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 2019.

Subsidies: The data of this indicator included all Wärtsilä subsidiaries and the parent company in 2019.

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

Senior management includes all employees with the highest job grade levels 12-16. At the end of 2019 this covered 103 employees.

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

Total energy consumption includes both direct and indirect energy usage. The direct energy usage includes the fuels used by Wärtsilä subsidiaries. Lower heating values (LHV) are used to calculate the energy consumption of fuels in joules. LHVs are based on information supplied by vendors or results of fuel analysis for engine testing and R&D purposes, and for other fuel consumption the source is the DEFRA (the UK government Department for Environment, Food and Rural Affairs). The indirect energy usage includes the purchased electricity and heat. Since the efficiency of purchased electricity and heat generation is not known, the energy conversion is done directly from the purchased values.

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

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

Energy intensity describes the ratio of total internal energy consumption divided by the total net sales of the subsidiaries included in the data gathering in a particular year (TJ/MEUR).

GHG emissions intensity describes the ratio of total greenhouse gas emissions (Scope 1, 2 and 3) divided by the total net sales of the subsidiaries included in the data gathering in a particular year (kgCO₂e/EUR).

Reduction of GHG emissions data is collected on a site level, based on permanent GHG emissions reduction measures, and either calculated or estimated (Scope 1 and 2).

Reduction of energy consumption data is collected on a site level, based on permanent energy saving actions, and either calculated or estimated.

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

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

Water discharge: The reported figures are based on either measured values or invoices. The cooling water discharge might also be calculated from the heat load in some units.
Emissions: The reported figures are mainly based on measured values, based on which specific emission factors are determined. The specific emission factors are determined for various fuels and engine types. The emissions of the heating boilers are either measured or calculated. For electricity consumption the indirect CO$_2$ emissions (Location-based scope 2) are calculated by using the emission factors from IEA (International Energy Agency), and the indirect CO$_2$ emissions (Market-based scope 2) are calculated by using the residual mix emission factors where available (for Europe and USA), and for other countries the IEA emission factors. For district heating the indirect CO$_2$ emissions (scope 2) are calculated by using the emission factors from DEFRA (the UK government Department for Environment, Food and Rural Affairs). The indirect CO$_2$ emissions (scope 3) of energy consumption are calculated by using the emission factors from DEFRA. The indirect CO$_2$ emissions (scope 3) of material consumption are calculated by using the emission factors from thinkstep’s GaBi database. The CO$_2$ emissions of air travel (Scope 3) are based on calculations by Wärtsilä’s travel agency and are based on DEFRA defined factors. The other-than-GHG emissions of vehicles are calculated by using the VTT (Technical Research Centre of Finland) Lipasto database emission factors. GWP factor used for converting methane emissions to CO$_2$-equivalent is 25. Only CO$_2$ and methane are considered for the CO$_2$ emissions.

Waste: Information on waste disposal methods normally comes from the waste disposal contractor.

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

Social performance data

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

Lost time injuries: The reported figures include all reported work-related injuries resulting in absence from work of at least one scheduled work day, lost day counting from the first day after the injury.

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

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

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

Employees and other workforce: The data on Wärtsilä employees is mainly from the global SAP HR database. Less than 3% of employees, the amount varying between indicators, have not had all their employment details in the global HR processes, and thus their qualities have been assumed to be the same as on average among the rest of the global employees, i.e. their gender, employment and contract type. The new-hires and resigned employee numbers do not include any such assumptions of employees having joined but still lacking the formal record of that activity.