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# Carbon Accounting Report 2022

This report provides an overview of the organisation's greenhouse gas (GHG) emissions, which is an integrated part of the organisation's climate strategy. Carbon accounting is a fundamental tool in identifying tangible measures to reduce GHG emissions. The annual carbon accounting report enables the organisation to benchmark performance indicators and evaluate progress over time.

## THIS REPORT COMPRISES THE FOLLOWING ORGANISATIONAL UNITS:

The input data is based on consumption data from internal and external sources, which are converted into tonnes CO<sub>2</sub>-equivalents (tCO<sub>2</sub>e). The carbon footprint analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). The GHG Protocol is the most widely used and recognised international standard for measuring greenhouse gas emissions and is the basis for the ISO standard 14064-1.

## REPORTING YEAR ENERGY AND GHG EMISSIONS

| Emission source             | Description                                                                                          | Consumption | Unit                | Energy (MWh)   | Emissions tCO <sub>2</sub> e | % share     |
|-----------------------------|------------------------------------------------------------------------------------------------------|-------------|---------------------|----------------|------------------------------|-------------|
| <b>Transportation total</b> |                                                                                                      |             |                     | <b>2,042.6</b> | <b>491.9</b>                 | <b>6.6%</b> |
| Diesel (NO)                 |                                                                                                      | 12,185.0    | liters              | 126.6          | 25.4                         | 0.3%        |
| Diesel (NO)                 | Farget diesel                                                                                        | 6,559.0     | liters              | 68.1           | 13.7                         | 0.2%        |
| Diesel (B7)                 |                                                                                                      | 6,949.6     | liters              | 73.5           | 17.5                         | 0.2%        |
| Diesel (B7)                 | Blank diesel                                                                                         | 850.0       | liters              | 9.0            | 2.1                          | -           |
| Diesel (B7)                 | Pajero Company car                                                                                   | 1,435.9     | liters              | 15.2           | 3.6                          | -           |
| Diesel (B7)                 | Hilux Company car                                                                                    | 2,043.1     | liters              | 21.6           | 5.2                          | 0.1%        |
| Bioethanol (E85)            |                                                                                                      | 5,536.3     | liters              | 38.9           | 2.0                          | -           |
| Diesel                      | Diesel                                                                                               | 29,572.0    | liters              | 315.2          | 79.8                         | 1.2%        |
| Diesel                      | Amount of diesel used for work owned or leased vehicles on account, mileage not noted just fuel used | 1,675.0     | liters              | 17.9           | 4.5                          | 0.1%        |
| Diesel                      |                                                                                                      | 20,043.0    | liters              | 213.7          | 54.1                         | 0.7%        |
| Diesel                      | Permanent rent car                                                                                   | 4,533.2     | liters              | 48.3           | 12.2                         | 0.2%        |
| Diesel                      | PKW über DKV                                                                                         | 37,398.9    | liters              | 398.7          | 100.9                        | 1.3%        |
| Diesel                      | Amount of diesel from Allstar contract only diesel vehicles                                          | 5,365.0     | liters              | 57.2           | 14.5                         | 0.2%        |
| Diesel                      | Stapler                                                                                              | -           | liters              | -              | -                            | -           |
| Diesel                      | Company car                                                                                          | 2,144.0     | liters              | 22.9           | 5.8                          | 0.1%        |
| Diesel                      | Varebil, Servicebil                                                                                  | 2,265.0     | liters              | 24.1           | 6.1                          | 0.1%        |
| Diesel                      | Truck                                                                                                | 707.0       | liters              | 7.5            | 1.9                          | -           |
| Diesel                      | All EFR-EFM Cars (x9)                                                                                | 24,072.0    | kgCO <sub>2</sub> e | 95.1           | 24.1                         | 0.3%        |
| Petrol                      | Petrol vehicles                                                                                      | -           | liters              | -              | -                            | -           |
| Petrol                      |                                                                                                      | 11,541.3    | liters              | 111.8          | 27.0                         | 0.5%        |
| Petrol                      |                                                                                                      | 106.0       | gal(us)             | 3.9            | 0.9                          | -           |
| Petrol                      | Amount of petrol used for work owned or leased vehicles on account, mileage not noted just fuel used | 701.0       | liters              | 6.8            | 1.6                          | -           |

