking technology to cut emissions

Wärtsilä and ABB Turbo Systems are co-operating in a joint programme to develop a new and groundbreaking application for two-stage turbocharging on large diesel engines. This advanced engine technology, together with two-stage turbocharging, offers significant advantages in fuel consumption and engine emissions. In this programme, Wärtsilä is focusing on developing an advanced engine technology, which with the turbocharger, is able to reach the highest possible performance, thus creating a cost-effective commercial solution for its customers. ABB Turbo Systems is delivering the turbocharging technology with defined performance parameters in terms of airflow, pressure ratios and efficiency. The technology will be implemented in specific market segments where lifecycle costs are of the highest importance. In 2012, first industrialised engine was delivered from the Vaasa factory where the engine's performance, as well as the manufacturing process, were validated. In order to fully utilise the potential of two-stage turbocharging, Wärtsilä has further developed technologies that enable engine optimisation over a vide load range.

Technologies such as variable valve and fuel systems have been developed, and during 2013 plans for industrialising these technologies were initiated. By ensuring optimum engine operation at part load Wärtsilä's customers can further reduce improve their operational costs.

Enabling liquefied biogas to be available for public transportation

Wärtsilä delivered the first biogas liquefaction plant to the Municipality of Oslo in November 2013. The production of liquid biogas commenced at start-up, indicating a success first installation of the technology. The control of the system is fully automated, which is an important step developing a fully commercial product for industrial owners. The produced bio-LNG will be used in 135 city-buses, which reduces the CO₂ emissions by approximately 10,000 tons annually. Based on experience from the first delivery, extensive work has been carried out to standardise the biogas liquefaction technology and product. Wärtsilä currently offers three different capacity classes adapted to marked needs. Standardisation is vital for reducing cost and improving competitiveness.

Enabling ship power production from captured recovered emissions of Volatile Organic Compounds

Wärtsilä continues to improve the efficiency of power production by utilising ship based VOC recovery systems. This is achieved by closely integrating the VOC recovery plant with a dedicated combustion and power unit. The systems can be utilised effectively on shuttle tankers, floating storage units and oil terminals.

They are designed to recover up to 100% of the VOC emissions, and enable full usage of the recovered products replacing HFO and diesel.

Enabling re-liquefaction of LPG compositions from shale gas and with improved efficiency.

Very Large Gas Carriers, VLGC's, are the largest gas carriers transporting LPG. Their typical size is 84,000 cu.m. These ships are equipped with reliquefaction plants to handle the boil off from the cargo tanks. Wärtsilä has developed a new generation of reliquefaction plants with improved efficiency. The plants are capable of handling high ethane content propane compositions, which is a new requirement related to trading of LPG from US shale gas process plants. The new developed process cycle from Wärtsilä allows up to 8-9% ethane in the LPG, compared to a maximum of 5% previously. The plant enables a 15-20% reduction in power consumption, with a direct reduction in the fuel consumption of the auxiliary engines.

Expanding fuel flexibility

Wärtsilä's power plant solutions are fuel flexible. The plants can be designed as multi-fuel plants and can even be converted from one fuel to another during the plant's lifecycle. Wärtsilä sees an increasing demand for large scale multi-fuel power plant projects, especially in those markets where a natural gas infrastructure is under development. Wärtsilä multi-fuel power plants can provide electricity from day one with various liquid fuels, and then switch to gas when it becomes available. This approach maximises the plants' availability and efficiency over the lifecycle. Wärtsilä is devoting more resources to the use of alternative fuels as part of its proactive approach to providing cost-effective, flexible, and environmentally sound solutions for its customers. Wärtsilä is studying and testing different fuel sources, such as vegetable oils, animal fats and emulsions, in its fuel laboratory. Recently Wärtsilä has tested engines running on tyre based pyrolysis oil, oil from a rock burning refinery process, different kinds of condensates coming from oil and gas wells, jatropha oil, fish oil, chicken oil, traditional animal fats, and different kinds of synthetic oils. In addition Wärtsilä has tested and developed solutions for operating engines on condensates, which enables them to operate on locally available fuels in oil fields and to utilise flare gases, thereby reducing greenhouse gas emissions.

In 2013, Wärtsilä began constructing the world's largest tri-fuel power plant, IPP3 in Jordan. The plant will initially run on heavy fuel oil, but as soon as the new gas infrastructure has been built and gas is available, the plant will switch to gas with minimal modifications.

Enabling a global transition to a more sustainable electricity infrastructure

Wärtsilä develops its products and market approach to offer high value solutions for a more modern and sustainable energy infrastructure. Wärtsilä's flexible power solutions make it possible to install much larger quantities of variable, non-dispatchable wind and solar power capacity to the electrical systems without jeopardizing system stability. The same flexible power plant solutions offer unique value in grid contingency situations where dynamic features, such as extremely fast starting (<5 minutes to full load), loading and stopping, are of paramount importance. Additional benefits include a high energy efficiency level over a wide load range, multifuel operation, no water usage, and the ability to locate the power generation facility within the load pockets, i.e. in cities, even in California where they have the most stringent emission requirements. Combining wind power with Wärtsilä's dynamic gas power plants offers noteable potential for dramatically reducing CO₂ emissions worldwide.

In order to ensure the security of the national power supply even in an emergency, Wärtsilä is delivering a grid reserve power plant for Estonia during 2013-2014. The plant will be able to start even in a scenario where all

power has completely been lost, and will reach full output in less than 10 minutes – either running on gas or light fuel oil.

Enabling efficient performance without water consumption

Standard Wärtsilä power plants are equipped with closed loop cooling systems. The system enables efficient performance without water consumption. This feature is available also for the Wärtsilä Flexicycle [TM] plants, where waste heat, in form of steam, is used for additional power generation. Continuous work is ongoing in order to increase the electrical efficiency without water consumption. The Dominican Republic received a major addition to its grid in 2013, as Wärtsilä commissioned a multi-fuel Flexicycle power plant. Despite extreme tropical conditions, the power plant will efficiently cater for the needs of both the national utility and a closely located gold mine. In this power plant the steam turbine is cooled by cooling towers. The same plant technology is available with closed loop cooling system for places where water availability is limited.

Sustainability highlights 2013





10.1. The new P-63 FPSO vessel, featuring Wärtsilä 50DF dual-fuel engines, the first such ship to produce more than 100 MWe of power with gas engines, completed the full 100% load tests.



13.1. Maiden Voyage of M/S Viking Grace, the world's largest LNG-fuelled passenger vessel, powered by Wärtsilä.



4.2. Wärtsilä contracted to supply a 220MW natural gas fuelled power plant in Oregon, USA, to accommodate rapidly changing input levels of renewable energy sources to the grid.

ANNUAL REPORT 2012

8.2. Wärtsilä's Sustainability report 2012 published as part of the Annual Report.



18.3. Wärtsilä launches GasReformer product for turning oil production gas into energy.



18.3. Wärtsilä Diversity Initiative launched.





12.4. Wärtsilä 34DF dual-fuel engines received certification of emission standard compliance from the US Environmental Protection Agency.



15.4. Wärtsilä contracted to supply total integrated solutions for new series of the most environmentally sustainable LNG carriers in the world for a Danish operator.



15.4. Wärtsilä Propulsion Wuxi exceeds 800 days with zero Lost Time Injuries.



6-9.5. Wärtsilä GasReformer product was recognised by the Offshore Technology Conference with the 2013 Spotlight award for reducing offshore oil and gas sector operating costs while benefiting the environment.



16.5. Wärtsilä AQUARIUS EC Ballast Water Management System received the IMO Final Approval status.



22.5. Wärtsilä contracted to supply Russia's largest engine power plant, running on natural gas.



28.-29.5. Wärtsilä discussed sustainable shipping with key stakeholders in Europe in two events - in the European parliament and with the members of the Sustainable Shipping Initiative.



4.6. "10 years of LNG operation" ceremony at Nor-Shipping in





2.7. Wärtsilä, together with CEVA Logistics, were winners of the Lean & Green Star Award 2013 for their successful efforts to reduce CO2 emissions by 60 per cent at Wärtsilä's warehousing operations.



10.7. The largest power plant running exclusively on natural gas engines on the African continent, in Sasolburg, South Africa, was inaugurated.



25.7. Wärtsilä receives 'Excellent Partner 2013' award from Samsung Heavy Industries.



6.8. Wärtsilä Brazil listed as one of the 30 best companies to work for in Rio de Janeiro, Brazil, according to Great Place to Work® in 2013.



2.9. Wärtsilä Annual Report 2012 ranks high in Report Watch's global competition.



27.9. Wärtsilä Anti-corruption e-Learning course made available in 11 languages.





9.10. Wärtsilä launches new long life seal ring for use with Environmentally Acceptable Lubricants (EAL).



9.10. Wärtsilä 20DF, another ECA compliant dual-fuel engine released to the US market.



10.10. Wärtsilä Power Plants' two technical papers awarded - at Power-Gen Asia 2013 and the Asian Power Awards 2013.



17.10. Crisis Management Initiative (CMI) arranged a fund raising dinner at Wärtsilä.



18.10. South Sudanese school inaugurated with Wärtsilä support.



29.10. The first Wärtsilä closed loop scrubber, installed on Containership VII, received a compliance certificate.



15.11. Wärtsilä Valves Ltd., Hull, received OHSAS18001 certification.



18.11. United States Coast Guard grants AMS acceptance for Wärtsilä's AQUARIUS®UV Ballast Water Management System.



28.11. Wärtsilä employee satisfaction survey, MyVoice 2013, response rate hits a new record of over 78%.



2.12. New Terntank tankers will feature the first recently introduced Wärtsilä 2-stroke, low pressure, dual-fuel engines.



4.12. Wärtsilä launches 2-speed marine gearbox to significantly reduce fuel consumption.



4.12. Customer webinar "Flexibility brings value in energy market".



8.12. Manufacturing site in Grunnavågen, Norway exceeds 2000 days of zero Lost Time Injuries.



16.12. Wärtsilä AQUARIUS®EC Ballast Water Management System granted IMO Type Approval.



31.12. The annual Lost Time Injury frequency index reached record low again.

Wärtsilä in sustainable development indices





FTSE4Good Index

OMX GES Sustainability Nordic Index & OMX GES Sustainability Finland Index





ECPI Global Carbon Index & ECPI Global ESG Best in Class Equity index

Wärtsilä has also been rated a Prime company by oekom research

Sustainability management

Wärtsilä applies global guiding principles such as the Quality, Environmental, Health & Safety policy (QEHS policy) and the Code of Conduct, which together with the company's values ensure a harmonised way of working towards sustainable development. The Corporate Manual includes, in addition to those mentioned above, other policies and directives, a description of the company's operating procedures, responsibilities and the management system structure. Wärtsilä's governance and risk management principles, as well as the main sustainability risks, are described in the <u>Governance-section</u>.

Roles and responsibilities

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

Wärtsilä's sustainability function is responsible for providing the necessary information to management, identifying development needs as well as for coordinating sustainability programmes and preparing instructions. The function co-operates closely with the Businesses and the supporting functions such as Human Resources, Legal, Compliance, Quality, Wärtsilä Supply Management and Real Estate. It also collects and consolidates sustainability data from the subsidiaries.

Wärtsilä has clearly defined responsibilities supported by necessary instructions and training. This training covers for example the Code of Conduct, anti-corruption as well as environmental and occupational health and safety issues. Wärtsilä monitors sustainability performance by utilising the information provided by various sustainability tools and activities such as internal audits and compliance processes.

Guiding principles

Wärtsilä Corporate Manual gives a brief description of the Wärtsilä way of working and contains the core policies, guidelines and instructions that are applicable to the entire Wärtsilä Group. These policies complement the Code of Conduct which set out, among other things, the requirement to maintain the highest legal and ethical standards in the Wärtsilä business practices.

CODE OF CONDUCT

- Introduction
- · Compliance with law
- · Openness
- Respect for human and labour rights
- · Fair employment practices
- · Conflict of interest
- · Anti-corruption
- Environment
- Occupational health and safety
- Relationship with authorities and local 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
- Fair employment practices
- Broker directive
- Accounting manual
- Intellectual property
- Competition law compliance
- Wärtsilä sourcing and purchasing
- Export control

COMMUNICATION & 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 pages with information packages and presentation sets in multiple languages
- Trainings via LIVE meeting for implementing the policies
- Tailored classroom trainings and locally specified training days

Voluntary commitments

Wärtsilä participates in the Sustainable Shipping Initiative and the UN Global Compact initiative. 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.

