Risks and risk management

The aim and principles of risk management

Wärtsilä, like any other company, is exposed to various risks through the normal course of its activities. No business can be conducted without accepting a certain level of risk, and any expected gains from business activities are to be assessed against the involved risks.

The purpose of risk management is to ensure that Wärtsilä is able to effectively execute its strategies and reach its targets, in the short-term as well as over the long run. The key is to identify those risks that have the potential to restrain the company from reaching its goals and to determine whether such risks are at an acceptable level.

By definition, risk is the effect of uncertainty on objectives. An effect is a deviation from the expected, positive or negative; in other words, either a threat or an opportunity. Actions need to be taken to avoid, mitigate, transfer, or monitor identified risks, or to capture and utilise the opportunities. Wärtsilä’s structured risk management process offers a set of reactive, proactive, protective, and preventive tools that are used not only to protect it against threats, but also to turn some of the risks into opportunities.

Risks can only be managed if they are identified and understood in advance, if risk treatment plans for managing them are made, and if a process of continuous follow-up is in place for the related controls. Therefore, risk management is a central part of Wärtsilä’s strategic and operational management.

Risk management at Wärtsilä is a continuous process of analysing and managing all the opportunities and threats faced by the company in its efforts to achieve its goals and to ensure the continuity of the business.

The basis for risk management is the lifecycle quality of Wärtsilä’s operations and products and the continuous, systematic loss prevention efforts at all levels of the Group, not only as an integrated part of management systems, but as part of every employee’s daily work. In the long-term, this is the only means for reducing overall risk related costs.

The Businesses are responsible for the risks and rewards, and thus managing risks is the responsibility of Business Management teams and individual managers. The risk management process at Wärtsilä is embedded in Wärtsilä’s culture and practices and has been tailored to fit the business functions and processes of the organisation. The process can be seen as a continuous loop consisting of the repetitive steps of context establishment, risk assessment, risk treatment, communication and consultation, and finally monitoring and review.
Implementation
The Board of Directors and the Board of Management decide and set the guidelines on strategic matters. The Businesses are responsible for achieving their set strategic goals and for mitigating and managing their risks. The Corporate Risk Management function is part of Group Treasury, which reports to the Chief Financial Officer. The function is responsible for the risk reporting process and for conducting risk assessments with the Businesses and their underlying organisations.

Risk mitigation actions are decided in the normal course of business. At its meetings, the Board of Management conducts annual management reviews for each Business and certain main support functions, addressing also their risks and risk mitigation.

Risk reporting

- Board of Directors / Board of Management
- Group risk report
- Business areas
- Support functions
- Underlying organisational units
Risk categories
The relevant risks for Wärtsilä have been classified under four categories: strategic, operational, hazard, and financial risks. The potential loss expectancy is the highest with strategic and operational risks and the lowest with hazard and financial risks. The risks in most of the categories can have both upside and downside impacts. In this regard, hazard risks are an exception, since for them only a negative effect is possible.

Risk radars are used to map the main risks within the risk categories. The Business-specific radars are consolidated into a single Group Risk Radar, which is presented to the Board of Directors and to the Audit Committee once a year. The purpose is to facilitate the discussion on risks and to give a quick overview of where priorities should lie in terms of risk management.

Strategic risks
Strategic risk assessment is part of the strategic planning process within the Group. At Wärtsilä, a risk is defined as strategic if it has the potential for imposing a long-term impact on the business.

Business environment risks
Business cycles in the global economy, and in customer industries, influence the demand for Wärtsilä’s products, as well as its financial condition and operating result. The flexible manufacturing model based on capacity outsourcing, together with exposure to two separate end markets with different demand drivers and a large share of sales deriving from service activities, provides Wärtsilä with a certain level of stability in a cyclical market. Important economic matters that indirectly affect Wärtsilä, its clients, and suppliers include inter alia, the liquidity and solvency of financial institutions, and thus not only their capability but also their willingness to extend credit, the counter cyclical stimulus programmes adopted by governments – especially in the power and infrastructure sectors – the activities of multilateral institutions, such as the International Finance Corporation, the availability of export credit schemes and guarantees, and other such factors. Wärtsilä’s order book gives the company time to adapt to changes in market conditions.