| Emission source                    | Description                               | Consumption | Unit                | Energy (MWh)   | Emissions tCO <sub>2</sub> e | % share      |
|------------------------------------|-------------------------------------------|-------------|---------------------|----------------|------------------------------|--------------|
| Petrol                             | Permanent rent car                        | 5,838.0     | liters              | 56.6           | 13.7                         | 0.2%         |
| Petrol                             | PKW über DKV                              | 7,194.2     | liters              | 69.7           | 16.8                         | 0.2%         |
| Petrol                             | Assume 10km by litter                     | 2,269.0     | liters              | 22.0           | 5.3                          | 0.1%         |
| Petrol                             | Civic Company car                         | 3,279.8     | liters              | 31.8           | 7.7                          | 0.1%         |
| Petrol                             | SALES & OPERATIONS                        | 2,826.0     | liters              | 27.4           | 6.6                          | 0.1%         |
| Petrol                             | All EFR-EFM Cars(x4)                      | 11,000.0    | kgCO <sub>2</sub> e | 45.5           | 11.0                         | 0.1%         |
| Gasoline (AU)                      |                                           | 7,477.0     | liters              | 71.0           | 17.3                         | 0.2%         |
| Autogas, LPG                       |                                           | 39.7        | liters              | 0.3            | 0.1                          | -            |
| <b>Chemical-process total</b>      |                                           |             |                     | -              | <b>17.8</b>                  | <b>0.2%</b>  |
| SF6                                |                                           | -           | tCO <sub>2</sub> e  | -              | -                            | -            |
| Acetylene, combusted               | Acetylene for Brazing                     | 2,146.0     | kg                  | -              | 7.3                          | 0.1%         |
| Acetylene, combusted               | Induktorbau                               | 294.5       | kg                  | -              | 1.0                          | -            |
| Acetylene, combusted               |                                           | 1,085.1     | kg                  | -              | 3.7                          | -            |
| Acetylene, combusted               | Coil Production EFR+EFM                   | 308.0       | kg                  | -              | 1.0                          | -            |
| Aviform L50                        |                                           | 12,100.0    | liters              | -              | 4.2                          | 0.1%         |
| Aviform S-solid                    |                                           | 1,000.0     | kg                  | -              | 0.6                          | -            |
| Arcal Force                        | Schweißen FT                              | -           | kg                  | -              | -                            | -            |
| Liquid Oxygene (LOx)               |                                           | 274.0       | m <sup>3</sup>      | -              | -                            | -            |
| <b>Stationary combustion total</b> |                                           |             |                     | <b>5,808.4</b> | <b>1,100.6</b>               | <b>14.8%</b> |
| Natural gas                        | 31511 Dequindre Road                      | 1,136.0     | m <sup>3</sup>      | 12.6           | 2.3                          | -            |
| Natural gas                        | Annual usage for heating                  | 33,853.0    | kWh                 | 33.9           | 6.2                          | 0.1%         |
| Natural gas                        | Annual usage figure, gas used for heating | 832,938.0   | kWh                 | 832.9          | 153.3                        | 2.0%         |
| Natural gas                        | Korea   TPK                               | 10.0        | m <sup>3</sup>      | 0.1            | -                            | -            |
| Natural gas                        |                                           | 212,934.0   | kWh                 | 212.9          | 39.2                         | 0.5%         |
| Natural gas                        |                                           | 28,457.0    | m <sup>3</sup>      | 314.4          | 57.8                         | 0.8%         |
| Natural gas                        | Canada   TAM - Energir                    | 213,236.0   | m <sup>3</sup>      | 2,356.3        | 433.2                        | 5.7%         |
| Natural gas                        | Canada   TPS - Energir                    | 58,949.0    | m <sup>3</sup>      | 651.4          | 119.8                        | 1.6%         |
| Natural gas                        | 31683 Dequindre Road                      | 822.2       | m <sup>3</sup>      | 9.1            | 1.7                          | -            |
| Natural gas                        | Heizung Halle 1                           | 32,518.0    | m <sup>3</sup>      | 359.3          | 66.1                         | 0.9%         |
| Natural gas                        | Canada   TMC - Energir                    | 15,823.0    | m <sup>3</sup>      | 174.8          | 32.1                         | 0.4%         |
| Natural gas                        | Assume JPY269 per m <sup>3</sup>          | 139.0       | m <sup>3</sup>      | 1.5            | 0.3                          | -            |
| Natural gas                        | Heating Workshop Seyssinet                | 169,289.0   | kWh                 | 169.3          | 31.1                         | 0.4%         |
| LPG                                |                                           | 350.0       | liters              | 2.5            | 0.5                          | -            |
| LPG                                | 31683 Dequindre Road                      | 1,050.0     | kg                  | 14.4           | 3.1                          | -            |