Wärtsilä Quality, Environmental and Health & Safety Policy

We provide lifecycle power solutions and services which meet or exceed our customers and other stakeholders' expectations being:

- Reliable and safe
- Efficient and Environmentally sound
- Compliant with the applicable legal requirements and regulations

We continually improve our performance and reduce adverse environmental impact, through objectives set by management, to satisfy our customers and other stakeholders.

Our business premises provide a safe and healthy working environment for our employees and partners.

Our skilled organisation acts as a responsible global citizen.

Approved by Wärtsilä Board of Management 15 March, 2012.

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 labor 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, color, 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, 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 awards 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 sixteen 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 training and development activities in Wärtsilä strive to develop, maintain and renew the short and long term skills and competencies required to fulfill 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 corporate level 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.

Tools and processes

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 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, the Division 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 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 $_{\tau}$ 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 life cycle view. Platform for focusing on the key improvement areas with biggest impact to our customers. Cross functional 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 EHS Management Team	Environmental, health and safety (EHS)	Overall responsibility for Wärtsilä EHS, EHS management system development, corporate level overall responsibility for Wärtsilä quality measuring and target setting and monitoring of legislation developments.

Management systems

Proportion of Wärtsilä companies with certification	
ISO 9001	79%
ISO 14001	65%
ISO 18001	62%

Supply chain management

Wärtsilä has defined its processes for choosing suppliers, determining their requirements and developing the supply relationship. Wärtsilä offers its suppliers a partnership that strengthens the competitiveness of both parties. A precondition of this partnership is an open and continuous dialogue. Partnership thinking is also applied in Wärtsilä's research and development activities, where the company often collaborates with universities 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. Wärtsilä controls regularly that suppliers comply with these requirements by using performance indicators and audits. Suppliers must demonstrate their compliance with these requirements in order to receive approved supplier status. The main priorities in Wärtsilä's supplier evaluations are supplier selection, conformance with requirements and performance reviews.

Wärtsilä assesses and manages its suppliers through its Supplier Management System. Wärtsilä regularly conducts supplier evaluations. These are divided into three categories: pre-assessment, auditing and performance review. A pre-assessment is made of potential new suppliers before the supplier relationship begins. Audits are conducted for new suppliers and for suppliers whose performance does not meet Wärtsilä's requirements. Performance reviews are carried out to identify and solve deviations from requirements. In the evaluation of a supplier, Wärtsilä focuses on several critical indicators in which Wärtsilä expects the suppliers to have high standards and performance: compliance with relevant legislation; environmental, occupational health and safety and quality management; process mapping, risk management; quality plans and social performance.

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, by paying taxes and social dues, by providing training and education to employees, by 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 160 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.

Security management

Wärtsilä has a corporate security policy and different guidelines, which incorporate human rights considerations and international best practices. Wärtsilä's security management principles and strategies are reviewed and analysed in the Corporate Security Management Committee (CSMC). CSMC consists of business representatives, security and risk management professionals and is chaired by the Executive Vice President. Wärtsilä security risk management actions are reported to the Board of Management by the committee chairman. Security management in Wärtsilä is divided into four specific security areas: personnel, premises (physical), information and automation security. Operational security management in these areas is conducted on the business and local level.

Through its network companies Wärtsilä has received C-TPAT and AEO certifications for supply chain security management. Wärtsilä deploys security professionals who are members of ASIS International and CSO Roundtable.

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. Modernizing 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), the UNECE (United Nations Economic Commission for Europe) and the World Bank. In national or regional level organisations such as the U.S. EPA, the European Commission and market areas such as Germany, Japan and India are considered 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. IMO regulates nitrogen and sulphur oxide emissions as well as ballast water treatment procedures and limitations. World Bank/IFC (International Finance Corporation) provides general and industry specific instructions of good international practices such as the thermal power plants' EHS (Environmental, Health and Safety) guideline, which is today the minimum environmental standard in global power plant projects. It is adhered to in most of the finance activities for projects in emerging markets. In the European Union, 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 European Commission's Machinery Directive, the SOLAS Convention and other relevant safety directives, while Wärtsilä's propulsion systems are designed to comply with the SOLAS and the 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 for development of new environmental sound products and solutions that meet the future demands of the changing operating environment.

Stakeholder relations

Wärtsilä takes actively care of its relations with stakeholders by engaging in an open and constructive dialogue with its various stakeholders. Wärtsilä believes that open dialogue with stakeholders is 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 the society. 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. The priorities in managing stakeholder relations vary within Wärtsilä from one subsidiary to another. Wärtsilä continuously enhances its reporting performance both on its own initiative and in response to feedback from its stakeholders.

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



In order to facilitate active dialogue with customers Wärtsilä arranges Customer Days for existing and potential customers at locations in various parts of the world. These events are used to review subjects of topical interest from both local and global perspectives, and to discuss existing and future needs and challenges. In addition to customer days Ship Power and Power Plants businesses arranged or participated in some 260 industry-related events globally, including international and national seminars, exhibitions, and conferences in 2013. These events were visited by customers, potential customers, and other stakeholders such as investors, consultants, suppliers, students, and other interested parties.

Employee dialogue 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 of <u>Consultation</u> and information procedures in <u>Group companies</u>.

The aim of open dialogue and discussion with local and international public authorities and officials is to share information and support authorities to improve the quality of regulation. Wärtsilä participates in public consultations in the areas of importance to the company.

Activities in organisations

In 2013, 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), Finland Chamber of Commerce (ICC Finland), The Federation of Finnish Technology Industries	Membership and participation in activities.
Industrial organisations	Cogen Europe, Cruise Line International Association (CLIA), EnergyVaasa, Engine Manufacturers Association (EMA), EURELECTRIC, European Sustainable Shipping Forum (ESSF), European Cruise Council (ECC), European Association of Engine Manufacturers (Euromot), Exhaust Gas Cleaning System Association (EGCSA), International Council on Combustion Engines (CIMAC), World Alliance for Decentralized Energy (WADE), Verband Deutscher Maschinen- und Anlagenbau (VDMA), Indian diesel engine manufacturers association (IDEMA), Confederation of Indian Industry (CII), WaterBorne TP, Brazilian Association of Flexible Energy Generation (ABRAGEF), The Brazilian Thermoelectric Generators Association (ABRAGET), Hong Kong Shipowner Association, Association of Singapore Marine Industries, Brazilian Institute of Oil and Gas (IBP)	Board membership and participation in activities of specific working groups (CIMAC, WADE, Euromot, VDMA, CogenEurope, Italcogen, Cogen Turkey). Membership and participation in activities (CII, CLIA, ESSF, EURELECTRIC, EMA, EGSA, ECC, WaterBorne TP, ABRAGEF, ABRAGET, Association of Singapore Marine Industries, IBP).
Standardisation organisations	European Committee for Standardisation (CEN), International Organisation for Standardisation (ISO)	Participation in activities.
International organisations	International Maritime Organisation (IMO),United Nations Economic Commission for Europe (UNECE)	Participation in activities through national delegations (IMO). Participation in activities (UNECE).
Other	European Federation for Quality Management (EFQM), European Energy Forum (EEF), Global Reporting Initiative (GRI), UN Global Compact Nordic Network	Participation in activities (EFQM, EEF, UN Global Compact Nordic Network). Organisational stakeholder (GRI).

Creating economic added value

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.

Despite the difficult conditions in the global economy during 2013, Wärtsilä has performed well. Profitability remained resilient and totalled EUR 520 million, 11.2% of net sales. Wärtsilä's net sales amounted to EUR 4,654 million, a decrease of 1% compared to the previous year. Asia's share of net sales was 38%, Europe's 29%, the Americas' 23% and others' 11%. Our long-term target is to grow faster than global GDP, and our operating profit margin (EBIT%) target is 14% at the peak of the cycle. Even at the trough of the cycle, our target is to keep the operating profit margin above 10%.

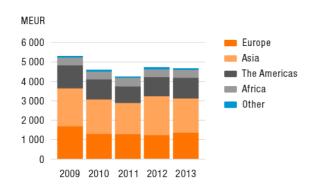
Added value to Wärtsilä's stakeholders

MEUR		2013	2012	2011	2010	2009
Customers	Net sales	4 654	4 725	4 209	4 553	5 260
Suppliers	Cost of goods, materials and services purchased	-2 901	-3 007	-2 694	-2 927	-3 593
	Value added	1 753	1 717	1 514	1 626	1 667
Distribution of value added	Distributed to stakeholders					
Employees	Wages and salaries	903	887	770	773	735
Public sector	Taxes and social dues	314	317	322	326	337
Creditors	Net financial items	19	30	16	13	34
Shareholder	Dividends	207	197	178	271	173
Communities	Donations given	1	1	1	1	1
For business development		310	285	228	242	388

Customers

Wärtsilä creates added value for its customers by providing products, solutions and services that fulfil their needs and expectations. The development of high-quality, reliable and environmentally sound solutions and services depends on long-term collaboration and continuous interaction with customers. We provide our customers with service throughout the product lifecycle, thus ensuring optimal performance during the product's lifetime. The modernisation of installed products can also extend their service life.

Net sales by market area



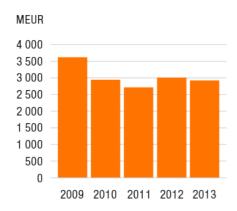
Net sales/employee



Suppliers

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 have a mutual understanding of and are able to respond to our strict process and product requirements. Apart from financial benefits, close relationships create added value for suppliers through the knowledge and development support we offer them, and at the same time Wärtsilä gains from the supplier competence. Successful relationships can also help a local supplier to expand internationally by becoming a part of our global supply chain. In 2013, the value of goods, materials and services purchased by Wärtsilä was EUR 2,901 million. Wärtsilä has more than 3,700 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.

Cost of all goods, materials and services purchased



Employees

At the end of 2013, Wärtsilä had 18,663 employees worldwide. We also employed thousands of people indirectly through our supply chain. In order to be able to recruit competent and motivated people, we endeavour to offer employees competitive salaries, opportunities for continuous personal development and a good working environment. Developing employee skills and competences is of critical importance both for our business performance and for the development of our employees. Wages and salaries totalled EUR 903 million in 2013. This figure includes basic salaries as well as payments based on various profit sharing and incentive schemes, which cover some 65% of the total workforce.

Pension cover

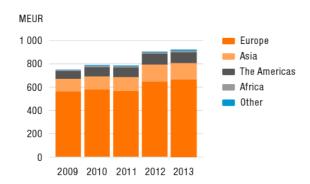
The pension cover is based on the legislation and agreements in force in each country. In Finland, most of the pension obligations are covered by the Employee Pensions system (TyEL). The largest defined benefit plans are used in the Netherlands, Switzerland and the United Kingdom. Most of these defined 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 20. Pension obligations.

Wage levels

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.

Salaries and wages by market area



Hiring principles

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 like 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.

Public sector

Wärtsilä pays various social dues and taxes to the governments of different countries. Income taxes and social dues in the financial period 2013 were EUR 314 million. 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.

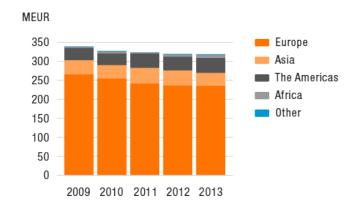
Wärtsilä companies also receive subsidies from the public sector. The value of the subsidies received in 2013 was EUR 6 million, and they were among others related to R&D projects.

Subsidies received from the public sector



The figures contain information from the 15 largest Wärtsilä companies and the parent company.

Taxes and social costs by market area



Creditors and shareholders

Creditors

In 2013, Wärtsilä's net financial items totalled EUR -19 million. At the end of the year, Wärtsilä's net interest bearing debt amounted to EUR 276 million, the solvency ratio was 43.9% and gearing was 0.15.

Shareholder value

Dividends totalling EUR 207 million are proposed to be paid to the company's shareholders. Our dividend policy is to pay a dividend equivalent to 50% of the operational earnings per share. The dividends paid per share are presented in the notes to the financial statements. At the end of 2013 earnings per share (EPS) was EUR 1.98 and Wärtsilä's market capitalisation was EUR 7,055 million.

Community support

At the national level, we provide financial support for a number of national, cultural and social activities. The Board of Directors has supported activities focused on children and youth, nature conservation, national defence, disabled war veterans and medical and technical research. Wärtsilä's Board of Directors contributed altogether EUR 111,200 to these activities in 2013. Additionally, many Wärtsilä companies provide support to local organisations for similar activities in their countries of operation.

