

Case study

You are a trade union rep in a chemical company that produces chemicals that are used to manufacture a wide array of products. The chemicals that are produced by the company are used both in high end (electronic devices, ...) as low end (single use packaging) applications.

The company has three main sites, you are a trade union rep in one of these:

- Corporate headquarters
HQ is situated in a historical building in the center of the capital city. About 300 people work there. Important activities include: IT; marketing, R&D (in close collaboration with the research facilities at the production site), procurement of raw materials and planning.
- Industrial production site
Production is situated in a big industrial zone in a large port. On this site there are also labs where R&D and quality assessment is performed. About 2.000 employees of the company work on this site, there are also around 300 employees of subcontractors active on the site.
- Logistical facility
This facility is situated near a main highway, close to an abandoned railway line. The warehouse buildings are rather old. The number of employees working on this site is close to 200.

The company has a joint works council in which members of all three sites are represented. Each site has a separate HSE (health, safety and environment) Committee.

The economic situation of the company is very good, there are high profits and also high dividends for shareholders. It is company policy to maximize dividend payout, sometimes at the expense of budgets for R&D and modernisation of the facilities.

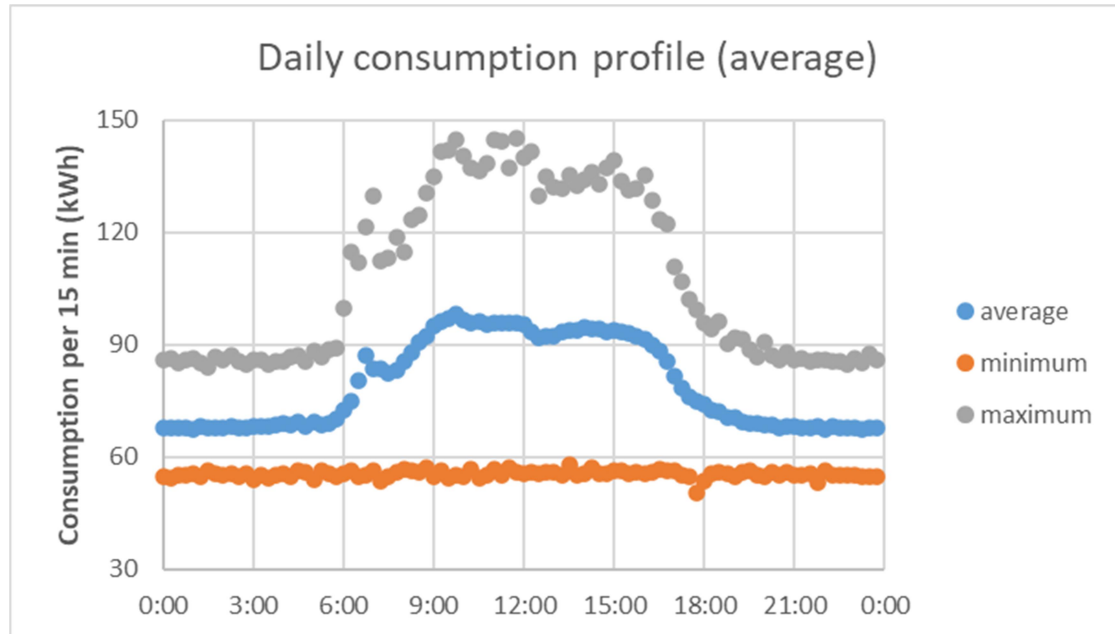
Most of the profit (60%) is generated by the company's specialized high-end chemicals, bulk chemicals are often sold in a package deal with the high-end products. In terms of volume, the production of bulk chemicals represents about 60% of the volume of products sold, but only 20% of the profit.

In its projections for the future the company predicts that the total annual demand for its products will continue to grow by 4% each year across the board, also for products mostly used for single-use packaging.

GROUP 1 - Corporate headquarters

Almost 80% of the workers use private means of transport to go to work, 75% of which is by car. There's a lot of traffic congestion near the HQ and the number of parking spaces available for cars are limited.

The electricity consumption of the corporate HQ is quite high. This is the daily consumption profile:



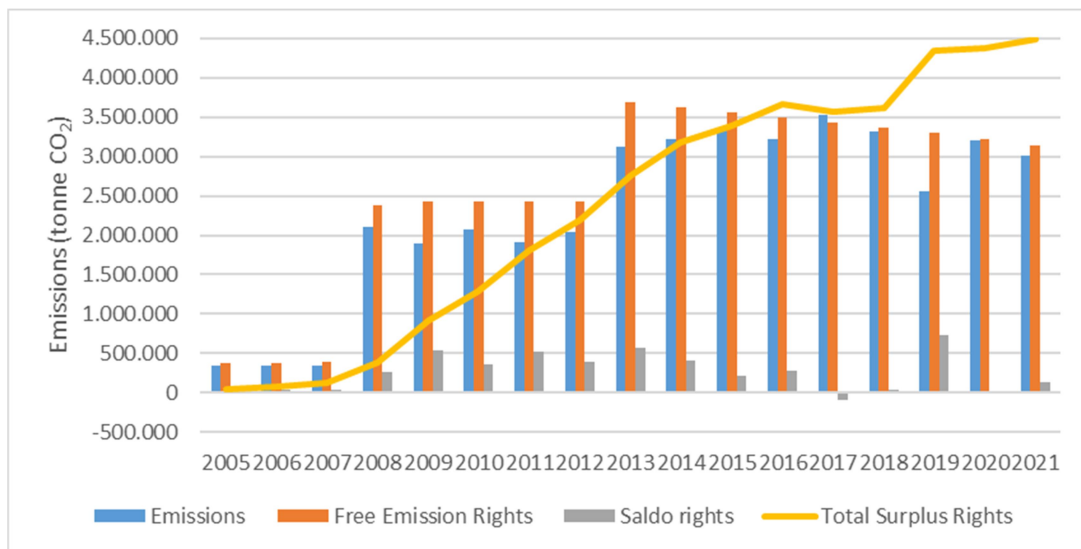
This amounts to an annual electricity consumption of 715 MWh per year. The data center which holds the servers for the company's internal IT system accounts for about 480 MWh. A few years ago, an in-house energy production scheme was designed but never implemented for lack of budget. The roof of the building is however ideally suited to install solar panels. The central heating system works on natural gas and is quite old. There are large temperature differences between the side of the building facing south and the side facing north.

