

Sustainability Report Data Calculation Methodology 2021

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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. In relevant categories in Scope 3 emission calculations joint ventures and subsidiaries are included.

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 2021:

Safety indicators

- ✓ Total recordable incident rate (TRI)
- ✓ 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 flights 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

TRI = Total recordable incident rate

= number of work-related injury incidents requiring medical treatment / working hours performed over the reference period * 1 000 000

Environmental data

Environmental data base year

Official base year for Konecranes energy and emission intensity targets is 2017. Base year for Konecranes Science Based Emission Target is 2019. To transparently report on our progress, data is published minimum of 2 years before the actual reporting year (e.g., in the 2021 report, 2020 and 2019 figures are also published).

Environmental Data Recalculation

In case of a significant changes (meaning 10 % change in the values) 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. Konecranes can recalculate values even if the change is smaller than 10 % if necessary.

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 (includes manufacturing and relevant service offices)
- 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 and district heat figures are excluded from the report as the consumption amounts are estimated to be significantly smaller than the respective figures of our

manufacturing locations. Service operations' electricity consumption in biggest service offices is included in the data collection.

Konecranes also collects information on how many percentages of our energy is from renewable and non-renewable sources. From this calculation we have excluded the share of renewable fuels.:

- 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 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.

Scope 1, 2 and 3 emissions are calculated:

- Scope 1, direct emissions:
 - o Scope 1 includes emissions from direct energy usage: diesel, petrol, natural gas, LPG consumption and refrigerants
 - o Emissions from diesel, petrol, natural gas and LPG consumption are calculated by using emission factors from IEA's The Emissions Factors database 2021
 - o Emissions from refrigerants are calculated by using conversion factors for Company GHG Reporting from BEIS
- Scope 2, indirect emissions:
 - o Scope 2 includes emissions from electricity and district heat consumption.
 - o 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 IEA's The Emissions Factors database 2021.
 - o Market-based calculation method: In the market-based calculation method, renewable electricity instruments/certifications are considered. The emission factors are chosen according to GHG Protocol's Scope 2 Guidance from IEA's The Emissions Factors database 2021. District heat emission factors are acquired from IEA's The Emissions Factors database 2021.

- When a location uses renewable electricity, they provide annually their Guarantee of origin for electricity for Global Sustainability team.
- Scope 3:
 - Purchased goods and services
 - The emissions from purchased goods and services are calculated based primarily on monetary data split by purchased goods and service category, using the Greenhouse Gas Protocol's and Quantis's Scope 3 Evaluator web-based tool. Volume data was collected separately for steel raw materials and aluminium raw materials, as they are the largest source of emissions, and Ecoinvent material-specific emissions factors were used to calculate the emissions from these raw materials. Inverter related emissions were calculated based on volume data and using emission factors from suppliers.
 - Capital goods
 - The emissions from capital goods are estimated based on monetary data split by purchased goods category using the Greenhouse Gas Protocol's and Quantis' Scope 3 Evaluator web-based tool.
 - Fuel and energy related activities
 - The emissions from fuel and energy related activities that are not included in Scope 1 or 2, are calculated based on the breakdown of Konecranes' energy consumption by country and source (fuels and electricity) using DEFRA's UK Government emission factors for WTT and Transmission and distribution (T&D) losses.
 - Upstream transportation and distribution
 - The emissions from upstream transportation and distribution were calculated using emissions data provided by Konecranes biggest logistics service providers for the services they provided during the reporting year. These logistics providers represent over half of Konecranes' total logistics spend and the remaining half was extrapolated to cover 100% of the logistics spend.
 - Waste generated in operations
 - Konecranes measures the volume of waste generated in its operations split by waste category (scrap metal, paper and board, hazardous and WEE, and other waste) and waste treatment streams (recycling, incineration, composting, and landfill) aggregated at the Group level. The emissions from waste generated in operations were calculated using DEFRA's UK Government emission factors for waste disposal.
 - Business travel
 - Business air travel emissions are reported by Konecranes' travel management companies annually. Emissions from air travel are calculated using DEFRA's UK Government emission factors without radiative force (RFI).
 - Overall business travel category calculation is based on data provided by global travel agency. This covers around 60% of all Konecranes business travel spend

and the remaining 40% were extrapolated by using employee headcount data to cover 100% of the business travel spend (including land business travel and hotel accommodation).

- Employee commuting
 - The emissions associated with employee commuting were estimated using Quantis' Scope 3 Evaluator web-based tool, using an average emission factor per FTE.
- Upstream leased assets
 - This Scope 3 category does not apply to Konecranes. Leased vehicles and facilities are included in scope 1 and scope 2.
- Downstream transportation and distribution
 - The emissions associated with downstream transportation and distribution were estimated using the assumption that Konecranes' customer share of the total transportation costs is around 10%. The emissions are based on the same split between air, train, ocean, and road transportation as for upstream transportation and calculated using the emission data provided by the upstream logistics service providers.
- Processing of sold products
 - This scope 3 category does not apply to Konecranes as it does not sell intermediate products that require further processing, transformation, or inclusion in another product before use.
- Use of sold products
 - The emissions associated with the use phase of sold products were calculated using energy data (electricity and fuel consumption), use rate (stand-by, operational and traveling phases) and lifetime (~10 to 30 years) assumptions for all Konecranes product categories. Total expected lifetime emissions from all products sold in the reporting year were calculated using AIB and DEFRA emission factors for fuel combustion and WTT and Transmission and distribution (T&D) losses.
- End-of-life treatment of sold products
 - The emissions associated with end-of-life treatment of sold products were calculated using Environmental Product Declarations (EPDs) for representative Konecranes product categories to infer the total mass of sold products per material types (mainly steel). Average waste treatment streams per material types obtained from Eurostat (primarily recycling) and DEFRA's UK Government/Ecoinvent emission factors for waste disposal were used to estimate the end-of-life emissions from all products sold by Konecranes in the reporting year.
- Downstream leased assets
 - This scope 3 category does not apply to Konecranes as it does not own or operate assets that it leases to other entities.
- Franchises
 - This scope 3 category does not apply to Konecranes as it does not have franchises as part of its business model.

- Investments
 - Emissions from equity investments not included in Scope 1 and 2 (where Konecranes does not have operational control) were calculated based on Konecranes' proportional share of investment in the investees in the reporting year. These emissions were estimated through an average-data method, using investee revenue data combined with EEIO Scope 1 and 2 emissions factors by investee geography and sector(s) of operation and allocating emissions to Konecranes based on its share of investment.

Total emissions include scope 1, scope 2 (market-based method) and scope 3.

Waste and water calculations

Waste and water data include our manufacturing locations' data. Service locations are excluded from the report 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.