Donations to good causes by the Board of Directors

TEUR	2013	2012	2011	2010	2009
Total	111	104	60	670	70
Donations to loca	l organisations ¹				
TEUR	2013	2012	2011	2010	2009
Total	609	456	940	421	527

The figures include the data from 15 major Wärtsilä companies and the parent company.

Wärtsilä and emission trading

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. We also advise and support our customers in utilising the Kyoto Protocol's Flexibility Mechanisms (JI and CDM) in their power plant projects. More information about Wärtsilä's solutions for climate change can be found in the Environmental Performance section. 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.

Environmental performance

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.

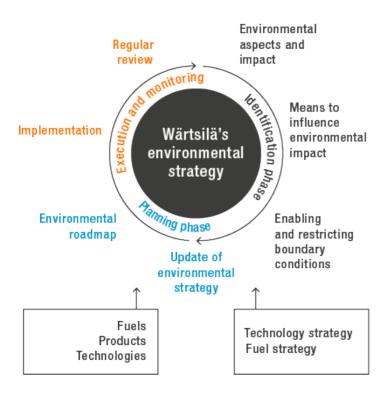
To continually improve environmental performance within the company's operations requires the organisation to constantly work in a systematic way. This work is guided by our strategy and its environmental targets, the Code of Conduct and the company's policies relating to Quality, Environmental, Health and Safety, and it is co-ordinated and monitored by the EHS Management team and the Quality Board. 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.

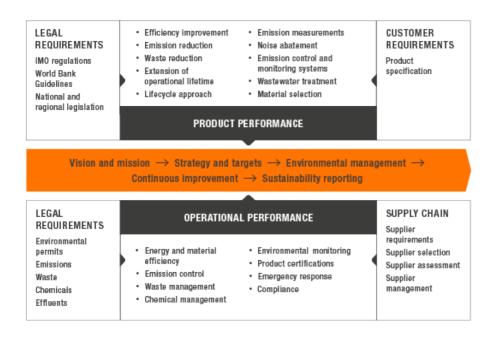
Wärtsilä continuously develops and improves its operations and products with the help of certified environmental management systems. Our principle is to apply the certified EHS (Environmental, Health and Safety) management systems based on ISO 14001 and OHSAS 18001 in all Group companies, excluding those companies focusing purely on sales. These units are required to apply Wärtsilä's internal EHS model. 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 2013, 50 Wärtsilä companies operated with a certified environmental management system. These certified environmental management systems cover roughly 91% of Wärtsilä's total workforce.

Wärtsilä's environmental strategy – a continuous process



Environmental management in Wärtsilä

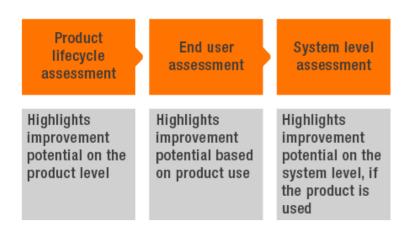


Lifecycle approach

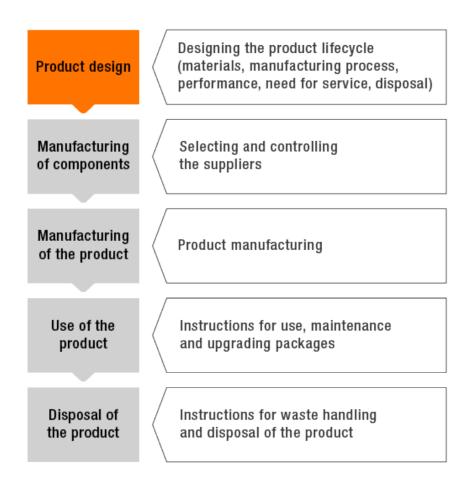
Since Wärtsilä's products have such a long operational life, identifying their lifecycle impacts is essential for understanding their total environmental impact. Based on the results of these lifecycle assessments, the majority of the environmental impacts of a diesel engine arise during the operation of the engine. These derive from the exhaust emissions and from the fuel supply chain relating to its operation. Wärtsilä manages the lifecycle of its products through product design, careful selection of suppliers, production methods, optimising transportation, maintenance and repair during the products' operational lifetime and by training and advising customers in using products and systems in the most efficient way. Wärtsilä offers service agreements and introduces products that help customers to optimise their operations. Furthermore, Wärtsilä actively supports customers in selecting suitable solutions in the early phase of projects.

In addition to lifecycle assessments, Wärtsilä has also utilised other assessment levels, such as end-user and system level assessments, in order to identify the improvement potential of existing technologies in new application areas and the development needs for the solutions offered.

Multilevel assessment approach



Environmental impacts - product lifecycle



Research & Development focus

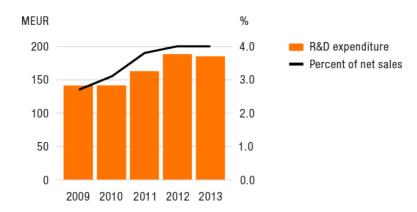
Wärtsilä continuously strives for technological leadership. This is achieved by developing products addressing customer needs which are based on reliable, efficient, and cost-competitive technologies. Wärtsilä's R&D activities focus on technologies, products, and solutions that are fuel-efficient, reliable, safe, self-diagnostic, cost-efficient to operate, and that produce minimal environmental impacts throughout their lifecycles. At Wärtsilä, we protect innovation and competitiveness through close attention to Intellectual Asset Management and continuous development of our internal key competences. We build networks and clusters to further extend our know-how, skills and capacity by committing to long-term relationships with suppliers, engineering companies, university partners, and licensees and other OEMs (Original Equipment Manufacturers).

Our R&D resources are dedicated and invested into products and technologies development and design with an increased focus on both simulation and virtual testing and validation. Wärtsilä actively develops product platform concepts and design products that are easy to manufacture and to service. A substantial proportion of the company's investments in product development are targeted at securing environmental compliancy providing short- and long-term benefits for whole value chain and ultimately for the environment.

R&D Costs

MEUR	2013	2012	2011	2010	2009
	185	188	162	141	141

Research and development expenditure



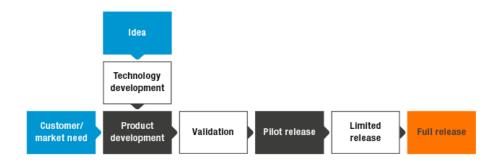
Ensuring reliability and safety

The long operational lifetime and the application of Wärtsilä products highlight the importance of reliability and safety. Wärtsilä's development process is geared to ensuring the reliability and safety features of the end product, and extensive validation and testing programmes are undertaken before the product is fully released. New technologies are validated before they are introduced into products. Validation is done both in the R&D laboratories and or with partners in existing installations.

By focusing on the initial stages of the development process, the development time for new solutions can be reduced without compromising the emphasis on reliability and safety. Individual components are validated already in the design phase by using advanced calculations and simulation tools. This approach enables us to identify areas of improvement at an early stage in the process and further reduces the amount of component testing. The actual component and technology testing allows efficient validation of the system, which results in faster development and market introduction for new products.

Validation testing on site with existing installations in cooperation with our customers enables us to further improve performance of existing solutions as well as to find new and better solutions. The customer benefits by getting the first insight into new technologies, while Wärtsilä gains long-term experience under controlled conditions. A typical field installation operates for 6,000 hours per year. When the product has successfully passed all the process steps and its performance meets Wärtsilä's high standards, it can be delivered to the market.

Product development process



Improving efficiency

Energy efficiency has always been a priority for Wärtsilä, and remarkable gains in the efficiency of our products and solutions have been achieved over the years.

Total ship efficiency

Improving total ship efficiency reduces lifecycle costs and emissions. By combining our knowledge of automation, machinery, propulsion and the control of them with an optimised ship design into a single integrated solution, a truly efficient ship operation can be achieved. From a long-term perspective, the potential for improving energy efficiency has been estimated to be 30-50%. This will be achieved by optimising component performance, ship design, waste heat recovery and the recovery of other losses, weather and voyage routing and by taking advantage of potential new technologies.

The efficiency of the ship can be improved also by using concepts, such as:

- the Low Loss Concept, which reduces the losses in the electrical power train by 30-50%
- · optimisation of the hull design

Several joint development programmes with customers are currently ongoing and aimed at significantly reducing their operating costs.

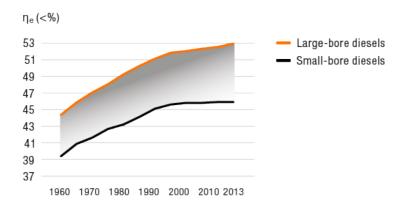
System integration enables further efficiency improvements, while customers benefit from having proven solutions from a single supplier. With lifecycle support, yards can better optimise their building schedules and owners get proven solutions that are easier to manage.

Engine efficiency improvements

The efficiency of Wärtsilä diesel and gas engines ranges between 42-52%, depending on the engine type. The peaking efficiency of 52% for the best engines is one of the highest efficiency ratings among existing prime movers. The improvement in efficiency is becoming more challenging as the emission requirements are getting increasingly stringent. Wärtsilä has several ongoing programmes targeting simultaneously to ensure the high efficiency of its engines, and to reduce engine emissions.

One key success factor in this field has been the development of integrated engine functionalities that enable low emissions and high engine efficiency. The air and fuel admissions are controlled by an automated system that provides optimal combustion under all operative conditions. Wärtsilä's extensive experience in component design has led to the development of combustion chambers capable of withstanding higher cylinder pressures and temperatures. This contributes to engine efficiency directly and positively. The research and development of two-stage turbocharging is another important part of aiming to achieve our goals in environmentally sound solutions of engine fuel efficiency development.

Wärtsilä engine fuel efficiency development



Wārtsilā marine diesel engines 1960-2013 -ηe for production engines, 5% tolerance

However, improving the efficiency of a single component does not necessarily guarantee the best overall outcome. In marine, more can be achieved through comprehensive ship design, system integration and machinery optimisation. Similarly, in power plant applications, by combining various technologies an overall efficiency rating of 90% is possible.

Heat recovery and energy conversion improvements

The utilisation of fuel energy can be further improved by using heat recovery concepts and secondary cycles. Steam-based combined cycles are applied widely in diesel engine applications and are expected to gain a foothold also in bigger gas engine plants. Further improvements can be expected by designing engines for secondary cycles.

Propeller efficiency upgrades

The propeller's efficiency, amongst other parameters, is an important consideration for achieving economic sailing. Fouling, surface roughening and leading edge damage to the propeller, when in service, can result in efficiency losses of 3-7%. Also, by replacing outdated existing propellers with new ones designed based on the latest knowledge, propeller designs and operating profile of the vessel, significant savings with short payback periods can be achieved. For ships such as oil tankers and container vessels with annual fuel costs exceeding EUR 5 million, propulsion degradation can easily cost several hundred thousands of euros a year. The results of ongoing projects investigating the efficiency loss of propellers in service will improve the performance based maintenance of a ship's propeller and will thus increase the vessel's overall efficiency throughout its lifecycle. Wärtsilä provides several solutions such as EnergoproFin propeller cap with fins, Energopac rudders and HR nozzles, that can also be retrofitted.

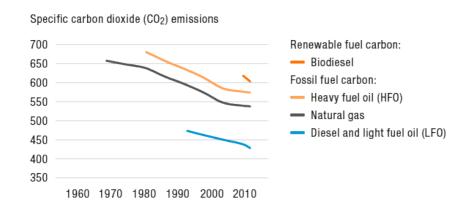
Reducing emissions to air

Reducing greenhouse gas emissions

Green House Gas (GHG) emissions are proven to be the dominant factor for climate change. The most important of such emissions are carbon dioxide (CO₂), nitrogen oxides (NO_x) and methane (CH₄). In addition to improving the efficiency of its solutions, Wärtsilä continuously develops technologies for reducing greenhouse gas linked emissions from both diesel and gas engines. For gas engines, Wärtsilä is developing technologies such as Ultra Low THC (Total Hydro Carbons) emission reduction, which reduces the THC levels by 30-90% by utilising both primary and secondary technologies.

The long-term investments in research and the strive for more environmental sound solutions have resulted in materialisation of many benefits and success especially at low load where the methane slip has reduced by as much as 75%. Many of the engine optimisations can also be retrofitted on existing older engines. These measures can include optimising combustion space, updating the software that is controlling the combustion, and a general optimisation of the machinery power management.

