

Cargotec's key environmental and safety figures 2013



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This report is part of Cargotec's sustainability reporting. The report complements the sustainability aspects described in Cargotec's 2013 annual report. The contents of this report do not cover all material aspects of sustainability at Cargotec. The annual report provides more info on Cargotec's sustainability principles, materiality and reporting. The sustainability reporting is based on the Global Reporting Initiative principles (GRI3). The contents of the GRI3 index are available in the [Annual report](#).

Cargotec's key environmental and health and safety figures are reported on an annual basis, for the same period as the financial figures. The reporting principles are based on the international sustainability reporting standard, the Global Reporting Initiative (GRI3) and the Greenhouse Gas Protocol (GHG Protocol).

Environmental and health & safety reporting was consolidated at corporate level in 2007 for the first time. The reporting was developed to focus mainly on assembly units, since these units were considered to have the highest impact on the environment and the highest risk to health and safety due to their size and type of operations. The material key indicators were chosen together with representatives of various operations: business area representatives, local quality and environmental management, global risk management, and local health and safety management. The process was supported by an external GRI specialist.

The figures in this report cover 14 assembly units (2012: 15). Compared to the previous year, the unit in Norway, Kristiansand, is no longer included in the key figures since it became a competence centre instead of being a Cargotec assembly unit. The assembly unit in India is not included in the report and UK information for 2012 is missing. These are due to continuing challenges in harmonizing reporting practices within large organizational changes going on at Cargotec. Assembly site in Texas has started reporting in 2014 and will be consolidated into the figures next year.

The changes in assembly operations also have an impact on the trend of environmental and health & safety (EHS) figures. Therefore, in this report, the figures will be shown as per compared to the established base year, 2010, and as gross total emissions during the reporting periods (2009-2013). The base year will give a better understanding of the EHS development on the current assembly sites throughout the years. Furthermore figures will be presented in the text as per the amount in 2013 and the previous year in parentheses.

Base year principles follow the guidance of the GHG Protocol's corporate accounting and reporting standard. 2010 was selected as the base year to ensure the highest data reliability and harmonization, as all the sites were using the same reporting system from that year onwards. In addition to GHG emissions, the base year calculation principles are applied also to analyse the use of energy and release of other air emissions.

Conversion factors for 2013 figures relating to direct energy usage (GHG scope 1) are based on Statistics Finland's fuel classification (Tilastokeskus, polttoaineluokitus 2014). Conversion factors for indirect energy usage (GHG Scope 2) are from IEA Statistics 2012 and the Global Reporting Initiative. Conversion factors for earlier years remained unchanged for the gross amount figures.

As explained in Cargotec's Annual report, Cargotec is in the process of reviewing the materiality of the reporting as well as further developing the comparability of the reports over the years.

Energy

The amount of energy consumption has a direct impact on the amount of greenhouse gases produced by Cargotec's operations. Energy reduction measures have been set as environmental targets for most Cargotec assembly units. Concrete measures for monitoring the levels of energy reduction are developed on a local basis depending on the energy-efficiency project scope and type.

Most of Cargotec's energy consumption is caused by internal transportation, heating, electricity consumption and the testing of finished products. Direct energy consumption refers to energy purchased on site and used as such. Indirect energy consumption refers to energy purchased in the form of district heating or electricity. One correction was made to the historical figures of energy usage based on an internal data check. Due to the change in figures, the amount of natural gas in direct energy usage decreased and the amount used as indirect energy increased.

The main factors affecting Cargotec's direct and indirect energy consumption are production levels and the facilities required. In Figure 1, direct energy consumption is shown in the form of primary energy sources. Natural gas, used mostly in the heating of facilities, is the most used fuel. Diesel is mainly used for internal transportation and testing. Total direct energy consumption in 2013 was approximately 28,400 MWh (35,400 MWh). Comparing 2013 to the base year 2010, the change of used energy per sales of assembly sites, was -32 percent.