The implementation of more stringent environmental regulations is important for Wärtsilä’s future growth potential, since the company’s comprehensive portfolio of products and services allows customers to meet such stricter requirements. A delay in legislation implementation may present a risk to Wärtsilä. Possible changes in the legislation timeline and scope are, therefore, actively monitored.
Market and customer risks

In the energy markets, there is a global shift towards more sustainable energy sources. The penetration of renewables is increasing, and energy storage is emerging as a technology that changes the paradigm of power systems. Wärtsilä is strongly participating in these new market developments. Rapid deployment of new technologies can create new risks related to managing complex hybrid installations in an optimal way. Wärtsilä’s Greensmith Energy Management System (GEMS) is a proven, efficient, and stable software for controlling and operating complex systems, which gives Wärtsilä a competitive advantage in managing the related risks.

The rapidly changing market environment has impacted the speed of customer decision-making, as the changes require updating their future portfolio strategies. Electricity demand is increasing, but fragile economic growth represents a risk for demand development. Geopolitical tensions and the implications of trade barriers create notable challenges to the demand environment. Significant currency fluctuations can result in investment decisions being postponed in certain countries. Low oil prices have a similar impact in the oil and gas producing countries.

Orders are received from all geographic regions, thus limiting the risk of dependence on one particular market. Wärtsilä’s three customer segments, namely industrial customers, IPPs (independent power producers), and utilities, are also all represented in the order intake.

In the shipbuilding industry, Wärtsilä is well represented in all the major markets and is active in all the main vessel segments. This, along with the company’s large product portfolio and global service network providing lifecycle support to the growing installed base of over 50,000 vessels and 10,000 customers, mitigates both geographical and single customer risks.

Trade tensions, geopolitical uncertainty, and a possible slowdown in the global economy are affecting investment decisions in the shipping industry. While slow economic growth is also a risk to demand development in the service markets, the capital-intensive newbuilding market is more sensitive to changes in the economic outlook. Changes in the financial landscape have resulted in challenges to securing financing for newbuilds. Consolidation among the major shipyards is a potential risk that might result in lower capture rates in equipment sales due to changed relationships with the shipyards.

The importance of fuel efficiency and environmental regulations are clearly visible, driving interest in environmental solutions, gas as a marine fuel, as well as electric and hybrid solutions. While concerns related to climate change require increasing efforts to reduce emissions within the shipping industry, uncertainties concerning developments in the regulatory environment may slow newbuild activity. Uncertainty concerning bunker fuel pricing and availability has delayed decision-making among customers for scrubber technology investments, despite supportive initial price indications. The deliveries of exhaust gas cleaning solutions, on the other hand, increased significantly, creating a recognised risk, namely to manage and deliver the demanded orders on time and with the required quality. The shortage of available shipyard capacity to install and commission scrubber retrofits is a risk in the form of delays in project deliveries.

Digitalisation has become increasingly important for both the shipping and energy industries’ business and operating models. In accordance with its Smart Marine strategy, Wärtsilä continued to work towards the digital transformation of future shipping markets with the development of a digital strategy and by introducing new market offerings. These include initiatives such as Operim, which enables improvements in operational performance by means of continuous monitoring and the reporting of key performance indicators through enhanced use of data. In the power generation markets, energy management systems gain importance as renewable penetration grows. Wärtsilä’s advanced energy management software platform GEMS enables customers to remotely monitor individual systems or entire fleets, identifying and diagnosing equipment issues in real time, and extending system lifetime.