| Emission source           | Description                                | Consumption | Unit   | Energy (MWh)   | Emissions tCO <sub>2</sub> e | % share      |
|---------------------------|--------------------------------------------|-------------|--------|----------------|------------------------------|--------------|
| Burning oil               | Heizung Halle 2+3                          | 43,086.0    | liters | 442.8          | 109.4                        | 1.5%         |
| Propane (NO)              |                                            | 14.4        | kg     | 0.2            | -                            | -            |
| Propane                   |                                            | 22.0        | kg     | 0.3            | 0.1                          | -            |
| Fuel/Diesel oil           | Heating Workshop Marcoussis                | 4,970.0     | liters | 50.7           | 13.5                         | 0.2%         |
| Natural gas (UK grid)     |                                            | 168,994.0   | kWh    | 169.0          | 30.8                         | 0.4%         |
| <b>Refrigerants total</b> |                                            |             |        | -              | <b>4.2</b>                   | <b>0.1%</b>  |
| R-407 C                   | Klimaanlagen                               | -           | kg     | -              | -                            | -            |
| R-410 A                   | Klimaanlagen                               | 2.0         | kg     | -              | 4.2                          | 0.1%         |
| R-422 D                   | Klimaanlagen                               | -           | kg     | -              | -                            | -            |
| <b>Scope 1 total</b>      |                                            |             |        | <b>7,851.0</b> | <b>1,614.3</b>               | <b>21.7%</b> |
| <b>Electricity total</b>  |                                            |             |        | <b>9,614.2</b> | <b>2418.0</b>                | <b>32.6%</b> |
| Electricity Norway        |                                            | 1,624,644.2 | kWh    | 1,624.6        | 11.4                         | 0.2%         |
| Electricity Norway        | Kontorlokale Kontali                       | 142,943.0   | kWh    | 142.9          | 1.0                          | -            |
| Electricity Norway        | Alytic group Norway                        | 150,254.0   | kWh    | 150.3          | 1.1                          | -            |
| Electricity Norway        | Leid Kontorlokale i Oslo/Rebel             | -           | kWh    | -              | -                            | -            |
| Electricity Norway        | 4-person office in new building in Oslo    | 9,100.0     | kWh    | 9.1            | 0.1                          | -            |
| Electricity Norway        | Lighting, climatizing, general consumption | 1,499,376.0 | kWh    | 1,499.4        | 10.5                         | 0.1%         |
| Electricity Norway        | Equipment testing (500V)                   | 386,382.0   | kWh    | 386.4          | 2.7                          | -            |
| Electricity Spain         |                                            | 1,468.0     | kWh    | 1.5            | 0.2                          | -            |
| Electricity India         | Electricity consumption                    | 865,440.0   | kWh    | 865.4          | 599.7                        | 8.1%         |
| Electricity USA           |                                            | 110,820.0   | kWh    | 110.8          | 39.3                         | 0.5%         |
| Electricity USA           | 31511 Dequindre Road                       | 203,210.0   | kWh    | 203.2          | 72.1                         | 1.0%         |
| Electricity USA           | 31683 Dequindre Road                       | 101,305.0   | kWh    | 101.3          | 36.0                         | 0.5%         |
| Electricity UK            | Annual figure from Pozitive Energy         | 614,658.0   | kWh    | 614.7          | 119.9                        | 1.6%         |
| Electricity UK            |                                            | 113,382.0   | kWh    | 113.4          | 22.1                         | 0.3%         |
| Electricity China         | China   TPZ - Sales office                 | 3,033.6     | kWh    | 3.0            | 1.9                          | -            |
| Electricity China         |                                            | 1,823,859.0 | kWh    | 1,823.9        | 1,127.1                      | 15.2%        |
| Electricity France        | France   TPE - Alterna                     | 521,288.0   | kWh    | 521.3          | 26.6                         | 0.4%         |
| Electricity France        | France   Imphytek - sales office           | -           | kWh    | -              | -                            | -            |
| Electricity France        |                                            | 177,188.0   | kWh    | 177.2          | 9.0                          | 0.1%         |
| Electricity Korea         | Korea   TPK - Sales office                 | 1,110.7     | kWh    | 1.1            | 0.5                          | -            |
| Electricity Denmark 125   |                                            | 160,405.0   | kWh    | 160.4          | 22.8                         | 0.3%         |
| Electricity Sweden        |                                            | 61,798.0    | kWh    | 61.8           | 0.6                          | -            |
| Electricity Switzerland   |                                            | 7,936.0     | kWh    | 7.9            | 0.2                          | -            |