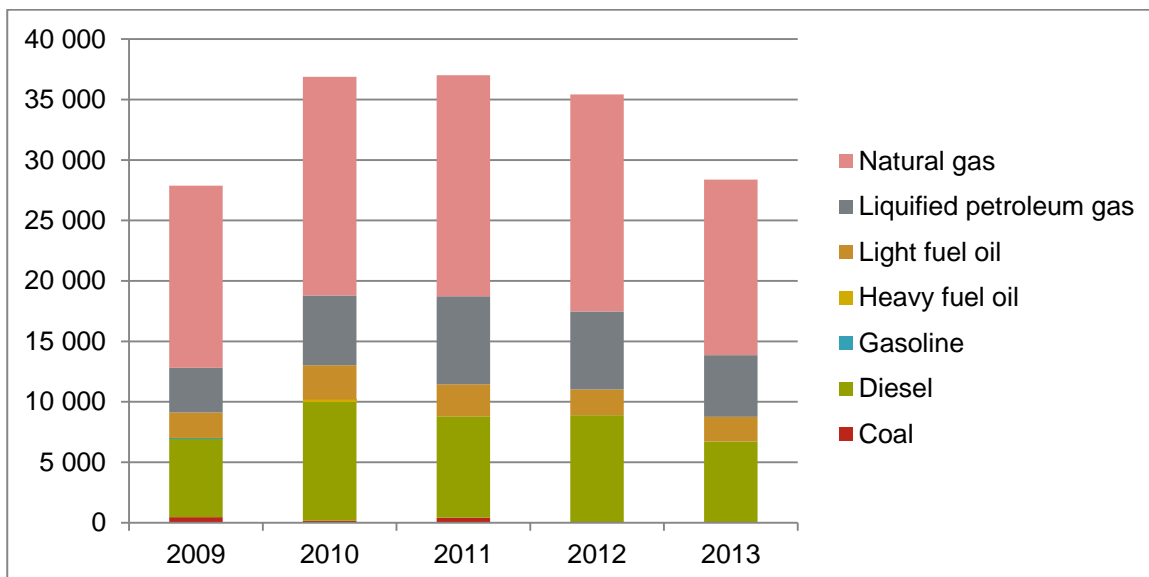


Figure 1. Direct energy consumption in MWh

Total indirect energy consumption decreased compared to previous years. Indirect energy consumption in 2013 totalled approximately 66,100 (73,800) MWh at Cargotec's assembly units. Again, the indirect energy usage per sales of assembly sites in 2013 decreased with 13 percent compared to the base year 2010.

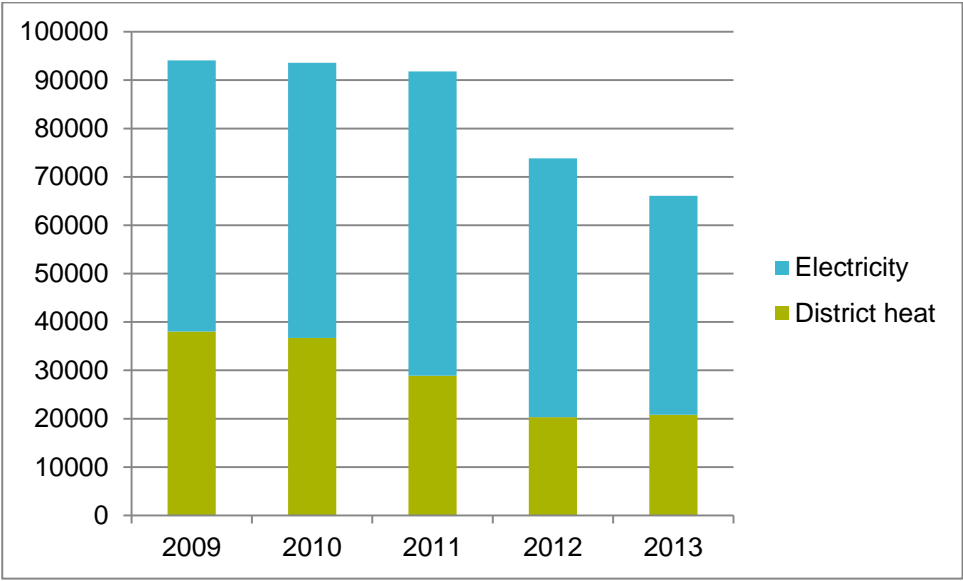


Figure 2. Indirect energy consumption in MWh

Water

Water consumption totalled approximately 82,700 (94,800) m³ in 2013. Water is mainly used in washing finished products, cleaning premises and by personnel. Most units are connected to public drainage systems but one unit has its own well.