Competitive situation and price risks

In 2019, competition on those markets where Wärtsilä operates has increased. In large gas-fired projects, Wärtsilä faces competition from gas turbine manufacturers, such as GE and Siemens. In smaller gas power plant projects, and in the liquid fuel power plant market, the competitors are mainly other combustion engine suppliers, such as MAN Energy Solutions, INNIO (previously GE Jenbacher), Caterpillar (MAK), and Rolls-Royce. In Wärtsilä’s addressable market, i.e. the market for installations of up to 500 MW, orders for natural gas and liquid fuel power
plants totalled 11.6 GW during the twelve-month period ending in September. Wärtsilä's market share was 17%. Wärtsilä's success in the market can be attributed to its flexible power generation solution, which can be used in a broad range of different applications and power plant sizes. Price pressure resulting from the prevailing competitive environment remains a risk.

When it comes to servicing the energy markets, in line with the value-based offering concept, Wärtsilä continues to develop and offer a range of lifecycle services and asset management solutions aimed at optimising its customers' power plants over their lifecycle. Such long-term service agreements not only ensure the power plant’s performance and protect the customer’s investment but bring stability to Wärtsilä as a service provider. Competition for energy services is fragmented, consisting mainly of individual local players.

In the marine equipment markets, the competitive landscape became more consolidated in 2019 as a result of Kongsberg’s acquisition of Rolls-Royce’s Commercial Marine unit. The most significant competitors in the main engine markets are MAN Energy Solutions and Caterpillar (MAK). Wärtsilä has a strong position in medium-speed main engines with a 45% market share in 2019. In auxiliary engines, Wärtsilä’s market share was 15%. In propulsion equipment, the competition is more fragmented and varies by product category. One of the main competitors for these products is Kongsberg. In environmental solutions, as well as in gas products, the markets are very fragmented. Alfa Laval and Evac are two of the main competitors in environmental solutions, while in the electrical and automation segment Wärtsilä faces competition from companies such as Kongsberg, GE, and Siemens. In marine services, Wärtsilä has no direct competitors capable of offering a similar portfolio of services from a single source.

Price competition has intensified in the marine newbuild markets, partly due to lower vessel contracting volumes. The strategic move of becoming a systems integrator with automation and ship design capability has proven to be an important differentiator in the competition for new projects with larger and more value-adding scopes. The concept of selling packaged solutions reduces price volatility.

**Political and legislative risks**

Wärtsilä is present in over 200 locations in more than 80 countries and has delivered power plants to 180 countries. Political developments and changes in legislation can have a significant impact on Wärtsilä’s business. Wärtsilä actively monitors political and legal developments in its markets and engages in a dialogue with various official bodies on projects of importance to its operations and intellectual property rights. Much of this engagement takes place through interest groups and trade organisations. The company monitors political and legislative changes at both the corporate and subsidiary levels.

Trade related tensions have increased globally in 2019, and the uncertainty related to trade relations is now a more noteworthy risk on the marketplace than before. The impact on Wärtsilä has materialized mainly in the form of delayed contract decisions and reduced demand for new vessels caused by the expected reduction in trade volumes between the USA and China.

In recent years, there has been increased regulatory activity by different governments worldwide, which has led to the need for emphasising due internal processes to ensure compliance. As an example, the ongoing and changing trade sanctions were complied with and closely monitored during 2019. This continues to require internal efforts to ensure that adequate procedures are in place.

**Climate change and sustainability risks**

Wärtsilä has assessed its sustainability risks, including climate change risks, in both its strategic and operative risk assessments. The potential business risks related to sustainability, climate change, and Wärtsilä’s products are in the areas of regulatory emission restrictions and changes in attitudes to using combustion engines and fossil fuels. The risks in environmental legislation changes are related to the complexity of the overall field of different emissions, the balance between commercially available fuels and their resulting emissions, available abatement technologies, the impact on overall energy efficiency, and the resulting financial feasibility of the various alternative ways to meet regulatory demands.
Being at the forefront of technological developments mitigates sustainability risks and gives Wärtsilä many opportunities arising from tightening environmental regulations. Over the years, Wärtsilä has worked continuously to improve the efficiency of its products, while at the same time seeking ways to reduce emissions. The fuel flexibility of Wärtsilä’s products enables the utilisation of various fuels, including gas and those from renewable sources, while their operational flexibility enables the installation of large capacity-based wind and solar energy systems without hampering the reliability of the electricity grid. Wärtsilä has entered both the hybrid energy and energy storage businesses, representing a further step in providing customers with sustainable innovations that reduce carbon emissions. Wärtsilä’s technology also enables energy to be generated with a minimum use of water. The lack of fresh water is expected to be one of the major challenges facing the world in the future. In shipping, Wärtsilä can reduce the carbon footprint of vessels through optimised ship design, optimal propulsion solutions, and voyage management. Environmental solutions offer, among others, alternative technologies to reduce sulphur oxide (SOx) emissions and to treat waste and ballast water. Wärtsilä offers several retrofit solutions for the after-sales market to reduce emissions and to increase fuel efficiency.