Development of specific carbon dioxide emissions of Wärtsilä engines



Reducing sulphur dioxide emissions

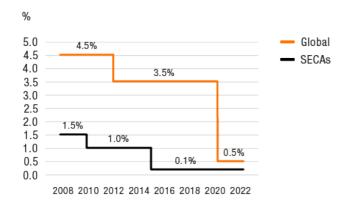
In 2008, the UN International Maritime Organization (IMO) revised its standards on the sulphur content of marine fuels (contained in MARPOL Annex VI). The current limit for sulphur content in the fuel is 1.0% m/m (by weight), and from 2015 onwards vessels sailing in Sulphur Emission Control Areas (SECAs) will have to comply with emission levels equivalent to a sulphur content of 0.1% m/m. Outside SECA's, the limits are 3.5% m/m and from 2020 onwards 0.5% m/m.

Marine sulphur emissions can be reduced in three different ways:

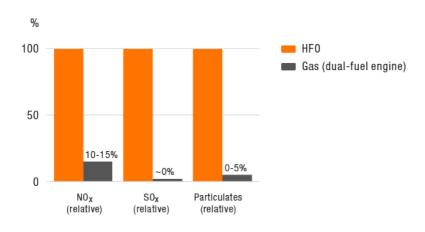
- by decreasing the sulphur content of the fuel used
- by removing sulphur from the exhaust gas
- by changing fuel, for example through the use of natural gas

Several methods can be used for de-sulphurising exhaust gases. Wet scrubbing is an obvious alternative for ships, as the scrubbing medium is readily available and the technology has been used for Inert Gas Systems onboard ships for 50 years. Development of a new, more space efficient design for the cruise and ferry segment has led to orders from several ferry companies during 2013. Wärtsilä has also invested further in increasing its engineering and installation capabilities, and can now offer additional services, including basic engineering and a complete turnkey Exhaust Gas Cleaning solution.

Emission legislation - IMO fuel sulphur cap



Comparison of typical NO_x , SO_x and particulate emissions – influence of fuel type



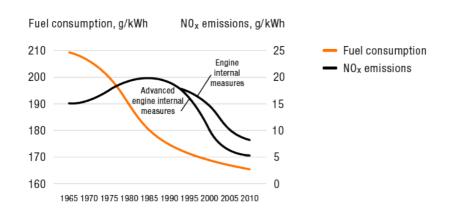
Reducing nitrogen oxide emissions

The IMO NO_X Tier II rules have been in force as of 2011. The Tier II NO_X limit is 20% below the 2010 emissions levels. All Wärtsilä portfolio products are IMO NO_X Tier II compliant. The next NO_X emissions level, IMO Tier III, will be valid from 2021, at the latest. This is expected to demand a reduction of 80% in NO_X levels from Tier I levels in the NO_X Emission Control Areas. An 80% NO_X reduction requires a step change in terms of engine technology and product offerings. Wärtsilä is looking into different solutions involving:

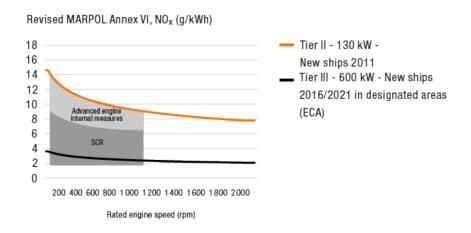
- Engine internal technologies
- After treatment technologies
- Fuel (gas) related technologies

Gas engines already comply with IMO NO_X Tier III, but development of other technologies will be needed, as will the integration between them. A driving factor in this work is the lifecycle cost of the solution. There will be two basic engine technologies that enable diesel engines to reach Tier III NO_X emissions requirements: Selective Catalytic Reduction (SCR) and Exhaust Gas Recirculation (EGR). Selective Catalytic Reduction will play an important role in the future, and it is essential to ensure that combinations of SCR and scrubbers are applicable. Wärtsilä has experience in SCR systems with a wide range of fuels. Wärtsilä is able to deliver also SCR solutions for high sulphur applications, thus ensuring the compatibility of SCR solutions with scrubbers. However, further development and commercialisation work will be carried out to optimise the system for a wider scope of applications and will take into consideration various side effects and boundary conditions.

Development of diesel engine specific fuel consumption and NO_x emissions



Emission legislation – marine application (IMO)



Sulphur and nitrogen emission control areas (SECA and NECA)



Sulphur emission control areas (SECA)



Reducing emissions to water

In 2004, the International Maritime Organization (IMO) adopted the Global Ballast Water Convention, which mandates the management of ballast water and sediments on both new builds and existing vessels. The Convention aims to protect local biodiversity from the threat of non-indigenous invasive species that may in turn cause a negative economic impact on society, reduce output from fisheries, and add substantial costs associated with control and clean up measures. It is estimated that around USD 1.4 trillion per year is spent on clean-ups, economic losses, and environmental damage related to ballast water transportation from one ecological zone to another. Wärtsilä expects the Convention to be ratified in 2014. In addition, December 2013 saw the introduction of EPA legislation (VGP 2013) which requires ballast water treatment to be in compliance with US Coast Guard (USCG) regulations in 33 CFR Part 151 for ships operating in US waters (excluding recreational and military vessels). USCG performance requirements are identical to those set out in the IMO Convention, but require equipment to be assessed on more stringent test protocols based on U.S. EPA (US Environmental Protection Agency) Equipment Test Validation (ETV) protocol."

The AQUARIUS® range of ballast water management systems (BWMS) available from Wärtsilä was obtained through the acquisition of Hamworthy in 2012. This offers customers a choice of treatment technology. The Wärtsilä AQUARIUS® UV BWMS was granted IMO Type Approval in December 2012 and received USCG Alternate Management System (AMS) acceptance in October 2013, the first step towards full USCG Type Approval. This will allow all US and foreign flag ships fitted with the Wärtsilä AQUARIUS®UV BWMS to operate in US territorial waters, and to discharge its treated ballast water for an interim period of up to 5 years from the ship specific implementation date.

The Wärtsilä AQUARIUS®EC BWMS gained IMO Type Approval in December 2013. This provides ship owners with a greater choice of cost effective BWMS technologies. The modular design approach and installation flexibility of this technology further reaffirms the company's commitment to developing sustainable environmental solutions for the marine industry.

Long-term research activities

The HERCULES programme

The long-term HERCULES R&D programme was conceived in 2002, and has been set up within the context of the EU's sixth and seventh Framework programmes. In sharing a joint vision, the two major low- and medium-speed engine manufacturers, Wärtsilä and MAN Diesel & Turbo, have been collaborating with universities, research institutions, and other industrial partners to develop new technologies for marine engines. In the third phase that started in 2012, the HERCULES-C project aims at taking marine engine technology a step further towards improved sustainability in energy production and total energy economy. This is to be achieved through extensive integration of the new technologies developed in the first two phases, HERCULES-A and HERCULES-B. This challenge is being addressed by adopting a combined approach for engine thermal process optimisation, systems integration, engine reliability, and extended lifetime. The particular objectives are:

- Further substantial reductions in fuel consumption, while optimising power production and usage
- Near-zero emissions
- Maintaining the technical performance of engines throughout their operational lifetime

HERCULES-C comprises 47 sub-projects under 10 work packages, involving the complete spectrum of marine diesel engine technology. It is planned to run for three years, from 2012 to 2014, with a total budget of EUR 17 million. The project has been made possible by a EUR 9.4 million funding through the European Commission Framework Programme 7.

CLEEN – Cluster for Energy and the Environment

CLEEN Ltd. maintains and develops a world-class open innovation platform for market-driven joint research between industry and academia, and is part of SHOK (Strategic Centres for Science, Technology and Innovation). Wärtsilä participates in the Future Combustion Engine Power Plant (FCEP) research programme under CLEEN, which was started on 1 January 2010. The programme focuses on research topics and development efforts in the areas of reciprocating engine technologies and related power plant technologies. The key areas of research include improvements in the combustion process, energy efficiency, emission reduction methods, heat recovery systems, and power conversion technologies. Other central research areas include automation & control, fuel flexibility, and the use of renewable fuels in combustion engines. The programme objectives and scope have been set jointly by the industry and research institutions, thereby enabling deep co-operation in executing the programme, and promoting breakthrough innovations across broad interfaces.

The total FCEP programme budget is EUR 37.8 million. This is covered by the participating companies (EUR 12.9 million) and research institutes (EUR 5.1 million), with the remaining EUR 19.8 million coming from the Finnish Funding Agency for Technology and Innovation (Tekes). This programme has been successfully underway for four years, with a special emphasis on the final year to utilize the established research network and infrastructure to facilitate new results and technical solutions. The FCEP consortium consists of the leading combustion engine and power equipment manufacturers, supported by local research institutes and universities. The 17 consortium partners represent a very high level of technical and scientific excellence in this field.

Environmental performance indicators

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 & acquisitions)
- changes in the reporting scope and coverage.

The environmental indices used in connection with performance indicators are linked to the development of net sales. It should be noted, that e.g. increased investments in R&D during any particular year do not impact net sales but may increase the absolute value of an indicator and the related index.

Monitoring environmental impacts

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

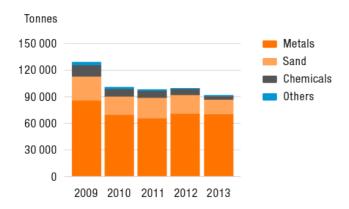
- participation in the monitoring of air quality with other local stakeholders
- · measurement of air emissions
- charting of noise levels
- periodical effluent analysis
- soil analysis
- dispersion analyses and bio-indicator surveys.

Materials, energy and water

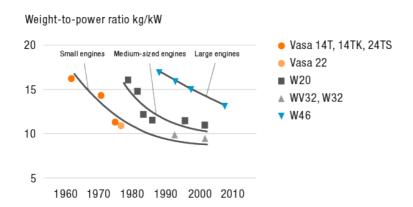
Materials

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. In 2013, the total material usage was 91,720 tons (99,570). The major material groups were various metals 76% (71), sand 18% (21) and various chemicals 4% (7).

Materials



Weight-to-power ratio of Wärtsilä's medium-speed engines for 6-cylinder in-line engines

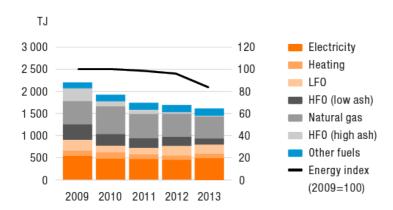


Energy

Total energy consumption

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.

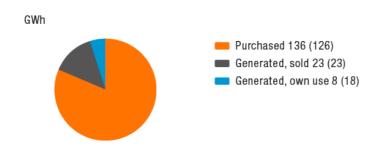
Annual energy consumption



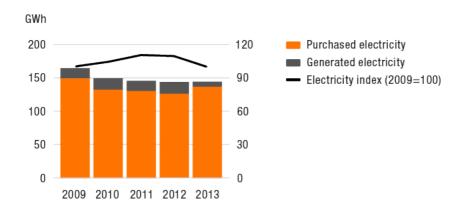
Electricity

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.

Electricity balance 2013



Annual electricity consumption



Heat

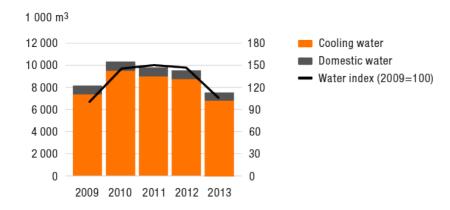
Heating for factories and offices accounts for most of Wärtsilä's consumption of heat energy. In several factories, the heat generated in engine test runs is used for heating. Some factories and offices are connected to a local district heating network, some have their own heating plant and some use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

Water

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, 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 sewage treatment, it is taken away for appropriate processing, for example to a special treatment plant for hazardous wastes.

Annual water consumption

Total annual water consumption split by the purpose of use. 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 2013 about 89% was seawater for cooling purposes, about 11% was from municipal water supplies, about 0.08% was rainwater collected and stored, about 0.06% was waste-water re-used from another organisation, and about 0.01% was directly withdrawn groundwater.



Emissions and wastes

Emissions to the air

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.

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 (NO_X) , sulphur dioxide (SO_2) , carbon dioxides (CO_2) 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.

In addition to direct CO₂ emissions, Wärtsilä's operations generate indirect CO₂ emissions. In 2013, the calculated secondary CO₂ emissions were 57,040 tons (54,011) (from purchased electricity and heat) and the CO₂ emissions from flights totalled 40,596 tons (39,033).