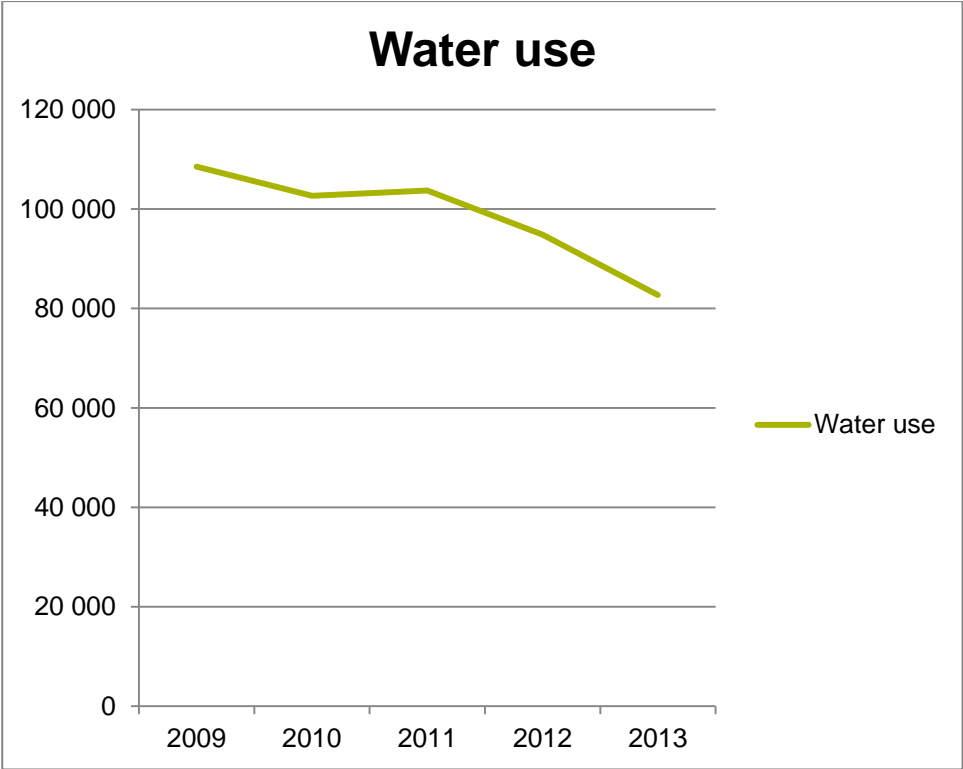


Figure 3. Water consumption in cubic metres (m³)

Greenhouse gas emissions

The calculation of Cargotec's greenhouse gas emissions is calculated from the energy usage. Calculation is based on international standards and set emission factors.

In 2013, Cargotec's greenhouse gas emissions totalled approximately 27,000 (28,000) carbon dioxide equivalent tonnes (CO₂ eqv.t). Greenhouse gases are calculated based on the direct and indirect energy consumption. Although the relative amount of energy is decreasing, the change of the amount of GHG emissions/sales of assembly sites 2013 was only -4 percent compared to the base year.