For more information, please see the Sustainability section in this annual report.

Technology risks

Wärtsilä aims to increase the competitiveness of its solutions and to manage technology risks and opportunities through solid R&D efforts and innovation. The development of new products is based on the strategic view of optimising lifecycle value for customers and on reducing the lifecycle impact on the environment of developed technologies and products. This is achieved with modern and sustainable power solutions through, for example, gas solutions, environmental technologies, ship design, as well as electrical and automation solutions. As a technology leader, Wärtsilä places strong emphasis on emissions control, enhancing efficiency and maintaining the cost competitiveness of its products. Connectivity and the utilisation of data to further optimise efficiency and unlock new customer value is becoming an increasingly important element of Wärtsilä’s development roadmap.
Operational risks

Operational risk management is part of the daily work of the Businesses. Opportunities and risks are identified, assessed, and managed on a daily basis and reported to, and managed by, the appropriate management level. The status of these opportunities and threats is reviewed on a periodic basis, and appropriate further actions are then taken.
Manufacturing risk

Wärtsilä constantly analyses its manufacturing footprint and capacity costs, including costs related to the supply chain. Risk assessments have been made for all the main delivery centres, and significant safety, environmental impact, and risk mitigation investments have been completed. Risk identification, assessment, and mitigation actions are executed on a regular basis as part of operational management. Management systems for quality, environmental, occupational health and safety, and other systems are utilised to improve productivity, while safety and business continuity plans have been implemented for the key delivery centres.

Supplier and sub-contractor risk

Wärtsilä’s supply management is integrated within the business lines. The aim is to work in partnership with the supplier base to create value for Wärtsilä’s customers by ensuring quality, on-time delivery, and the lowest total cost. In order to ensure coordinated interfaces and synergies for the cross-divisional supplier base, a category management structure has been in place since 2007. Indirect Purchasing remains a centralised function responsible for managing strategic sourcing activities for indirect materials and services in all businesses and support functions.

The supply management units have a unified process for managing and controlling Wärtsilä’s supplier network and for verifying that the suppliers’ performance meets Wärtsilä’s expectations. Supplier performance is, therefore, continuously measured. A key activity in managing business continuity planning is the regular assessment of business interruption risks, which is carried out in cooperation with the company’s suppliers. Several supplier risk audits have been completed jointly with the insurer as one means of mitigating risk. These audits are now one of the regular tasks for the supply category managers and the Risk Management function.

Wärtsilä has developed its supply related activities by creating close collaboration and long-term relationships with its main suppliers. This cooperation creates a common view towards values and goals, which in turn supports the management of Wärtsilä’s strategic risks. To further mitigate supplier and sub-contractor risks, a comprehensive follow-up of suppliers’ credit worthiness has been established. Supplier related risks for key components are mitigated through dual- or multi-sourcing.

Wärtsilä uses an online solution for supply chain risk identification, assessment, and monitoring. More than 2,000 suppliers have been, and continue to be, followed through the system. The solution includes a selection of key criteria defined by Wärtsilä, against which the situation of each supplier is continuously measured. Any
discrepancies are automatically reported to the responsible category manager, who is responsible for ensuring that the necessary steps, if any, are taken to mitigate the risk. A supply chain cyber security assessment process was introduced in 2019, with the focus of covering a variety of suppliers, from large key suppliers to smaller low-spend suppliers. Until now, only a limited number of suppliers has undergone this assessment, with further assessments to be conducted during the coming year.