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: Office Communicator,

which enables live chats between two people or more; Live meetings allowing multi-person meetings from personal computers, in which presentation material can be shared and the Telepresence videoconferencing system. Wärtsilä Live and Telepresence are in everyday use. Approximately 3,000 Live-meetings are arranged daily, and there are 35 Telepresence rooms established in Wärtsilä premises in 18 countries.

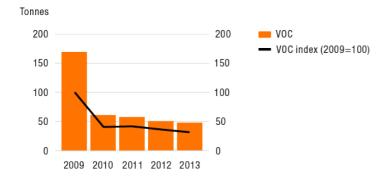
Waste management

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.

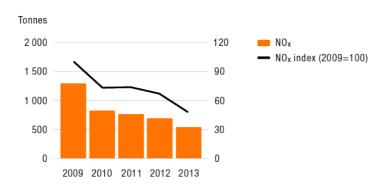
Waste management in Wärtsilä has four aims, listed in their order of priority:

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

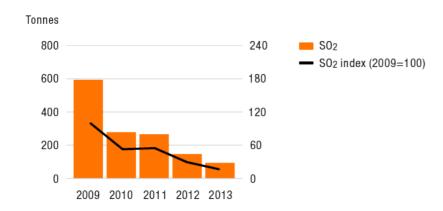
Annual VOC emissions



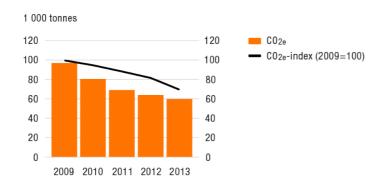
Annual NO_x emissions



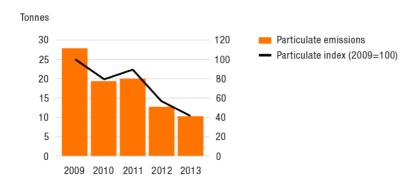
Annual SO₂ emissions



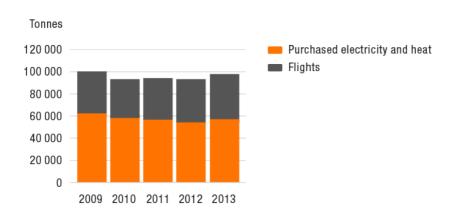
Annual CO_{2e} emissions



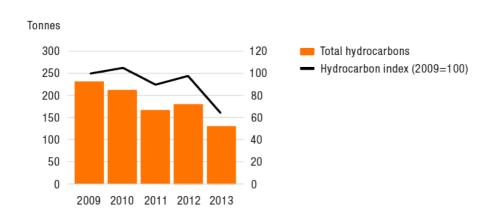
Annual particulate emissions



Indirect CO₂ emissions



Total hydrocarbons



Annual waste



^{*} The hazardous waste for landfills 2011 includes 36,269 t, for 2012 it includes 16,541 t, and for 2013 it includes 4,517 t of contamined soil, which is not considered as operational waste.

Compliance with legislation

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

Environmental disturbances and complaints

The number of disturbances, complaints and incidents of non-compliance are presented below.

Reported disturbances cover incidents in which the Wärtsilä company concerned has usually been obliged to report the disturbance to the authorities. The following main environmental disturbances occurred in Wärtsilä's business locations in 2013:

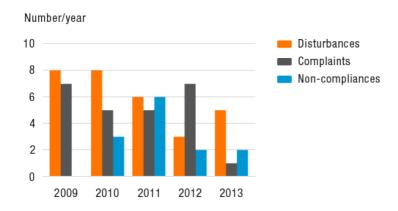
- 2 fires
- 3 oil spills

All the above disturbances were investigated and appropriate corrective actions were taken in each case. The complaint made by occupants of neighbouring property was related to smoke. The complaint was investigated and discovered unfounded.

Cases of non-compliance

Wärtsilä Azerbaijan LLC missed the deadline for renewing their Ecological Passport. The document was arranged promptly after this was discovered. Wärtsilä de Mexico S.A. was found missing the Environmental Impact Statement required to operate in the protected natural area of Cd. Del Carmen. A fine of EUR 3,328 was paid, and the statement will be arranged during the first quarter of 2014.

Disturbances, complaints and non-compliances



Non-compliance cases presented in previous reports

Wärtsilä India Ltd. has reached compliance with the permitted water consumption limits.

Environmental costs and liabilities

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.

Wärtsilä real estate and environmental responsibilities

The real estate that Wärtsilä owns or leases is mainly located in urban areas. The company is not aware of any properties that are situated in areas where biodiversity could be endangered. Environmental risks and liabilities are identified and reviewed as part of the overall risk management. In Wärtsilä's operations, potential liabilities are primarily related to the company's real estate. Environmental liabilities are systematically scrutinised in conjunction with every acquisition or sale of real estate. Wärtsilä has recognised certain cases where potential environmental liabilities may exist, but these are not expected to have a significant financial impact on Wärtsilä.

Environmental capital expenditures and operating expenses

MEUR	2013	2012	2011	2010	2009
Environmental capital expenditures	0.6	0.8	0.9	2.9	1.1
Environmental operating expenditures	5.1	6.3	6.1	5.5	4.2

Personnel and social performance

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.

Personnel in figures 2013

Number of employees at 31 Dec. 2013		18 663
Number of nationalities		120
Change in number of employees (net employment creation)		-477
Average age of employees	years	39.7
Male/female ratio	%	85/15
Executive positions globally: male/female ratio	%	90/10
Employee turnover (resigned)	%	7.7
Total payroll costs	MEUR	903
Aggregate coverage of different bonus schemes	%	65
Development discussions held annually	%	91

Personnel

Structural changes in 2013

Wärtsilä opened a new services workshop in Niterói, Rio de Janeiro, Brazil on 27 February 2013. The new facilities will strengthen Wärtsilä's presence in Brazil and enable Wärtsilä to support its customers by offering a wide range of workshop services with rapid response times. The new workshop will replace the company's current premises in São Cristóvão, Rio de Janeiro, and is designed to bring logistical advantages for the company and its customers. It will feature, among other things, a laboratory for automation and electronic fuel injection, as well as a dedicated marine thruster facility. The scope of services will also be expanded to include repairs to large engines, and the maintenance of propulsion systems for ships. About 200 employees will work in the new workshop, 120 of whom are able to work offshore. The team will be connected to Wärtsilä's worldwide technical support and will join a network of international technicians able to support local projects all around the world.

On 29 August 2013, Wärtsilä announced the combination of the PowerTech and Ship Power 4-stroke organisational structures into one business unit. The new organisation became effective 1 January 2014. Ship Power's new 4-stroke organisation consists of all 4-stroke R&D and production both for the Ship Power and the Power Plant markets, as well as engineering, project management and 4-stroke sales for the Ship Power market. The former PowerTech delivery centres continue within the new product companies.

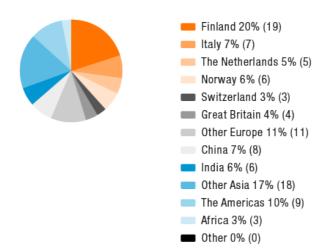
In September 2013 following years of deteriorating business performance, Ship Power's Environmental Solutions announced the restructuring of the Wärtsilä Serck Como company, which is located in Geesthacht, Germany. Plans have been developed to reduce the activities to focus solely on the strategic core business, i.e. fresh water generation for marine and offshore segments, new system deliveries and after sales.

Wärtsilä inaugurated its new test facility for future propulsion products and technology in November 2013. The Wärtsilä Propulsion Test Centre was established and funded by Wärtsilä with strong support from VTT Technical Research Centre of Finland, who will provide the resources to operate the facility. The test centre is located in Tuusula, southern Finland, and will enhance the company's capabilities in product validation and research activities. The new facility enables Wärtsilä to speed up the development of new, high quality and environmentally sound propulsion products together with research institutes, universities and suppliers. It will have a central role in propulsion related research and development activities carried out by the company. In particular, the test centre will be used for functional and endurance testing with an emphasis on mechanical power transfer. With the new test centre Wärtsilä will remain at the forefront of propulsion technology advancement as the demands of the marine industry evolve.

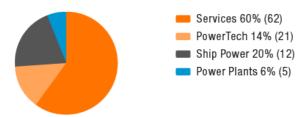
Personnel

In addition to direct employment, Wärtsilä employed also indirectly an external workforce totalling 2,813 manyears in subcontracting at its factories and units. The units located in Finland had a total personnel of 3,662 employees.

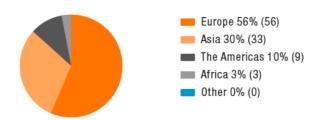
Personnel by country



Personnel by business



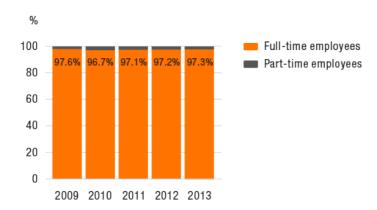
Personnel by market area



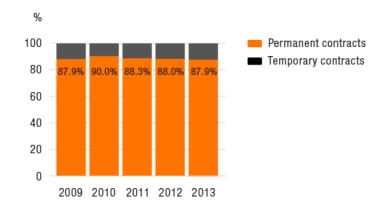
Number of employees per business

	No. of employees	Change
Power Plants	1 053	121
Ship Power	3 612	1 473
Services	10 785	-378
PowerTech	2 449	-1 362
Other	764	-79

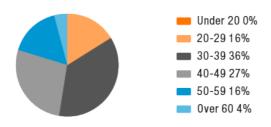
Full-time/part-time employees



Permanent/temporary employees



Age structure



All in all, 2,531 employees left Wärtsilä globally during 2013 for different reasons.

In addition, part of the expired temporary employment, voluntary leavers and retirements was not replaced. At the same time, Wärtsilä continued focused recruitments in the critical competence areas. Major part of open vacancies was filled by Wärtsilä employees.

In December, at Wärtsilä's Product Company Trieste in Italy, Management and union representatives defined and agreed a plan for a temporary lay-off program following the temporary reduction of the workload in the factory. In the period between Monday, January 13 and Friday, April 11, 2014, there will be temporary lay-offs focusing on Fridays and Mondays.

Wärtsilä had 18,663 employees at the end of 2013 (18,887).

People management in 2013

The main goal of Wärtsilä's Human Resource strategy is to support the group business strategies and to bring them alive by developing Wärtsilä's organisation and competencies to meet the business needs. The key focus areas of the people strategy continues to be further development of leadership and leadership culture in the company as well as a high-performance culture throughout the organisation by promoting true employee engagement through a culture of open communication, integrity and innovation and finally by ensuring that the businesses have the requisite resources and skilled and motivated people at their disposal. This means supporting organisational design and changes, continuous competence development and stronger performance management processes with target setting, proper feedback, evaluation of overall performance and recognition of strong performance.

In 2013, Wärtsilä Hamworthy integration continued according to plan. The merger of the Ship Power and PowerTech organisations have been major projects, and a strong focus for human resources as well. In addition to these global changes, many local change initiatives have been concluded.

Wärtsilä Human Resources continued to develop its common people management processes and tools and common ways of working across national and organisational boundaries. Strong focus and effort has been made to further develop managerial skills in people management by launching Management Focus, a modular training program for all line managers. During 2013, 80% of all line managers participated this three module training. Wärtsilä Human Resources continued to invest in technologies and tools that enable quick access to online reports, employee information and annual compensation planning both local and multi country teams.

Diversity initiative

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.

The Diversity Initiative is a means to ensure that Wärtsilä continuously develops a proactive approach to diversity. Gender balance was identified as the first aspect of diversity to focus on, and one of the initiative's first goals became to increase the number of female employees to 20% by 2015 (2013: 15%). Wärtsilä's President & CEO Björn Rosengren has stated that measures should be taken to reach this goal, to assist women in their career progress, and to support their attainment of managerial positions in the corporation. Research shows a correlation between women in management and higher profits.

As part of the Diversity Initiative, a Gender Diversity Survey was conducted in all of Wärtsilä's subsidiaries during 2013. There were almost 5,000 responses globally, showing that improving gender balance is seen as important throughout the organisation. Organisational culture and career development for women were identified as key focus areas for the future development.

A Diversity Forum was established to discuss, brainstorm and develop methods and tools to increase diversity in the corporation. The forum consists of ten Wärtsilä employees of varied genders, nationalities and educational as well as professional backgrounds. Regular Diversity Forum meetings were established and the initiative was promoted both internally and externally. The Diversity Forum also undertook benchmarking with other companies that had taken part in similar initiatives.