| Emission source                        | Description                     | Consumption | Unit                | Energy (MWh)   | Emissions tCO <sub>2</sub> e | % share     |
|----------------------------------------|---------------------------------|-------------|---------------------|----------------|------------------------------|-------------|
| Electricity Germany                    |                                 | 601,047.0   | kWh                 | 601.0          | 188.1                        | 2.5%        |
| Electricity Germany                    | Cars                            | -           | kWh                 | -              | -                            | -           |
| Electricity Germany                    | Permanent rent car              | 10,695.2    | kWh                 | 10.7           | 3.3                          | -           |
| Electricity Finland                    |                                 | 46,675.0    | kWh                 | 46.7           | 3.4                          | -           |
| Electricity Poland                     | Sowińskiego 3                   | 786.0       | kWh                 | 0.8            | 0.5                          | -           |
| Electricity Poland                     |                                 | 6,500.0     | kWh                 | 6.5            | 4.1                          | 0.1%        |
| Electricity Poland                     | Sowińskiego 5                   | 3,819.0     | kWh                 | 3.8            | 2.4                          | -           |
| Electricity Japan                      | Assume JPY17 per kWh            | 9,160.0     | kWh                 | 9.2            | 4.4                          | 0.1%        |
| Electricity Nordic mix                 |                                 | -           | kgCO <sub>2</sub> e | -              | -                            | -           |
| Electricity Thailand                   |                                 | 35,474.4    | kWh                 | 35.5           | 16.9                         | 0.2%        |
| Electricity Malaysia                   | Office & workshop               | 15,836.0    | kWh                 | 15.8           | 10.4                         | 0.1%        |
| Electricity Brazil                     |                                 | 20,754.0    | kWh                 | 20.8           | 1.9                          | -           |
| Electricity Italy                      |                                 | 6,908.0     | kWh                 | 6.9            | 1.8                          | -           |
| Electricity Romania                    |                                 | 276,920.0   | kWh                 | 276.9          | 75.9                         | 1.0%        |
| <b>District heating location total</b> |                                 |             |                     | <b>438.7</b>   | <b>23.5</b>                  | <b>0.3%</b> |
| District heating NO/ Grimstad          |                                 | 9,504.0     | kWh                 | 9.5            | 0.2                          | -           |
| District heating SE/ Jonkoping         |                                 | 31,460.0    | kWh                 | 31.5           | 1.8                          | -           |
| District heating NO/ Oslo              |                                 | -           | kWh                 | -              | -                            | -           |
| District heating Sweden mix            |                                 | 12,583.0    | kWh                 | 12.6           | 0.6                          | -           |
| District heating SE/ Stockholm         |                                 | -           | kWh                 | -              | -                            | -           |
| District heating DE/ Karlsruhe         |                                 | 13,130.0    | kWh                 | 13.1           | 1.1                          | -           |
| District heating NO/ Trondheim         |                                 | 342,498.0   | kWh                 | 342.5          | 11.5                         | 0.2%        |
| District heating Poland mix            |                                 | 29,483.0    | kWh                 | 29.5           | 8.4                          | 0.1%        |
| <b>District heating general total</b>  |                                 |             |                     | <b>-</b>       | <b>-</b>                     | <b>-</b>    |
| District heating CHP                   |                                 | -           | kWh                 | -              | -                            | -           |
| <b>Electricity Green total</b>         |                                 |             |                     | <b>7,949.4</b> | <b>4.7</b>                   | <b>0.1%</b> |
| Electricity w/GoO                      |                                 | 74,716.0    | kWh                 | 74.7           | -                            | -           |
| Hydropower, Quebec                     | Canada   TAM - Hydro Sherbrooke | 6,300,664.0 | kWh                 | 6,300.7        | 3.8                          | 0.1%        |
| Hydropower, Quebec                     | Canada   TPS - Hydro Sherbrooke | 1,463,835.0 | kWh                 | 1,463.8        | 0.9                          | -           |
| Hydropower, Quebec                     | Canada   TMC - Hydro Sherbrooke | 110,175.0   | kWh                 | 110.2          | 0.1                          | -           |

| Emission source                | Description                        | Consumption | Unit           | Energy (MWh)    | Emissions tCO <sub>2</sub> e | % share      |
|--------------------------------|------------------------------------|-------------|----------------|-----------------|------------------------------|--------------|
| <b>Electric vehicles total</b> |                                    |             |                | <b>5.3</b>      | <b>0.6</b>                   | <b>-</b>     |
| Hybrid vehicles                |                                    | 3,450.0     | km             | -               | 0.4                          | -            |
| Electric car Nordic            |                                    | 800.0       | kWh            | 0.8             | -                            | -            |
| Electric car Nordic            |                                    | 23,633.0    | km             | 4.5             | 0.1                          | -            |
| <b>Scope 2 total</b>           |                                    |             |                | <b>18,007.5</b> | <b>2,446.7</b>               | <b>33.0%</b> |
| <b>Waste total</b>             |                                    |             |                |                 | <b>245.5</b>                 | <b>3.3%</b>  |
| Residual waste, incinerated    |                                    | 155.5       | m <sup>3</sup> | -               | 20.7                         | 0.3%         |
| Residual waste, incinerated    |                                    | 41,981.0    | kg             | -               | 21.1                         | 0.3%         |
| Residual waste, incinerated    | Annual energy from waste produced  | 11,030.0    | kg             | -               | 5.5                          | 0.1%         |
| Residual waste, incinerated    | Non recyclable waste               | 1,260.0     | kg             | -               | 0.6                          | -            |
| Residual waste, incinerated    | Alytic group                       | 1,140.0     | kg             | -               | 0.6                          | -            |
| Residual waste, incinerated    | Nassmüll/Restmüll                  | 3,940.0     | kg             | -               | 2.0                          | -            |
| Mixed waste, recycled          |                                    | -           | m <sup>3</sup> | -               | -                            | -            |
| Mixed waste, recycled          |                                    | 20,760.0    | kg             | -               | 0.4                          | -            |
| Mixed waste, recycled          | Recycled waste                     | 349.0       | kg             | -               | -                            | -            |
| Mixed waste, recycled          | Annual figure for recycled waste   | 6,060.0     | kg             | -               | 0.1                          | -            |
| Wood waste, recycled           |                                    | 26,156.8    | kg             | -               | 0.6                          | -            |
| Wood waste, recycled           | France   TPE - wood                | 1.5         | tonne          | -               | -                            | -            |
| Wood waste, recycled           | Waste is sent for recycling        | 2,066.8     | kg             | -               | -                            | -            |
| Wood waste, recycled           | Canada   all sites - wood          | 10,000.0    | kg             | -               | 0.2                          | -            |
| Wood waste, recycled           | Holz                               | 5,400.0     | kg             | -               | 0.1                          | -            |
| Glass waste, recycled          |                                    | 2,281.7     | kg             | -               | -                            | -            |
| Glass waste, recycled          | Greenfact                          | 64.0        | kg             | -               | -                            | -            |
| Paper waste, recycled          |                                    | 69.6        | m <sup>3</sup> | -               | 0.2                          | -            |
| Paper waste, recycled          |                                    | 18,169.0    | kg             | -               | 0.4                          | -            |
| Paper waste, recycled          | France   TPE - paper and cardboard | 18.0        | m <sup>3</sup> | -               | 0.1                          | -            |