**Lifecycle quality of products and product liability risk**

Wärtsilä’s quality strategy focuses on preventive and proactive actions to deliver increased customer satisfaction, shorter lead times, and a reduced number of claims. To realise Wärtsilä’s quality vision, the strategy has been focused towards effective project risk management, strengthened awareness, and ownership supported by a streamlined product improvement process.

The launching of new products always involves risks. In the R&D process, several risk management techniques are applied, including the risk elimination tool FMEA (Failure Modes and Effects Analysis) and in-house validation testing. Wärtsilä seeks to control quality risks by monitoring the incoming quality of the supply chain and by designing and manufacturing its products with all due care. A non-destructive robotic ultrasonic data analysis procedure, which replaces manual scanning of critical components, enhances the probability of detecting imperfections in components with a complex geometry.

Wärtsilä applies a GATE model in order to control the product development process. Initially, only a limited release of new products is allowed, and via the gate approach, full release authority is given to the sales organisations only after testing and further validation has been completed.

Wärtsilä seeks to control its manufacturing quality risks by applying several assurance and quality control principles. The level of quality assurance and control requirements are determined based on component criticality, and they are applied throughout the delivery chain.

Requirement management is used to assess components systematically, enabling the allocation of resources and efforts according to the component criticality. The ranking criteria indicates the consequence if a component fails. The objective is to improve quality proactively within product development, supply management, and the entire delivery process from order intake to commissioning.

Nonconformity management at Wärtsilä focuses on developing and improving operations by registering and handling detected nonconformities. This ensures that customers receive products and services according to the agreed scope and specifications. Efficient handling, monitoring, and reviewing of nonconformities is crucial for proper risk management and mitigation.

Product improvement management (issue resolution) projects are prioritised based on risk and importance. This happens when Wärtsilä identifies a technical issue according to claim statistics, customer feedback, or internal analysis, and the case fulfils the risk categorisation for a non-isolated case.

The business lines are responsible for supporting customers in all warranty issues. This offers a feedback loop from the field to production and R&D, while taking care of the customers’ installations throughout their lifecycle. The company makes warranty provisions to cover any costs that may arise after product delivery. The company’s product liability insurance covers unexpected damages.

Wärtsilä seeks to continuously improve the quality of its products and services through the adoption of best industry practices and good governance. Management at all levels is responsible for the quality of output from their organisations and is accountable for ensuring that appropriate review and feedback mechanisms are in place. The centralised Wärtsilä Quality function is responsible for coordinating quality activities across the businesses and for ensuring that senior governance mechanisms are in place and effective. Wärtsilä’s business level management systems are certified in accordance with the 2015 standard revisions (ISO 9001:2015 and ISO 14001:2015), with an emphasis on a risk-based approach and proactive risk and opportunity management. Migration to the new 45001:2018 standard version will be completed during 2020.
Contractual risks

Wärtsilä’s equipment business includes projects and deliveries of various sizes. The most substantial orders concern power plants delivered on a complete EPC (engineering, procurement, and construction) basis and major marine and energy delivery contracts requiring extensive coordination, efficient risk management, and the integration of contracted systems and solutions.

In 2019, Wärtsilä’s operating result was weakened by unforeseen cost overruns in a handful of complex marine and energy projects. A review of the projects in question revealed incorrect underlying assumptions in cost estimates, insufficient risk identification, and supplier related challenges. Corrective actions have been taken to prevent similar issues from occurring in the future. These include changes to the organisational structure, processes, and technical assessment controls. Furthermore, supplier approval has been tightened, new tools introduced, and training enhanced. With these measures, Wärtsilä aims to improve the quality of its project execution activities and to ensure better upfront identification of risks and opportunities.

The risk of product liability claims is reduced through the lifecycle quality of the products and work, starting from the initial design, through all stages of the production process, to the eventual field service activities, and the use of standard sales contracts, including the establishment of a contract review process.

