

Sustainability Data Calculation Methodology 2018

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Owner: Konecranes Corporate Responsibility, [corporate-responsibility\(at\)konecranes.com](mailto:corporate-responsibility(at)konecranes.com)

This document supports the information presented in the Konecranes Sustainability Report by providing additional details on our sustainability data collection and calculation methodology.

The data and information presented in the Konecranes Sustainability Report have been collected using our own internal data collection procedures, aligned with the industry best-practices. The reported data has been obtained from the databases kept in the respective corporate systems.

Unless otherwise stated, the report covers all Konecranes operations in all the countries we operate, focusing our core business and excluding joint ventures and subsidiaries. Reporting is aligned with reporting on the financial year, or in other words, the calendar year.

Verification

Ecobio Oy provided a limited third-party assurance for the following data in 2018:

Safety indicators

- ✓ Lost time accident frequency (LTA1)
- ✓ Number of work-related fatalities

Environmental indicators

- ✓ Energy consumption in own operations
- ✓ All Scope 1 greenhouse gas emissions
- ✓ All Scope 2 greenhouse gas emissions
- ✓ Scope 3: Business travel greenhouse gas emissions
- ✓ Energy intensity (MWh/sales) of own operations
- ✓ Emission intensity (tCO₂e/sales) of own operations

Assurance statement can be found at www.konecranes.com

Safety data

LTA1 = Lost Time Accident Frequency

= Number of work-related accidents causing at least one day of lost time / working hours performed over the reference period * 1 000 000 hours

Environmental data

Environmental data base year

Official base year for Konecranes energy and emission data is 2017. This is the first year we have reliable data from the combined company after integration (legacy-Konecranes + legacy-MHPS business).

To transparently report on our progress, legacy-Konecranes data is also published -4 years before the actual reporting year (e.g. in the 2018 report, 2016, 2015 and 2014 legacy-Konecranes figures are also published).

Environmental Data Recalculation

In case of a significant changes in the organization, calculation methodology or data accuracy, historical environmental figures are recalculated to ensure our reporting gives a realistic view on our environmental impacts and our progress. In case of recalculations, these are always remarked and explained in the report.

Energy data

Four different kind of energy consumption categories are collected and reported:

- Fuel consumption: consists of diesel and petrol (includes manufacturing and service)
- Natural gas and LPG consumption (manufacturing only, service excluded)
- Electricity consumption (manufacturing only, service excluded)
- District heat consumption (manufacturing only, service excluded)

In addition, a figure for total energy consumption is reported: this includes all the above energy sources.

Service operations' natural gas, LPG, electricity and district heat figures are excluded from the report as collecting this data from our service network is challenging and the consumption amounts are estimated to be significantly smaller than the respective figures of our manufacturing locations.

Konecranes also collects information on how many percentages of our energy is from renewable and non-renewable sources:

- Renewable energy percentage = Amount of renewable energy divided by total energy consumption
- Renewable electricity percentage = Amount of renewable electricity divided by total electricity consumption

Greenhouse Gas emissions

Konecranes uses the **operational control approach** described in The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard: Company accounts for 100 percent of the GHG emissions from operations over which it has control. A company has operational control over an operation if the former or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation.

Emissions from service operations' natural gas, LPG, electricity and district heat figures are excluded from the report as collecting this data from our service network is challenging and the emission amounts are estimated to be significantly smaller than the respective figures of our manufacturing locations.

CO₂, CH₄ and N₂O are included in the reported emissions. GWP: 2014 IPCC Fifth Assessment Report.

Three different types of emissions are calculated:

- Scope 1, direct emissions:
 - o Scope 1 includes emissions from direct energy usage: diesel, petrol, natural gas and LPG consumption
 - o Calculated by using emission factors from GHG Protocol's Excel file *GHG emissions from stationary combustion*
- Scope 2, indirect emissions
 - o Scope 2 includes emissions from electricity and district heat consumption. Scope 2 indirect emissions are calculated according to the GHG Protocol Scope 2 Guidance dual reporting requirement: location-based and market-based method.
 - o Location-based calculation method: Electricity emission factors are taken from GHG Protocol's Excel file *GHG emissions from purchased electricity*.
 - o Market-based calculation method: In the market-based calculation method, renewable electricity instruments/certifications are considered. For locations, which have purchased renewable energy, the emission factors are collected from the electricity suppliers. For locations, which do not purchase renewable energy, the emission factors are chosen

according to GHG Protocol's Scope 2 Guidance. District heat emission factors are acquired from heat suppliers whenever possible; otherwise Motiva's district heat average factors are used.

- Konecranes Finland Oy acquired RES-GO guarantees of origin for electricity (Renewable Energy Sources - Guarantee of Origin), which are subject to EECS (European Energy Certificate System). These guarantees of origin covered 15,800 MWh electricity consumption for the year 2018. Production method was Finnish bioenergy.
- Scope 3, emissions from business travel
 - Includes emissions only from business travel flights
 - Business travel emissions are reported by our travel management company. This emission figure is extrapolated to cover all our operations by using employee headcount data.
 - GHG Protocol emission factors are used (CO2 equivalents)

Total emissions include scope 1 and scope 2 (market-based method). Scope 3 is not included in the total emission figures, as collecting comprehensive Scope 3 data is still in progress.

Waste and water calculations

Waste and water data include our manufacturing locations' data. Service locations are excluded from the report as collecting this data from our service network is challenging, and the waste/water amounts are estimated to be significantly smaller than the respective figures of our manufacturing locations.

Four different waste categories are reported:

- Metal scrap: waste streams are directed to recycling
- Cardboard, paper and wood: waste streams are directed to recycling
- Hazardous and electronic and electrical waste: waste stream handling split into recycling, incineration and other adequate treatments depending on location
- Other waste: Includes plastic, organic, mixed and energy waste. Waste stream handling split into recycling, incineration, composting, and landfill depending on location.