Since the Diversity Initiative was initiated, awareness of diversity-related questions has risen. Follow-up analysis shows that overall feedback towards the initiative is positive, and diversity has become a key topic for Wärtsilä. The Diversity Forum will continue developing actions both on global and local levels internally and externally, to work towards a more diverse and balanced corporation.

Performance management

The performance management process supports Wärtsilä in reaching its business targets by translating business strategies to team and individual objectives. Each Wärtsilä employee needs to know and understand Wärtsilä's business strategies and their goals. More importantly, everybody needs to know the targets set for their own units and the main target areas related to their own work. As part of the performance management process, each employee has a proper performance evaluation based on their overall job performance. Overall performance evaluation is one of the inputs for the compensation decisions following the principle of performance-based rewarding.

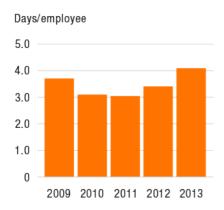
Learning and development

Wärtsilä continued its leadership development activities in many areas. New learning solutions for line managers have been developed to support the managers in their people management and leadership roles. An annual executive development programme was held in November, and six other global leadership development programmes for senior managers were carried out during 2013. The number of managerial training days is also followed regularly as one of the HR KPIs. In 2013 Wärtsilä Learning & Development delivered totally 6,743 training man days for managers.

Continuous development of new learning solutions for core competence areas in sales, project management and technology have been developed and delivered, and they continue to be part of the learning offering in 2014 as well.

Learning at work, self-learning, mentoring, coaching, job rotation and assignments designed to enable the 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 75,177 training days in total which gives 4.08 training days per employee on average. Many of the training programs are tailored to the specific strategic competence development needs of the businesses.

Training days



Training days

Days/employee	2013	2012	2011	2010	2009
Managers and superiors	4.6	3.3	3.4	3.2	3.9
Other white-collar employees	4.1	3.9	2.5	2.9	3.8
Blue-collar employees	3.6	3.0	3.4	3.3	3.5

Engagement

The positive trend in development discussion compliance has continued. The average coverage of annual development discussions was 91% globally. Strengthening engagement through active strategy communication has been a main target for all Wärtsilä entities. Positive impact of the different communication initiatives was also visible in the seventh global employee engagement survey, MyVoice, which was conducted in October 2013. The MyVoice Survey response rate was at an all time high of 78% during 2013. Overall satisfaction continued to be strong across Wärtsilä, although there are differences between geographies and organisational entities.

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 use 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 coverage of OHSAS 18001 certifications in Wärtsilä subsidiaries increased during 2013. At the end of 2013, 48 Wärtsilä companies operated with a certified occupational health and safety management system. These certified occupational health and safety management systems cover roughly 82% of Wärtsilä's total workforce.

In addition to the management system, 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 82% 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 and the frequency of accidents. Wärtsilä has set a corporate level target of achieving zero lost time injuries. This target is a long-term commitment from the company to strengthen 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 in the Board of Management.

In 2013, Wärtsilä has continued the global implementation of Zero Injury training programme comprised of a 4-hour e-learning and 4-hour practical training session. The target group for the training consists of Wärtsilä's front-line personnel working in factories, workshops and customer premises. The e-learning has been translated into 11 major languages in order to ensure effective training in various countries. Over 3,700 employees completed the e-learning and over 1,000 the practical training during the year 2013.

To strengthen Wärtsilä's safety culture, the Board of Management decided in 2012 to start a safety walk practice, which requires members of the Board of Management, division management teams and the managing directors or Wärtsilä subsidiaries to carry out regular visits to Wärtsilä's workplaces and discuss with employees about safety related topics. Full implementation of safety walk practice has taken place in 2013, and over 400 safety walks were conducted by the end of 2013.

Wärtsilä's first ever Safety Webinar was held 16 April 2013. The webinar targeted Wärtsilä subsidiaries' Managing Directors, selected business leaders and the QEHS organisation. Live webinar concluded around 180 attendees all around the Wärtsilä network. The theme of the webinar was "Manager's role in Safety" and that concluded of presenting Wärtsilä's and customers' expectations towards safety, practical examples of successful safety leadership and tips on how to conduct safety walks.

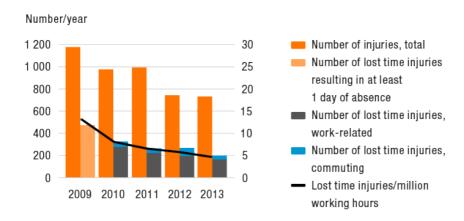
In 2013, Wärtsilä initiated a project, named WeCare, to activate and harmonise hazard and near miss reporting within the whole Wärtsilä. As part of the project, Wärtsilä purchased and customised software which is globally used for incident reporting, investigation and action handling. At the end of the year 2013, pilot implementation has started in Wärtsilä Norway, Wärtsilä Shanghai Services and Wärtsilä India. Full roll out will follow in the first half of 2014.

The positive trend in reducing lost time injuries continued. Wärtsilä achieved a good result in 2013, with a lost time frequency index of 20% below that of the previous year.

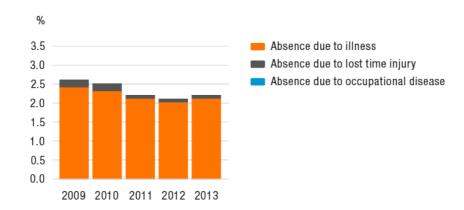
Wärtsilä regrets to report one fatal occupational accident during the review period. A Wärtsilä employee had a fatal road accident in France while returning back home from a meeting with a customer.

During the report period there was one non-compliance discovered in a Wärtsilä subsidiary. Wärtsilä Moss AS had a non-compliance case related to noise protection regulations. Required actions have been taken, and a confirmation from the authorities has been received.

Injuries



Absence rate



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 UN Global Compact, of which six principles are related to Human and Labour rights.

Wärtsilä's employees represent 120 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). 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. Wärtsilä is unaware of any cases of breach of human rights, discrimination, infringements of rights at work or the use of forced or child labour. During the reporting period the following misconducts were realised:

- Wärtsila Service (Shanghai) Ltd., Co. had a single case of exceeding the legal overtime working hours in November 2012, and was required by the authorities to limit overtime work from January 2013. Processes were put in place to ensure no more non-compliances will occur.
- Wärtsilä India Ltd. and its subcontractor company failed to register under the provisions of BOCWA at O&M Power Plant situated at Tuticorin, South India. The registration for both Wärtsila India and subcontractor for the above O&M plant was obtained. EUR 148 was paid as a fine.
- Wärtsilä Korea Ltd. was charged a penalty fee of EUR 9,639 for not fulfilling its legal obligation to hire disabled persons covering a minimum of 5% of the total headcount. The company has mainly hired blue collar employees, which limits the suitable job offerings to disabled persons.

Since Wärtsilä expects its partners and suppliers to act in compliance with its Code of Conduct, similar measures will also apply to them. The company sets common requirements for its suppliers and regularly monitors conformance with these requirements through numerous performance indicators and audits. All the company's main suppliers are required to comply with Wärtsilä's requirements, in order to gain approved supplier status. Wärtsilä assesses all companies in conjunction with mergers and acquisitions. An integral part of these due diligence assessments is compliance with relevant legislation. More information on supplier performance is presented in Suppliers section.

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 to reporting 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.

In May 2009, a former senior manager of Wärtsilä Finland Oy was charged before a court of first instance in Finland with bribery allegedly committed in aggravated circumstances. The charges related to a consulting agreement concluded in 1997 in connection with a power plant project in Kenya. Subsequently, in October 2009, Wärtsilä Finland Oy, which was the Wärtsilä contracting party and the former employer of the senior manager, was charged for aggravated giving of bribe (corporate criminal liability), for which prosecution demanded that Wärtsilä Finland Oy be ordered to pay a corporate fine. Both the senior manager and Wärtsilä Finland regarded the charges as unfounded. Wärtsilä cooperated with the investigation authorities throughout the investigation. On 18 December 2009, the court of first instance in Finland dismissed all the charges and demands. After a lengthy appeals process for reasons of procedural law, the case was referred back to the court of first instance for a new hearing as no evaluation of the evidence had been conducted earlier. On 21 March 2013, the Pohjanmaa district court, being the court of first instance to hear the case for the second time, rendered its verdict. The court dismissed the charges against Wärtsilä Finland Oy but condemned the former senior manager to prison on probation for a period of 1 year 6 months on account of aggravated bribery. The former senior manager has appealed as regards the judgment against him and prosecution has appealed as regards the dismissal of the charges against Wärtsilä Finland Oy. The appeal is currently

pending before the Vaasa Court of Appeal: the hearings concluded on 21 January 2014 and the Court of Appeal decision is expected within 30 days.

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. During 2013, Wärtsilä did not make any contributions to political parties.

Competition regulation

Wärtsilä has a compliance programme for managing risks relating to competition law in place, and the company's corporate 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 instructions for Wärtsilä's internal procedures. As before, Wärtsilä arranged a number of competition law training seminars in 2013 for the relevant personnel in order to further promote knowledge of competition laws and thus ascertain full compliance with them.

Suppliers

Wärtsilä has implemented measures to regularly track its suppliers' performance. As part of the supplier evaluation, Wärtsilä conducts a rating based upon Wärtsilä's supplier requirements. This rating includes an evaluation of compliance with Wärtsilä's sustainability requirements related to legal compliance, environmental, occupational health and safety management and social performance. This rating is a result of pre-qualification questionnaires and conducted audits.

Based on this rating, the suppliers can be approved, approved with limitations or remarks, or banned. During 2013, 209 suppliers were rated for the first time, and 239 suppliers received a renewal of their rating. By the end of 2013, Wärtsilä has rated 793 of its key suppliers (1,124 overall), and this covers 95% of the total spent on Wärtsilä Supply Management supplies.

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 2013, one supplier was banned because of non-compliance with Wärtsilä's requirements for environmental, health and occupational safety management, or through non-compliance with legislation.

Wärtsilä Supplier Development activities are implemented continuously on a global basis. A global action item in 2013 has been the communication of the new Supplier Handbook to suppliers. The handbook clarifies

Wärtsilä's expectations. There is a major emphasis on introducing sustainability related supplier requirements. As a new requirement, Wärtsilä is introducing a list of substances that are either prohibited or restricted in Wärtsilä's products, materials and processes. This list is named as Wärtsilä's Black and Grey list, and is based on international regulations, conventions and European REACH legislation (Registration, Evalutation, Authorisation & Restriction of Chemicals).

Product liability

Wärtsilä's occupational health and safety policy defines procedures for ensuring product safety. Further information about issues relating to product safety is given in the <u>Product design principles section</u>. During the review period, no instances of non-compliance related to product liability were identified.

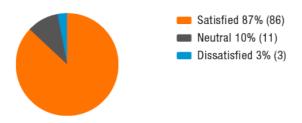
Customer satisfaction

In order to strengthen our customer-focused mindset, Wärtsilä uses an integrated customer feedback process. Wärtsilä's aim is to achieve excellent long-term relationships with its customers by listening to and acting upon customer feedback. While challenges may arise in our kind of business, by listening to our customers, taking a pro-active approach, and addressing their needs, relationships will develop.

Our customers provide us with important feedback during project deliveries, as well as during the operation of their installations. To ensure that we meet our customers' expectations, their feedback is systematically reviewed and the needed actions are taken accordingly, at both the operative and management levels. In addition, Wärtsilä collects feedback during different events, activities and interactions with our customers. In 2013, Wärtsilä received more than 3,900 specific feedback forms. More than 480 of these triggered a corrective action, which involved front-line personnel taking immediate rectifying steps.

Customer satisfaction results

Overall satisfaction key performance indicator



The average results of the customer satisfaction survey

	2013	2012	2011	2010	2009
Power Plants	8.5	8.5	8.4	8.3	8.1
Ship Power	8.2	8.1	8.1	7.6	7.4
Services	8.5	8.4	8.3	7.9	7.9
Sample	3 911	3 022	2 188	1 933	1 859

Our figures

The operational performance data in this report has been compiled from the economic, environmental and social records of the Wärtsilä companies. Whilst every effort has been made to ensure that the information is neither incomplete nor misleading, it cannot be considered as reliable as the financial information published in the <u>Financial review</u>.