| Emission source              | Description                             | Consumption | Unit           | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share |
|------------------------------|-----------------------------------------|-------------|----------------|--------------|------------------------------|---------|
| Paper waste, recycled        | Alytic group                            | 1,433.0     | kg             | -            | -                            | -       |
| Paper waste, recycled        | Aktenvernichtung                        | 3,000.0     | kg             | -            | 0.1                          | -       |
| Paper waste, recycled        | Carton box waste                        | 3,772.0     | kg             | -            | 0.1                          | -       |
| Plastic waste, recycled      |                                         | 100.0       | m <sup>3</sup> | -            | 0.2                          | -       |
| Plastic waste, recycled      |                                         | 3,469.3     | kg             | -            | 0.1                          | -       |
| Plastic waste, recycled      | France   TPE - plastics                 | 9.0         | m <sup>3</sup> | -            | -                            | -       |
| Plastic waste, recycled      | Waste is sent for recycling             | 23,359.2    | kg             | -            | 0.5                          | -       |
| Plastic waste, recycled      | Greenfact                               | 56.0        | kg             | -            | -                            | -       |
| Plastic waste, recycled      | Styropor                                | 9.0         | kg             | -            | -                            | -       |
| Plastic waste, recycled      | Umreifungsbänder                        | 16.0        | kg             | -            | -                            | -       |
| Plastic waste, recycled      | Plastic bobbins and others              | 510.0       | kg             | -            | -                            | -       |
| Plastic waste, recycled      | Folie                                   | 390.0       | kg             | -            | -                            | -       |
| EE waste, recycled           |                                         | 11,844.0    | kg             | -            | 0.3                          | -       |
| EE waste, recycled           | Canada   all sites - EE waste           | 2,000.0     | kg             | -            | -                            | -       |
| EE waste, recycled           | Greenfact                               | 45.0        | kg             | -            | -                            | -       |
| EE waste, recycled           | Elektroschrott                          | -           | m <sup>3</sup> | -            | -                            | -       |
| Hazardous waste, incinerated | Non recyclable waste                    | 40.0        | kg             | -            | 0.1                          | -       |
| Hazardous waste, incinerated | Gefahrstoffe, Verwertung                | 3,723.0     | kg             | -            | 9.0                          | 0.1%    |
| Hazardous waste, incinerated | Solid waste                             | 5,110.0     | kg             | -            | 12.3                         | 0.2%    |
| Cardboard waste, recycled    |                                         | 25,305.0    | kg             | -            | 0.5                          | -       |
| Cardboard waste, recycled    | Canada   all sites - cardboard          | 13,207.0    | kg             | -            | 0.3                          | -       |
| Cardboard waste, recycled    | Waste is sent for recycling             | 6,578.0     | kg             | -            | 0.1                          | -       |
| Cardboard waste, recycled    | 31511 Dequindre Road                    | 1,395.0     | kg             | -            | -                            | -       |
| Cardboard waste, recycled    | Kartonage, Papier                       | 6,290.0     | kg             | -            | 0.1                          | -       |
| Hazardous waste, treated     | Canada   TPS - hazardous waste, treated | 2,520.0     | kg             | -            | 0.1                          | -       |
| Hazardous waste, treated     | Canada   TAM - hazardous waste, treated | 21,549.0    | kg             | -            | 0.5                          | -       |