In activities related to lifecycle support, contractual risk is mainly related to long-term agreements and service projects, such as engine upgrades, retrofits, or modifications. In large scale performance-based agreements, the recognised contractual risk is related to the ability to manage and maintain assets as planned.

Risk of non-compliance, corruption and fraud

Wärtsilä complies with the law and its own internal policies and procedures everywhere the company does business. Wärtsilä’s Code of Conduct is the key guideline for all employees globally. Wärtsilä is committed to high ethical standards and integrity, and to preventing corruption and violations of the principles set forth in the Code of Conduct, as well as in Wärtsilä’s Anti-Corruption and Compliance Reporting policies. Compliance processes are embedded in all of the Businesses, and the responsibility for compliance and awareness of ethics and integrity is that of all Wärtsilä employees. Wärtsilä is fully committed to compliance with anti-corruption laws and statutes. Wärtsilä’s Anti-Corruption Policy absolutely forbids any kind of corruption and bribery, and the top management of the company has a zero-tolerance policy regarding corruption and fraud.

The Compliance function promotes Group-wide compliance and continuously strives to raise awareness of the risk of corruption and bribery and other misconduct. It is primarily responsible for creating and enforcing Group level policies and procedures, training programmes, misconduct incident reporting, internal compliance investigations, as well as for managing the consequences of misconduct, and reporting. The continuous development of Wärtsilä’s compliance programme and nurturing the company’s commendable ethical culture are pivotal tasks for the Compliance function. Moreover, Compliance supports and cooperates with the Businesses and other corporate functions in their risk management efforts. Wärtsilä has a Group-wide programme for strengthening its Code of Conduct, which aims to increase the employees’ understanding as to how the Code of Conduct impacts everyday activities at all Wärtsilä locations, wherever Wärtsilä operates.

While Wärtsilä is aware of the risk of being subject to fraud by external business parties, and that the risk of corruption and fraud is heightened in many markets where the company operates, Wärtsilä maintains its highly ethical practices at all times. Full compliance with its stringent anti-corruption regime, including policies to prevent the corruption and bribery risk of third parties, is demanded by Wärtsilä.

Cyber and information security related risks

Wärtsilä has an experienced and professional internal organisation dedicated to the effective management of cyber security risks across Wärtsilä’s portfolio. This organisation, in cooperation with Wärtsilä’s Business Management teams, delivers cyber security operational support. It also provides the associated governance, risk management, and assurance required to support and enable safe and secure internal operations, while ensuring that the Businesses’ customer offerings are compliant with the relevant current and future regulations and applicable standards.
The Wärtsilä cyber security governance model aligns closely with overall business risk management and supports the Businesses in identifying and prioritising their respective cyber security risks. The cyber security team works seamlessly with physical security colleagues across Wärtsilä to ensure the effective and coordinated delivery of holistic security solutions for both the cyber and physical domains.

Information security risks related to Wärtsilä's internal operations are continually identified, analysed, and evaluated. The attendant mitigation activities are executed across Wärtsilä's networks, endpoints, systems, and services. The 24/7 Wärtsilä Security Operations Centre continually monitors the perimeter to internal systems and closely observes the external threat exposure level, whilst providing a coordinated response to identified information security incidents, as and when they may occur.

The effective mitigation of risks associated with cyber security hygiene throughout Wärtsilä are continually and progressively reinforced through coordinated and complementary cyber security training, awareness initiatives, and extensive communications. This involves all Wärtsilä corporate functions and the Businesses.

Wärtsilä has identified the need to mitigate the cyber security risks associated with its supply chain. The company is addressing this need through a comprehensive and risk-based approach, involving both increased opportunities for remote and objective assessment of some suppliers, as well as increased levels of communication with others.

Recognising the ever-present and increasing cyber security risks to customers in the maritime industry, Wärtsilä has developed, in close partnership with a leading cyber security provider, a world-leading maritime cyber emergency response capability based in Singapore. This service puts thought leadership into tangible action and places Wärtsilä at the forefront in mitigating the cyber security risks to its customers.