Economic data

	2013	2012	2011	2010	2009
Customers					
Net sales (MEUR)	4 654	4 725	4 209	4 553	5 260
Net sales by market area (MEUR)					
Europe	1 329	1 202	1 249	1 266	1 654
Asia	1 759	2 009	1 594	1 754	1 937
Americas	1 068	994	845	1 034	1 176
Africa	405	398	443	390	399
Other	93	122	77	109	94
Suppliers					
Cost of goods, materials and services purchased (MEUR)	2 901	3 007	2 694	2 927	3 593
Employees					
Salaries and wages (MEUR)	903	887	770	773	735
Salaries and wages by market area (MEUR)					
Europe	649	631	552	565	549
Asia	138	145	119	111	106
Americas	91	91	80	78	66
Africa	14	12	11	12	9
Other	10	8	7	6	4
Net sales / employee (TEUR)	248	250	238	253	279
Public sector					
Taxes and social dues (MEUR)	314	317	322	326	337
Taxes and social costs by market area (MEUR)					
Europe	232	234	240	253	264
Asia	34	39	41	35	37
Americas	39	36	38	31	32

Africa	8	6	2	5	3
Other	2	2	1	2	1
Subsidies received (TEUR)	6 331	5 543	8 263	7 406	13 725
Net financial items (MEUR)	-19	-30	-16	-13	-34
Community					
Donations given, Board of Directors (TEUR)	111	104	60	670	70
Donations given, Wärtsilä companies (TEUR)	609	456	940	421	527
Expenditure					
R&D costs (MEUR)	185	188	162	141	141
Environmental costs					
Environmental capital expenditures (MEUR)	0.6	0.8	0.9	2.9	1.1
Environmental operating expenditures (MEUR)	5.1	6.3	6.1	5.5	4.2

Environmental data

	2013	2012	2011	2010	2009
Materials					
Total material usage (t)	91 720	99 570	98 142	100 896	129 320
Metals (t)	69 991	70 323	65 263	69 194	85 351
Sand (t)	16 537	21 279	23 072	20 739	27 157
Chemicals (t)	3 865	6 730	7 963	8 500	12 932
Others (t)	1 327	1 238	1 844	2 462	3 880
Energy					
Total energy consumption (TJ)	1 613	1 691	1 735	1 916	2 194
Electricity consumption (MWh)	143 833	143 810	145 078	149 047	164 022
Purchased electricity (MWh)	136 098	125 761	129 885	131 562	148 780
Generated electricity (MWh)	7 735	18 007	15 109	17 485	15 242
Sold electricity (MWh)	23 527	22 568	36 893	39 958	60 881
Heat consumption (MWh)	29 077	27 910	31 805	41 401	37 060
Light fuel oil (t)	4 765	5 096	3 409	3 623	5 662
Heavy fuel oils (t)	3 755	5 920	7 652	9 020	15 652
Natural gas (t)	9 806	9 767	10 486	12 347	11 792
Other fuels (t)	4 214	4 025	4 173	3 729	3 326
Water					
Total water consumption (1 000 m³)	7 534	9 546	9 775	10 292	8 128
Consumption of domestic water (1 000 m³)	744	799	830	840	808
Consumption of cooling water (1 000 m³)	6 790	8 747	8 945	9 452	7 320
Emissions					
Emissions of nitrogen oxides (t)	549	697	765	826	1 290
Emissions of carbon dioxide (t) (direct)	59 631	63 762	68 897	80 234	96 749
Emissions of carbon dioxide (t) (indirect)	57 040	54 011	56 610	58 002	62 211
Emissions of carbon dioxide (t) (indirect - flights)	40 596	39 033	37 459	35 060	37 882
Emissions of sulphur oxides (t)	91	145	265	277	595
Emissions of total hydrocarbons (t)	130	180	166	211	230
Particulates (t)	10	13	20	19	28
Emissions of VOC (t)	49	51	58	61	170
Waste					
Total waste (t)	44 741	62 517	85 153	43 566	55 803
Non-hazardous waste (t)	33 623	39 512	42 865	38 391	49 946
Hazardous waste (t)	11 118	23 005	42 288	5 175	5 857

Waste for landfills (t)	16 875	21 988	27 808	21 682	20 752
Waste for recycling (t)	14 622	15 423	12 444	14 221	26 332
Waste for incineration (t)	2 125	2 101	2 614	2 542	2 862
Hazardous waste for landfills (t)	6 360	17 376	38 054	1 127	852
Hazardous waste for recycling (t)	2 796	3 200	2 082	2 161	2 305
Hazardous waste for incineration (t)	1 963	2 429	2 152	1 887	2 699
Compliance with legislation					
Disturbances	5	3	6	8	8
Non-compliance	2	2	6	3	0
Complaints	1	7	5	5	7

Social data

	2013	2012	2011	2010	2009
Personnel					
Number of employees at the end of the year	18 663	18 887	17 913	17 528	18 541
Personnel by business					
Services	10 785	11 163	11 168	11 150	11 219
Ship Power	3 612	2 139	999	969	1 140
Power Plants	1 053	932	855	835	835
PowerTech	2 449	3 811	4 091	4 210	4 911
Other	764	842	800	364	436
Personnel by market area					
Europe	10 507	10 490	9 813	9 790	10 889
Asia	5 628	6 084	5 830	5 503	5 610
Americas	1 876	1 693	1 700	1 700	1 610
Africa	563	533	484	443	410
Other	89	87	86	92	78
Average age of employees	39.7	39.4	38.8	38.9	38.8
Permanent employees (%)	88	88	88	90	88
Temporary employees (%)	12	12	12	10	12
Full-time employees (%)	97	97	97	97	98
Part-time employees (%)	3	3	3	3	2
Employee turnover (resigned) (%)	7.7	6.9	8.6	9.8	10.5
Net employment creation	-477	-416	-191	-814	-310
Training days (days/employee)	4.1	3.4	3.0	3.1	3.7
Managers and superiors	4.6	3.3	3.4	3.2	3.9
Other white-collar employees	4.1	3.9	2.5	2.9	3.8
Blue-collar employees	3.6	3.0	3.4	3.3	3.5
Development discussions held annually (%)	91	84	89	72	78
Gender diversity					
Male/female ratio (%)	85/15	84/16	86/14	86/14	86/14
Executive positions globally: male/female ratio (%)	90/10	91/9	90/10	90/10	87/13
Regional diversity					
Number of nationalities	120	107	114	109	110
Injuries					
Total number of injuries	730	742	987	971	1 169
Number of lost tome injuries resulting in at least 1 day absence, total	199	238	267	333	470
Number of lost time injuries - work-related	162	194	221	274	

Number of lost time injuries - commuting Lost time injuries / million working hours	37 4.4	44 5.5	46 6.3	59 7.8	12.9
Absence rate					
Absence due to illness (% of total working hours)	2.1	2.0	2.1	2.3	2.4
Absence due to lost time injury (% of total working hours)	0.1	0.1	0.1	0.2	0.2
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	0	1	1	2
Employees	1	0	1	0	1
Contractors	0	0	0	1	1
Non-compliances					
Number of non-compliance cases	4	3	4	2	4
Fines of non-compliance cases (EUR)	9 787	45 079	7 869	26 157	17 659
Customer satisfaction					
Ship Power	8.2	8.1	8.1	7.6	7.4
Services	8.5	8.4	8.3	7.9	7.9
Power Plants	8.5	8.5	8.4	8.3	8.1
Sample	3911	3022	2 188	1 933	1 859

Report scope

Wärtsilä's Sustainability Reporting 2013 is prepared according to the GRI (Global Reporting Initiative) sustainability Reporting Guidelines (G3).

Wärtsilä reports those core indicators which are of most relevance to its operations, products and stakeholders. The Sustainability section of the Annual Report examines the company's economic, environmental and social performance. The core indicators chosen are of importance at the corporate level and are based on the core indicators of the G3 guidelines. Reporting of the product performance, which is done mainly on the internet (www.wartsila.com), describes the environmental aspects and impacts of Wärtsilä's products, the measures taken by Wärtsilä to reduce these impacts and the environmentally advanced solutions that Wärtsilä has developed.

Coverage of the report

This 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.

Wärtsilä's businesses comprise of the Ship Power, Power Plants and Services businesses and PowerTech. The first three of these generate external net sales while the fourth is an internal function. The economic performance data covers all Wärtsilä companies. The data on environmental and social performance covers all Wärtsilä companies except the following:

Wärtsilä Tanzania Ltd. Cedervall Söner AB Wärtsilä Egypt Power S.A.E Wärtsilä Mocambique Lda Antique Energy Operators Ltd. Wärtsilä Operations Guyana Inc.

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.

Significant changes in Group structure

The structural changes that apply to Wärtsilä are described in the Business review.

Coverage of operational data

Operational data, % of Wärtsilä companies

	2013	2012	2011	2010	2009
Economic	100	100	100	100	100
Environmental	93	79	92	93	84
Social	93	79	92	93	84

Operational data, % of personnel

	2013	2012	2011	2010	2009
Economic	100	100	100	100	100
Environmental	99	94	98	98	98
Social	99	94	98	98	98

Operational data, % of product manufacturing

	2013	2012	2011	2010	2009
Economic	100	100	100	100	100
Environmental	99	93	100	100	100
Social	99	93	100	100	100

Reporting 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 CSM 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.

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 video conferencing. Site assurance was carried out in Wärtsilä Water Systems in Poole, England. CME Zhenjiang Propeller Co, Wärtsilä China, Wärtsilä Switzerland and Wärtsilä Japan were assessed through video conferencing.

Wärtsilä self-declares an Application level of "A+" according to the GRI G3 guidelines for this report. KPMG has checked our reporting and has confirmed it to be Application level "A+".

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

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

Sustainability Report Project Team

Marko Vainikka Director, Corporate Relations and Sustainability (contact person: marko.vainikka@wartsila.com)

Harri Mäkelä Sustainability Officer

Natalia Valtasaari Director, Investor Relations **Minna Kröger** Manager, Corporate Relations



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 2013.

Subsidies: The data of this indicator included 15 major Wärtsilä subsidiaries and the parent company in 2013.

Environmental performance data

Total energy consumption includes both direct and indirect energy usage. The direct energy usage includes the fuels used by Wärtsilä subsidiaries. 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.

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

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.

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 emissions of vehicles are calculated by using the VTT (Technical research centre of Finlands) Lipasto database emission factors. The indirect CO₂ emissions (scope 2) are calculated by using the emission factors from the GHG Protocol. The CO₂ emissions of air travel are based on calculations by Wärtsilä's travel agency and are based on DEFRA (the UK government Department for Environment, Food and Rural Affairs) defined factors.

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

Social performance data

Injuries: The reported figures include all types of reported cases other than lost time injuries.

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

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

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

Independent Assurance Report

To the Board of Management of Wärtsilä Corporation

We have been engaged by the Board of Management of Wärtsilä Corporation (hereafter: Wärtsilä) to provide limited assurance on Wärtsilä's Sustainability Information in the electronic Wärtsilä Annual Report 2013 from the reporting period 1.1.–31.12.2013.

The sustainability information subject to the limited assurance engagement (hereafter: the Sustainability Information) includes the data and text presented in the "Sustainability" -section and its sub-sections in the Report, as well as the following sub-sections of the "Business" section: "Ship Power and Sustainability", "Power Plants and Sustainability", and "Services and Sustainability". The Sustainability Information also includes data and text in the Inside Stories specifically marked with "Sustainability Assured 2013".

The Board of Management of Wärtsilä is responsible for the presented Sustainability Information as well as for preparing and presenting the Sustainability Information in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines 3.0. The Board of Management of Wärtsilä has approved the presented Sustainability Information.

Our responsibility is to carry out a limited assurance engagement and to express a conclusion on the Sustainability Information subject to the assurance based on the work performed. We have conducted the engagement in accordance with the International Standard on Assurance Engagements (ISAE 3000): Assurance engagements other than audits or review of historical financial information, issued by the International Auditing and Assurance Standards Board. We do not accept or assume responsibility to anyone other than Wärtsilä for our work, for this assurance report, or for the conclusions we have reached.

The evaluation criteria used for our assurance are the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines 3.0.

Limitations of the engagement

Sustainability related data and information are subject to inherent limitations in data accuracy and completeness, which 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. Our assurance report is not intended for use in evaluating Wärtsilä's performance in executing the sustainability principles Wärtsilä has defined. To assess the financial state and performance of Wärtsilä, the Wärtsilä audited Financial Statements for the year ended 31 December 2013 is to be consulted.