| Emission source                | Description                              | Consumption | Unit           | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share |
|--------------------------------|------------------------------------------|-------------|----------------|--------------|------------------------------|---------|
| Hazardous waste, recycled      | Canada   TAM - hazardous waste, recycled | 4,789.0     | kg             | -            | 0.1                          | -       |
| Hazardous waste, recycled      | Canada   TPS - hazardous waste, recycled | 560.0       | kg             | -            | -                            | -       |
| Hazardous waste, recycled      | Waste is sent for recycling              | 5,600.0     | kg             | -            | 0.1                          | -       |
| Hazardous waste, recycled      |                                          | 500.0       | kg             | -            | -                            | -       |
| Hazardous waste, recycled      | Gefahrstoffe, Recycling                  | 15,284.0    | kg             | -            | 0.3                          | -       |
| Metal waste, recycled          |                                          | 1,090.0     | m <sup>3</sup> | -            | 3.0                          | -       |
| Metal waste, recycled          |                                          | 10,521.6    | kg             | -            | 0.2                          | -       |
| Metal waste, recycled          | Canada   all sites - metal waste         | 6,563.0     | kg             | -            | 0.1                          | -       |
| Metal waste, recycled          | Waste is sent for recycling              | 453.2       | kg             | -            | -                            | -       |
| Metal waste, recycled          | ALU, Stahl, Messing, Kupfer              | 13,690.0    | kg             | -            | 0.3                          | -       |
| Hazardous waste, landfill      | Canada   TPS - hazardous waste, landfill | 2,520.0     | kg             | -            | 0.1                          | -       |
| Hazardous waste, landfill      | Canada   TAM - hazardous waste, landfill | 21,549.0    | kg             | -            | 0.5                          | -       |
| Hazardous waste, landfill      | France   TPE - hazardous, landfill       | 7,680.0     | kg             | -            | 0.2                          | -       |
| Residual waste, landfill       |                                          | 210.4       | m <sup>3</sup> | -            | 23.5                         | 0.3%    |
| Residual waste, landfill       |                                          | 18,250.0    | kg             | -            | 8.1                          | 0.1%    |
| Organic waste, treated         | Greenfact                                | 488.0       | kg             | -            | -                            | -       |
| Organic waste, treated         |                                          | 16.0        | m <sup>3</sup> | -            | 0.2                          | -       |
| Organic waste, treated         |                                          | 24,534.0    | kg             | -            | 0.5                          | -       |
| Commercial waste, landfill     | 31511 Dequindre Road                     | 9,500.0     | kg             | -            | 4.4                          | 0.1%    |
| Mineral oil waste, incinerated | Canada   all sites - mineral oil         | 1,000.0     | liters         | -            | 2.5                          | -       |
| Mineral oil waste, incinerated | Oil waste                                | 4,000.0     | liters         | -            | 10.0                         | 0.1%    |
| Waste water treatment          |                                          | 699.6       | m <sup>3</sup> | -            | 0.2                          | -       |
| Waste water treatment          | Toilet flush                             | 1.3         | m <sup>3</sup> | -            | -                            | -       |
| Waste water treatment          | Wasser                                   | 1,337.7     | m <sup>3</sup> | -            | 0.4                          | -       |
| Industrial waste, recycled     | Waste is sent for recycling              | 2,447.2     | kg             | -            | 0.1                          | -       |

| Emission source                                 | Description                             | Consumption | Unit           | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share      |
|-------------------------------------------------|-----------------------------------------|-------------|----------------|--------------|------------------------------|--------------|
| Industrial waste, recycled                      | Copper                                  | 52.0        | kg             | -            | -                            | -            |
| Industrial waste, recycled                      | Stainless steel                         | 24.0        | kg             | -            | -                            | -            |
| Industrial waste, recycled                      | Steel                                   | 172.0       | kg             | -            | -                            | -            |
| Residual waste, land fill                       | France   TPE - municipal waste, treated | 1.6         | m <sup>3</sup> | -            | -                            | -            |
| Residual waste, land fill                       | Canada   all sites - municipal waste    | 28,620.0    | kg             | -            | 12.8                         | 0.2%         |
| Organic waste, composting                       |                                         | 43.0        | kg             | -            | -                            | -            |
| Organic waste, composting                       | Canada   all sites - organic            | 1,139.0     | kg             | -            | -                            | -            |
| Sorted waste, recycled                          | Canada   all sites - sorted waste       | 7,200.0     | kg             | -            | 0.2                          | -            |
| Metal copper waste, recycled                    | Waste is sent for recycling             | 22.0        | kg             | -            | -                            | -            |
| Metal aluminium waste, recycled                 | Waste is sent for recycling             | 107.2       | kg             | -            | -                            | -            |
| Plastic waste, incinerated                      |                                         | 320.0       | kg             | -            | 0.8                          | -            |
| Fluorescent tubes waste (H), treated            |                                         | 120.0       | kg             | -            | -                            | -            |
| Special waste, treated                          |                                         | 174.0       | kg             | -            | -                            | -            |
| Wood (softwood)                                 | Wood waste                              | 12,608.0    | kg             | -            | 15.5                         | 0.2%         |
| Steel profile                                   | Metals- MS/SS/LIGHT                     | 15,389.0    | kg             | -            | 39.7                         | 0.5%         |
| Water supply, groundwater                       |                                         | 1,170.0     | m <sup>3</sup> | -            | 0.7                          | -            |
| Paper, recycled                                 |                                         | 2,730.0     | kg             | -            | 2.0                          | -            |
| Aluminium                                       |                                         | 1,873.5     | kg             | -            | 17.1                         | 0.2%         |
| Aluminium                                       | Aluminium waste                         | 154.0       | kg             | -            | 1.4                          | -            |
| Steel, stainless recycled                       |                                         | 1,180.0     | kg             | -            | 3.4                          | -            |
| Steel, unalloyed                                |                                         | 4,540.0     | kg             | -            | 8.5                          | 0.1%         |
| Copper, recycled                                |                                         | 6,973.0     | kg             | -            | 0.2                          | -            |
| Copper, recycled                                | Copper waste                            | 2,440.0     | kg             | -            | 0.1                          | -            |
| Brass                                           |                                         | 123.0       | kg             | -            | 0.7                          | -            |
| Brass                                           | Brass waste                             | 1,464.0     | kg             | -            | 8.1                          | 0.1%         |
| Monitor 27"                                     |                                         | 1.0         | Qty            | -            | 0.4                          | -            |
| Printer toner module                            |                                         | 34.0        | kg             | -            | 0.4                          | -            |
| <b>Fuel-and-energy-related activities total</b> |                                         |             |                | -            | <b>1,393.3</b>               | <b>18.8%</b> |
| Diesel (B5) (WTT)                               |                                         | 25,481.0    | liters         | -            | 15.7                         | 0.2%         |
| Electricity Norway (upstream)                   |                                         | 3,813,499.2 | kWh            | -            | 7.6                          | 0.1%         |