In 2019, Wärtsilä became one of the founding members of the Operational Technology Cyber Security Alliance (OTCSA) intended to provide a technical and organisational framework for safe and secure operational technology. This new alliance aims to bridge dangerous gaps in security for operational technology and industrial control systems. As cyber criminals are seen to increasingly target operational technology used to control physical equipment like those found in factories, power plants, ships, or ports, finding ways to collaborate with the ecosystem of suppliers, customers, and other partners, even competitors, is the best way to manage the continuously evolving threat landscape.

Privacy and data protection risks
EU’s General Data Protection Regulation (GDPR) sets out the general framework for Wärtsilä’s efforts in data protection. Wärtsilä has global privacy notices to inform its personnel, customers, vendors, other stakeholders, and interest groups about the processing of personal data. Data protection implementation is supported by and aligned with group-wide privacy policies and processes.

Mandatory GDPR training is in place for employees processing personal data. Tailored data protection training is provided also for specific employee groups, such as management teams.

Wärtsilä’s applies a risk-based approach to privacy and data protection and continues to take further actions to strengthen privacy and data protection implementation in order to mitigate risks.

Commodity price risk
Oil
The direct effect of oil price changes on Wärtsilä’s production is limited, with their impact being mainly demand related. Higher oil prices represent a risk for global economic growth and increase operating costs, especially in the shipping markets. However, they also stimulate investments in exploration and production for oil and gas, both on land and offshore. Furthermore, high oil prices increase investments in gas carriers, gas-based power plants and, increasingly, also in gas-fuelled vessels. Low oil prices can delay investment decisions in oil producing countries and regions, as well as in the offshore industry. Wärtsilä is a global company involved in different shipping and power plant segments where oil price changes can have an opposing impact on demand drivers. This position is further diversified by the increasing importance of natural gas in Wärtsilä’s business.
Metals
Metal prices have an indirect effect on the component cost of Wärtsilä’s products. Some key components are sourced with long-term contracts, and raw material price volatility is, therefore, limited.

Electricity
Electricity prices have no substantial impact on Wärtsilä’s production costs. In the energy markets, high electricity prices support investments in new capacity by utility customers. Lower grid electricity prices do not favour investments in their own generating capacity by industrial customers.

Hazard risks
Occupational health and safety systems, travel safety instructions, and crisis management guidelines are aimed at protecting Wärtsilä employees. Appropriate insurances are in place for the personnel, and to emphasise the importance of employee safety, the Board of Management has decided on a corporate level target of zero lost-time injuries. A specific Zero Injury project exists for this purpose, and the target is included in the company's sustainability programme. During 2019, the near-miss reporting system, WeCare, was actively used worldwide in order to manage information related to incidents that can threaten the safety, health, and security of the company’s employees and operations, as well as the environment. This IT solution provides a guide for identifying the causes of incidents and for taking all appropriate actions in a systematic way.

Environmental management systems are in place to mitigate environmental hazard risks. Wärtsilä maintains a register of all properties used and gives guidelines for the purchase, sale, rental, and security of premises, and uses external advisors for environmental audits.

None of Wärtsilä’s major facilities are located in natural disaster areas. Catastrophic peril related scenarios are identified and, where necessary, exposures are mitigated by, for example, elevating sites above the flood risk level or by constructing flood dikes. For Wärtsilä’s main sites, business impact analyses have been conducted and continuity plans created to cover both property and business interruption risks.

The risks that Wärtsilä is unable to influence through its own efforts are transferred, whenever possible, to insurance companies. Wärtsilä uses appropriate insurance policies to cover indemnity risks related to its personnel, assets, and business interruptions, including supplier triggered interruptions, as well as third-party and product liability. Wärtsilä has established its own captive insurance company, Vulcan Insurance PCC Ltd. This risk management tool only insures Wärtsilä’s own risks. For insurance technical reasons, the company is located on the island of Guernsey. Vulcan Insurance PCC Ltd’s results are consolidated into the corporation’s books and are subject to normal taxation in Finland.
Which insurances cover our business?

Financial risks

Wärtsilä’s financial risks are presented in the notes to the financial statements, Note 33.