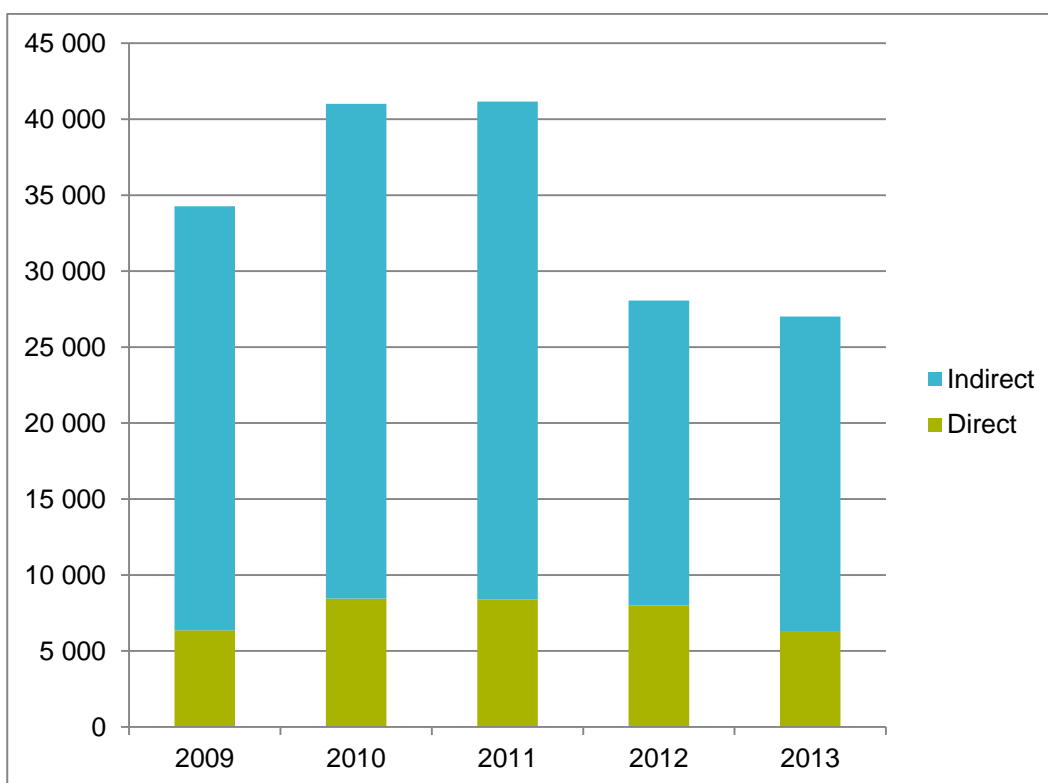


Figure 4. Greenhouse gas emissions by type of energy consumption in CO₂ eqv. t

In 2008, Cargotec began to follow up the greenhouse gas emissions generated by business travel. During the first stage, only the greenhouse gas emissions from air travel were followed up for approximately 70 percent of the flights by Cargotec personnel. In 2013, the greenhouse gas emissions from air travel totalled approximately 12,500 (10,700) CO₂ tonnes. Based on this, it can be estimated that the total greenhouse gas emissions from all Cargotec flights totalled approximately 17,900 (16,500) CO₂ tonnes. The calculation model for greenhouse gas emissions from air travel is based on the United Kingdom Department for Environment, Food and Rural Affairs (Defra) guidelines 2008.

Other air emissions

Other emissions into the air include volatile organic compounds (VOC), nitrogen oxides (NO_x), sulphur dioxide (SO₂), hydrocarbon and particulate matters (PM). Together, VOC and NO_x emissions form 99 percent of other air emissions. In 2013, VOC emissions remained at the same level as in 2012 being 51 (51) tonnes. NO_x emissions totalled only 1.6 (1.7) tonnes. The amounts of SO₂ and PM account for less than one percent of the emissions. VOC emissions per sales of assembly sites increased slightly, approximately by three percent from the base year 2010 until 2013.

In most cases, national authorities have set limitations on these so-called traditional air emissions. Air emission figures in this report consist of the emissions that require an environmental permit or similar and which are controlled by the authorities.

Some of these emissions result from the operations of Cargotec's subcontractors working on Cargotec sites. For example, painting is outsourced in many units. Cargotec is willing to take responsibility for the way in which its subcontractors operate. For this reason the figures in this report include emissions associated from subcontractors' work on Cargotec sites.

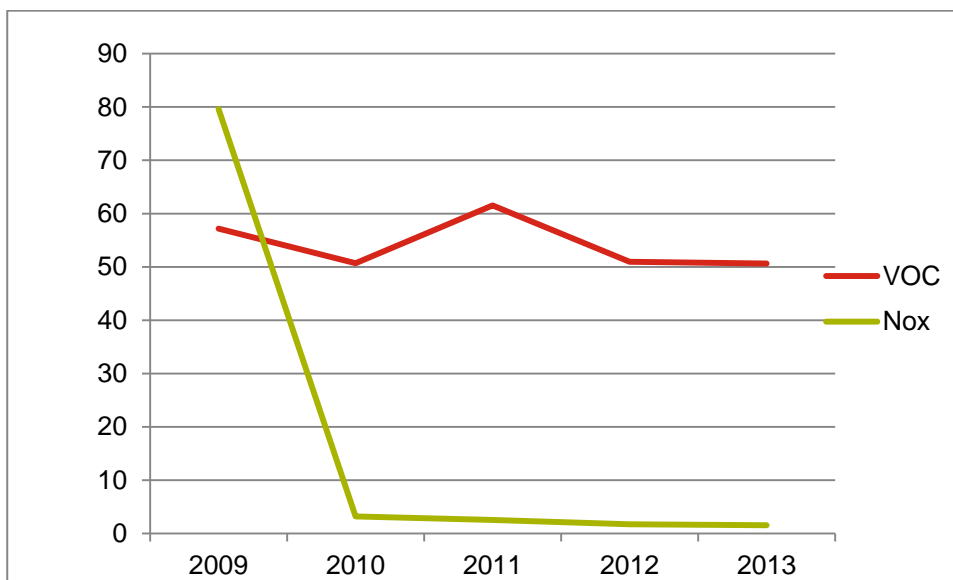


Figure 5. VOC and NOx emissions in tonnes

Waste

The total amount of waste in 2013 was approximately 7,700 (8,800) tonnes. Most of this waste is recyclable. Waste treatment methods depend on the waste regulations of the country in which the unit is located. Cargotec is cooperating with specialised waste handling partners in order to enhance waste treatment and recycling to the most effective and reasonable level possible at all Cargotec units.