The work performed in the engagement

Our assurance procedures are designed to obtain limited assurance on whether the information subject to the assurance engagement is presented in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative 3.0 in all material respects. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the sustainability information presented, and applying analytical and other evidence gathering procedures, as appropriate. The evidence gathering procedures mentioned above are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement.

In our engagement we have performed the following procedures:

- Interviews with two members of senior management to reassert our understanding of the connection between Wärtsilä's sustainability procedures and Wärtsilä's business strategy and operations as well as sustainability objectives;
- An assessment of data management processes, information systems and working methods used at the Head Office to gather and consolidate the presented Sustainability Information, and a review of Wärtsilä's related internal documents and guidelines;
- Comparison of Sustainability Information to underlying rules of procedure, management and reporting systems as well as documentation;
- An assessment of the presented Sustainability Information against the GRI reporting principles;
- A review of the presented Sustainability Information, including the performance data and assertions, subject to the engagement, and an assessment of information quality and reporting boundary definitions;
- Assessment of data accuracy and completeness through a review of the original numerical information received from Wärtsilä's subsidiaries as well as through samples the Group's information systems;
- Assessment of the local reporting processes of Wärtsilä's subsidiaries on a sample basis through a site
 visit and four video conferences, conducted to Wärtsilä sites selected on the basis of a risk analysis taking
 into account both qualitative and quantitative information.

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 presented in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative 3.0 in all material respects.

Helsinki, 10. February 2014 KPMG OY AB

Virpi Halonen

Authorized Public Accountant

Nathalie Clément Senior Manager, Advisory

GRI and UNGC index

1 Strategy and analysis

GRI content	Links	Remarks	GRI UNG	
1.1 CEO's statement	Message to the Shareholders		•	•
1.2 Key impacts, risks and opportunities	Risk and risk management Corporate strategy Power Plants and sustainability Ship Power and sustainability Services and sustainability Wärtsilä and sustainability	See also Business Strategy sections	•	•

2 Organisational profile

2.1 Name of the organisation	This is Wärtsilä	•
2.2 Primary brands, products and services	This is Wärtsilä Operating environment Power Plants review Ship Power review Services review PowerTech review	•
2.3 Operational structure	This is Wärtsilä Operating environment Notes to the Consolidated Financial Statements	•
2.4 Location of organisation's headquarters	Shares and shareholders	Helsinki, Finland •
2.5 Number of countries and location of operations	This is Wärtsilä Operating environment Notes to the Consolidated Financial Statements, Note 30	www.wartsila.com •
2.6 Nature of ownership and legal form	Shares and shareholders	•
2.7 Markets served	This is Wärtsilä Operating environment	•
2.8 Scale of reporting organisation	This is Wärtsilä Shareholders Operating environment	•
2.9 Significant changes	Board of Directors' report	•
2.10 Awards received in the reporting period	Sustainability highlights 2013	•

3 Report parameters

3.1 Reporting period	Report scope	•	
3.2 Date of most recent report	Report scope	•	
3.3 Reporting cycle	Report scope	•	

3.4 Contact point for questions regarding the report	Report scope	•	
3.5 Process for defining report content	Report scope	•	
3.6 Boundary of the report	Report scope	•	
3.7 Limitations on the report's scope or boundary	Report scope	•	
3.8 Basis for reporting subsidiaries and joint ventures	Report scope	•	
3.9 Data measurements techniques and bases of calculations	Report scope Reporting principles	•	
3.10 Explanation of restatements	Report scope	•	
3.11 Significant changes from previous reporting periods	Report scope	•	
3.13 Assurance policy and practice	Report scope	•	

4 Governance, Commitments and Engagement

4.1 Governance structure	Governance	•	
4.2 Position of the Chairman of the Board	Board of Directors	•	
4.3 Independence of the Board members	Board of Directors	•	
4.4 Mechanism for shareholder and employee consultation	Annual General Meeting	•	
4.5 Executive compensation and linkage to organisation's performance	Salary and remuneration report 2013	•	
4.6 Processes for avoiding conflicts of interest	Governance	•	
4.7 Processes for determining expertise	Governance	•	
4.8 Implementation of mission and values statements; code of conduct	Corporate strategy Wärtsilä and sustainability Guiding principles Code of Conduct	•	•
4.9 Procedures of the Board for overseeing risk management	Governance Board of Directors' report	•	
4.10 Processes for evaluating the Board's performance	Governance Board of Directors' report	•	
4.11 Precautionary principle	Risks and risk management Wärtsilä and sustainability Environmental performance	•	•
4.12 Voluntary charters and other initiatives	Strategy: Sustainability Guiding principles	•	•

4.13 Memberships in associations	Stakeholder relations	•	•
4.14 List of stakeholder groups	Stakeholder relations	•	
4.15 Identification and selection of stakeholders	Stakeholder relations	•	•
4.16 Approaches to stakeholder engagement	Stakeholder relations	•	•
4.17 Key topics raised through stakeholder engagement	Stakeholder relations Wärtsilä and sustainability	•	•

5 Management Approach and Performance Indicators

				Т
Disclosure on management approach	Economic performance Financial targets			ľ
EC1 Direct economic value generated and distributed	Economic performance		•	
EC2 Risks and opportunities due to climate change	Risks and risk management Wärtsilä and emission trading			
EC3 Coverage of defined benefit plan obligations	Employees		•	
EC4 Significant subsidies received from government	<u>Public sector</u>		•	
EC5 Entry level wage compared to minimum wage	Employees		0	•
EC6 Spending on local suppliers	<u>Suppliers</u>		0	
EC7 Local hiring	Employees		•	•
EC8 Infrastructure investments provided for public benefit	Community support Sustainability highlights 2013		•	
EC9 Significant indirect impacts	Economic performance Local community approach		0	
Environmental Performance Ir	ndicators			
Disclosure on management approach	Wärtsilä's sustainability goals Environmental performance	www.wartsila.com/ sustainability		•
EN1 Materials used by weight or volume	Materials, energy and water		0	•
EN2 Recycled materials used	Materials, energy and water	Reporting system under development	0	•
EN3 Direct energy consumption	Materials, energy and water		•	•
EN4 Indirect energy consumption	Materials, energy and water		•	•

EN5 Energy saved due to conservation and efficiency improvements	Wärtsilä's sustainability goals		•	•
EN6 Initiatives to provide energy efficient or renewable energy based products and services	The value of sustainable innovation	www.wartsila.com/ sustainability	•	•
EN7 Initiatives to reduce indirect energy consumption	Wärtsilä's sustainability goals Wärtsilä's R&D focus Improving efficiency Emissions and wastes		0	•
EN8 Total water withdrawal	Materials, energy and water		•	•
EN9 Water sources significantly affected	Materials, energy and water		•	•
EN10 Percentage and total volume of water recycled and reused			-	•
EN11 Location and size of land holdings in biodiversity-rich habitats	Environmental costs and liabilities		•	•
EN12 Description of significant impact of activities, products and services on biodiversity	Environmental costs and liabilities	Not applicable	0	•
EN13 Habitats protected or restored		Not applicable	-	•
EN14 Managing impacts on biodiversity		Not applicable	-	•
EN15 Species with extinction risk with habitats in areas affected by operations		Not applicable	-	•
EN16 Total direct and indirect greenhouse gas emissions	Emissions and wastes		•	•
EN17 Other relevant indirect greenhouse gas emissions	Emissions and wastes	Reporting system under development	0	•
EN18 Initiatives to reduce greenhouse gas emission	Emissions and wastes Wärtsilä's sustainability goals Wärtsilä's R&D focus Improving efficiency	www.wartsila.com/ sustainability	•	•
EN19 Emissions of ozone- depleting substances		Not applicable	-	
EN20 NO _X , SO _X , and other significant air emissions	Emissions and wastes		•	•
EN21Total water discharge	Materials, energy and water		•	•
EN22 Total amount of waste	Emissions and wastes		•	•
EN23 Significant spills	Compliance with legislation		•	•
EN24 Transported, imported, exported or treated hazardous waste		Not applicable	-	•

EN25 Water bodies and habitats affected by discharges of water		Not applicable	-	•
EN26 Mitigating environmental impacts of products and services	Power Plants review Ship Power review Services review Environmental performance	www.wartsila.com/ sustainability	•	•
EN27 Reclaimable products and reuse		www.wartsila.com/ sustainability	0	•
EN28 Significant fines and sanctions for non-compliance with environmental regulations	Compliance with legislation		•	•
EN29 Environmental impacts of transportation			-	
EN30 Total environmental protection expenditures and investments	Environmental costs and liabilities		•	•
Social Performance Indicators				
Labor Practices and Decent Work				
Disclosure on management approach	Personnel and social performance Wärtsilä's sustainability goals			•
LA1 Breakdown of workforce	<u>Personnel</u>		•	
LA2 Breakdown of employee turnover	Employee practices		•	•
LA3 Employee benefits	Employee practices		•	
LA4 Coverage of collective bargaining agreements	Employee practices	www.wartsila.com/ sustainability	•	•
LA5 Minimum notice period regarding operational changes	Employee practices		•	•
LA6 Representation in joint health and safety committees	Occupational health and safety	57% of Wärtsilä employees were covered by collective bargaining agreements in 2013.	•	•
LA7 Injury, lost time injury, fatalitites, absence rates	Occupational health and safety		•	•
LA8 Education and prevention programmes regarding serious diseases	Occupational health and safety	Part of the OHS management systems which cover Wärtsilä employees	0	•
LA9 Health and safety topics covered in formal agreements with trade unions			-	
LA10 Average training hours per year	Personnel		•	
LA11 Programmes for skills management	Personnel		•	
LA12 Employees receiving regular performance and	Employee practices Social data		•	

career development reviews				
LA13 Composition of governance bodies and breakdown of employees	Governance Personnel Employee practices		•	•
LA14 Ratio of basic salary of men to women by employee category	Employees Employee practices		0	•
Human rights				
Disclosure on management approach	Personnel and social performance Wärtsilä's sustainability goals			Ľ
HR1 Investment agreements that include human rights clauses	Human and labour rights		•	•
HR2 Suppliers and contractors that have undergone human rights screening	<u>Suppliers</u>		•	•
HR3 Human rights related training for employees	Code of Conduct	Part of Code of Conduct training	-	•
HR4 Incidents of discrimination and actions taken	Human and labour rights		•	•
HR5 Supporting right to freedom of association and collective bargaining in risk areas	Human and labour rights		•	•
HR6 Measures taken to eliminate child labour in risk areas	<u>Wärtsilä and sustainability</u> <u>Human and labour rights</u>		•	•
HR7 Measures taken to eliminate forced labour in risk areas	<u>Wärtsilä and sustainability</u> <u>Human and labour rights</u>		•	•
HR8 Human rights related training for security personnel	Security management		•	•
HR9 Incidents involving rights of indigenous people and actions taken	<u>Human and labour rights</u>		•	•
Society performance				
Disclosure on	Personnel and social performance			•
management approach	Wärtsilä's sustainability goals			
SO1 Managing impacts of operations on communities	Local community approach		•	
SO2 Business units analysed for corruption risks	Preventing corruption and bribery Risks and risk management		•	•
SO3 Anti-corruption training	Preventing corruption and bribery Wärtsilä's sustainability goals		•	•
SO4 Actions taken in response to incidents of corruption	Preventing corruption and bribery		•	•

SO5 Public policy positions and participation in public policy development and lobbying	Political lobbying	•	•
SO6 Contributions to politicians and related institutions	Political lobbying	0	•
SO7 Legal actions for anti- competitive behaviour, anti-trust and monopoly practices	Competition regulation	•	
SO8 Fines and sanctions for non-compliance with laws and regulations	Social data	•	
Product responsibility			
Disclosure on management approach	Personnel and social performance Product liability		•
PR1 Assessment of health and safety impacts of products	Product liability Ensuring reliability and safety	•	•
PR2 Non-compliance with regulations concerning health and safety impacts of products	Product liability	•	•
PR3 Product information required by procedures	Product liability	•	•
PR4 Non-compliance with regulations concerning product information and labelling	Product liability	•	•
PR5 Customer satisfaction	Customer satisfaction	•	
PR6 Adherence to marketing communications laws, standards and voluntary codes	Product liability	•	
PR7 Non-compliance with marketing communications regulations and voluntary codes	Product liability	•	
PR8 Complaints regarding breaches of customer privacy	Product liability	•	•
PR9 Fines for non- compliance concerning the provision and use of products and services	Product liability	•	

• = Full	y reported o	= P	Partly reported - = Not reported $ullet$ = UNGC reported
= Co	re indicator		= Additional indicator