| Emission source                    | Description | Consumption | Unit           | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share |
|------------------------------------|-------------|-------------|----------------|--------------|------------------------------|---------|
| Natural gas (WTT)                  |             | 1,479,810.0 | kWh            | -            | 46.0                         | 0.6%    |
| Natural gas (WTT)                  |             | 351,090.2   | m <sup>3</sup> | -            | 120.6                        | 1.6%    |
| Electricity China (upstream)       |             | 1,864,365.6 | kWh            | -            | 330.0                        | 4.4%    |
| Electricity France (upstream)      |             | 698,476.0   | kWh            | -            | 11.1                         | 0.1%    |
| Electricity Korea (upstream)       |             | 1,110.7     | kWh            | -            | 0.1                          | -       |
| Electricity Sweden (upstream)      |             | 61,798.0    | kWh            | -            | 0.2                          | -       |
| District heating NO/SE (upstream)  |             | 396,045.0   | kWh            | -            | 2.0                          | -       |
| Electricity Nordic mix (WTT)       |             | -           | kWh            | -            | -                            | -       |
| Electricity UK (upstream)          |             | 728,040.0   | kWh            | -            | 45.9                         | 0.6%    |
| Electricity Germany (upstream)     |             | 686,458.2   | kWh            | -            | 61.7                         | 0.8%    |
| Diesel (B7) (WTT)                  |             | 8,728.6     | liters         | -            | 5.3                          | 0.1%    |
| Electricity Canada (upstream)      |             | 7,874,674.0 | kWh            | -            | 277.2                        | 3.7%    |
| Electricity Denmark (upstream)     |             | 160,405.0   | kWh            | -            | 4.0                          | 0.1%    |
| Petrol (WTT)                       |             | 66,365.3    | liters         | -            | 40.0                         | 0.5%    |
| Electricity Finland (upstream)     |             | 46,675.0    | kWh            | -            | 0.9                          | -       |
| Electricity Poland (upstream)      |             | 11,105.0    | kWh            | -            | 2.1                          | -       |
| Electricity Switzerland (upstream) |             | 7,936.0     | kWh            | -            | 0.1                          | -       |
| Diesel (WTT)                       |             | 131,520.1   | liters         | -            | 82.7                         | 1.1%    |
| Heat & steam (upstream)            |             | 29,483.0    | kWh            | -            | 1.0                          | -       |
| Electricity USA (upstream)         |             | 415,335.0   | kWh            | -            | 42.7                         | 0.6%    |
| LPG (WTT)                          |             | 389.7       | liters         | -            | 0.1                          | -       |
| LPG (WTT)                          |             | 1,050.0     | kg             | -            | 0.4                          | -       |
| Electricity India (upstream)       |             | 790,641.0   | kWh            | -            | 230.0                        | 3.0%    |
| Electricity Japan (upstream)       |             | 9,160.0     | kWh            | -            | 1.3                          | -       |
| Electricity Malaysia (upstream)    |             | 15,836.0    | kWh            | -            | 3.2                          | -       |
| Electricity Thailand (upstream)    |             | 35,474.4    | kWh            | -            | 5.1                          | 0.1%    |
| Electricity Brazil (upstream)      |             | 20,754.0    | kWh            | -            | 0.8                          | -       |