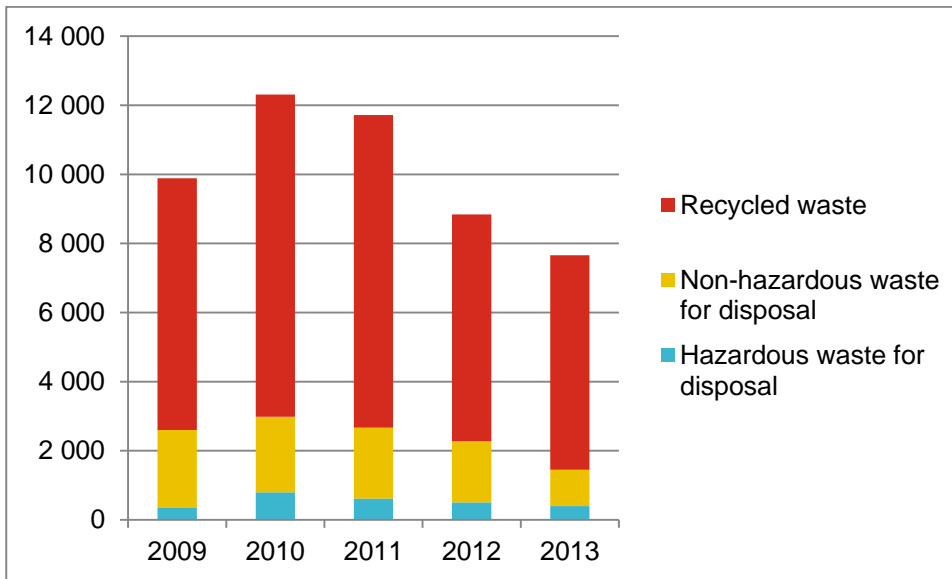


Figure 6. Waste by waste type in tonnes

Health and safety

The industrial injury frequency rate (IIFR) unfortunately increased being 12.8 (11.6) injuries per million hours worked in 2013. IIFR rate development follow-up is from now on conducted systematically on a business area management level and in the corporate executive board. Corrective actions and continuous training programs have been developed locally on sites to decrease the IIFR rate. The total number of injuries at assembly units was 79 (80).

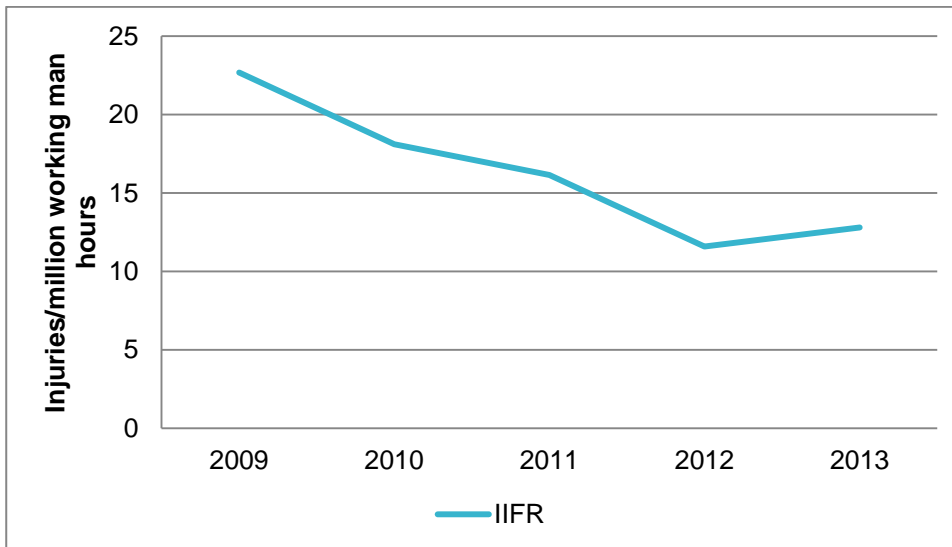


Figure 7. Industrial injury frequency rate (IIFR)

There are occupational health and safety committees or similar on each site. Their responsibility is to ensure the best practices relating to occupational health and safety processes.