Economy is the leading principle for the procurement processes. Most of the raw materials are still fossil fuel derivatives. While the marketing department (which focuses solely on the business-to-business segment) gives a lot of attention to the high end products that are being used in sustainable technology. There is little budget for research into the innovations needed to make the company more circular. A colleague at the R&D department told you that she believes that it would be interesting to research the possibility of recycling carbon-rich waste streams into raw materials but that there's no budget for this. She also mentions that the company's high end products contain a lot of additives, which give them interesting properties, but also make it very hard to recycle them.

6 months ago the management commissioned to KPMG an analysis of the organizational processes in the HQ and defined the necessity to develop a training plan for the workers. You have been informed a few days before the investigation started. Despite denials from the management, there are rumors of HQ restructuring.

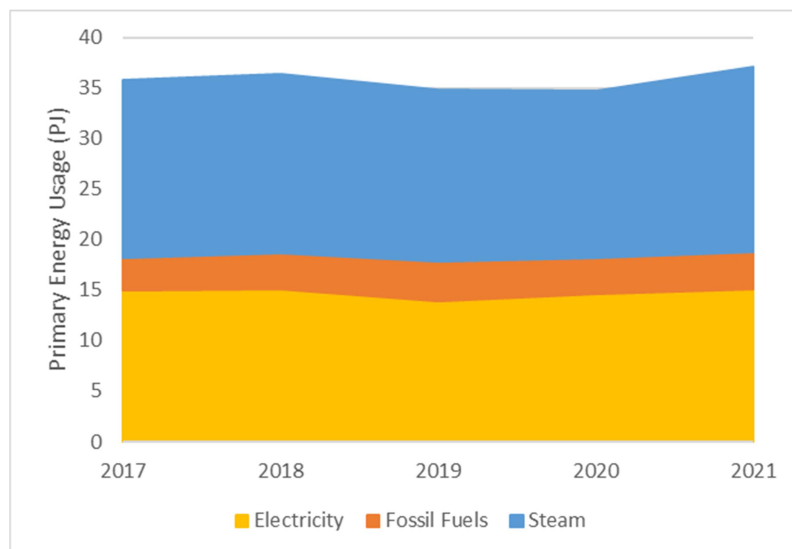
GROUP 2 - Industrial production site

The production facility's emissions are regulated under the European Emissions Trading System (ETS) for carbon emissions. The ETS-data for carbon emissions, are shown below. Since 2013 the annual amount of CO₂-equivalents emitted fluctuates between 3 to 3.5 million tonnes per year. The company has received over 3.1 million free emission credits in 2021, at the current market price these free credits were worth over € 235 million. The company has built up a large surplus of free carbon emission rights over the years. If it hasn't sold them on the market in the meantime, it has a pool of about 4.5 million carbon credits, worth € 338 million.



While the production plant consumes a lot of energy, approximately 50% of the energy consumption is covered by steam generated during exothermic processes (which emit energy) on site and by incineration of process waste. The company is very proud that this production facility is world-leading in terms of energy efficiency.

Primary energy consumption for the last five years (by energy carrier).



The production facility is situated in a port area, there is heavy traffic on the roads in this area, and there are little to none facilities for cyclists. The factory operates around the clock in a system with 4 shifts. There are virtually no means of public transport in the vicinity of the factory. The railroad tracks that are present in the port area are not used by the company. More than half of the workers live within a 10 km radius of their workplace.

The production plant causes protests from citizens living in the neighborhoods due to the loud noise emissions. A table was established between trade union representatives and associations representing the territory to solve the issue.

GROUP 3 - Logistical facility

The logistical facility is composed of 3 main buildings, whose total surface is 20.000 mq. In 10 years, the facility has expanded its extension by 50%, and the business plan for coming years foresees an additional extension up to 30.000 mq, to be acquired from bordering common land and private areas.

80% of the goods are transported by roads and the neighboring area is often subject to traffic congestion. It is increasingly difficult to recruit new workers, as the site of the facility is not easy to reach by public transportation.

The average age of the working force in the facility is 49,5 years, the largest majority is men, unionization of the permanent employees is around 70%. Around 50 porters are hired through an external agency with short-term contracts, during the period of the year with production peaks. Their average stay lasts about 20 days, and there is around 80% turnover from one year to the other.

The facility makes extensive use of paper- and plastic-derived packaging. In the last 5 years, in view of a 2.5% per year growth in goods transfers, there has been a 5% growth per year in waste production. Waste management is outsourced and there is no in-house reuse or recycling process.

Annual electricity consumption is 600 MWh per year. The warehouses have large roofs well suited to the installation of solar panels. The heating system works on natural gas, yearly consumption is 2400 MWh. Many colleagues working in the loading bays complain that the temperatures in winter are very low and in summer it's often too hot to do heavy work. This is because the gates leading to the loading bays are always open.