| Emission source                            | Description                                                 | Consumption | Unit                | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share      |
|--------------------------------------------|-------------------------------------------------------------|-------------|---------------------|--------------|------------------------------|--------------|
| Electricity Italy (upstream)               |                                                             | 6,908.0     | kWh                 | -            | 0.5                          | -            |
| Propane/Butane (WTT)                       |                                                             | 36.4        | kg                  | -            | -                            | -            |
| Electricity Romania (upstream)             |                                                             | 276,920.0   | kWh                 | -            | 26.2                         | 0.3%         |
| Electricity Spain (upstream)               |                                                             | 1,468.0     | kWh                 | -            | 0.1                          | -            |
| Fuel oil (WTT)                             |                                                             | 4,970.0     | liters              | -            | 3.5                          | -            |
| Burning oil (WTT)                          |                                                             | 43,086.0    | liters              | -            | 22.8                         | 0.3%         |
| E85 Bioethanol (WTT)                       |                                                             | 5,536.3     | liters              | -            | 2.5                          | -            |
| <b>Business travel total</b>               |                                                             |             |                     | -            | <b>1,457.1</b>               | <b>19.6%</b> |
| Flights                                    |                                                             | 16.9        | tCO <sub>2</sub> e  | -            | 16.9                         | 0.2%         |
| Flights                                    |                                                             | 48,665.9    | kgCO <sub>2</sub> e | -            | 48.7                         | 0.6%         |
| Flights                                    | Total Number of NA Flights                                  | 76.5        | tCO <sub>2</sub> e  | -            | 76.5                         | 1.0%         |
| Flights                                    | Air travel work related, annual total                       | 105,258.0   | kgCO <sub>2</sub> e | -            | 105.3                        | 1.4%         |
| Flights                                    | Flyreiser                                                   | 3,394.2     | kgCO <sub>2</sub> e | -            | 3.4                          | -            |
| Flights                                    | Total CO2 emissions from Ampwell related flights            | 5,668.5     | kgCO <sub>2</sub> e | -            | 5.7                          | 0.1%         |
| Flights                                    | Air travel work related annual total Global Maritime Travel | 30,167.0    | kgCO <sub>2</sub> e | -            | 30.2                         | 0.4%         |
| Flights                                    | Alytic group total                                          | 46,743.9    | kgCO <sub>2</sub> e | -            | 46.7                         | 0.6%         |
| Flights                                    | FCM Travel                                                  | 32,489.0    | kgCO <sub>2</sub> e | -            | 32.5                         | 0.4%         |
| Flights                                    | Worldwide   Tekna - all entities                            | 51.7        | tCO <sub>2</sub> e  | -            | 51.7                         | 0.7%         |
| Air travel, intercontinental, BC, incl. RF | Visma                                                       | 10.0        | flight trip         | -            | 27.8                         | 0.4%         |
| Mileage all. avg. car                      |                                                             | 8,490.4     | km                  | -            | 1.4                          | -            |
| Mileage all. avg. car                      |                                                             | -           | kgCO <sub>2</sub> e | -            | -                            | -            |
| Mileage all. avg. car                      |                                                             | 13,250.0    | mile                | -            | 3.6                          | -            |
| Mileage all. avg. car                      | Total Miles NA                                              | 190,287.0   | mile                | -            | 52.3                         | 0.7%         |
| Mileage all. avg. car                      | Worldwide   Tekna - all entities                            | 125,445.0   | km                  | -            | 21.4                         | 0.3%         |
| Air travel, continental                    |                                                             | 217,862.0   | pkm                 | -            | 17.7                         | 0.2%         |
| Air travel, continental                    |                                                             | 53.0        | flight trip         | -            | 4.8                          | 0.1%         |
| Air travel, continental                    |                                                             | 1.2         | tCO <sub>2</sub> e  | -            | 1.2                          | -            |
| Air travel, continental                    |                                                             | 25,350.6    | kgCO <sub>2</sub> e | -            | 25.4                         | 0.3%         |
| Air travel, intercontinental               |                                                             | 384,123.0   | pkm                 | -            | 39.2                         | 0.5%         |
| Air travel, intercontinental               |                                                             | 10.0        | flight trip         | -            | 6.6                          | 0.1%         |

| Emission source                        | Description                      | Consumption | Unit                | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share |
|----------------------------------------|----------------------------------|-------------|---------------------|--------------|------------------------------|---------|
| Air travel, intercontinental           |                                  | 12,866.5    | kgCO <sub>2</sub> e | -            | 12.9                         | 0.2%    |
| Air travel, intercontinental           | International flight travel      | 15.0        | flight trip         | -            | 9.9                          | 0.1%    |
| Air travel, continental, incl. RF      |                                  | 215,620.0   | pkm                 | -            | 33.1                         | 0.4%    |
| Air travel, continental, incl. RF      |                                  | 17.5        | tCO <sub>2</sub> e  | -            | 17.5                         | 0.2%    |
| Air travel, continental, incl. RF      |                                  | 73,729.0    | kgCO <sub>2</sub> e | -            | 73.7                         | 1.0%    |
| Air travel, domestic, incl. RF         |                                  | 22,416.0    | pkm                 | -            | 5.5                          | 0.1%    |
| Air travel, domestic, incl. RF         |                                  | 113,258.0   | kgCO <sub>2</sub> e | -            | 113.3                        | 1.5%    |
| Air travel, domestic, incl. RF         | EFR-EFM                          | 13.0        | flight trip         | -            | 1.5                          | -       |
| Car, rental (fuel unknown)             | Short-term rental                | 27,493.6    | km                  | -            | 4.7                          | 0.1%    |
| Car, rental (fuel unknown)             |                                  | 1,620.0     | km                  | -            | 0.3                          | -       |
| Hotel nights, Europe                   |                                  | 1,556.0     | nights              | -            | 22.7                         | 0.3%    |
| Hotel nights, Europe                   | EFR-EFM                          | 267.0       | nights              | -            | 3.9                          | 0.1%    |
| Hotel nights, world                    | Total Number of Hotel Nights NA  | 855.0       | nights              | -            | 33.8                         | 0.4%    |
| Hotel nights, world                    | Worldwide   Tekna - all entities | 1,067.0     | nights              | -            | 42.1                         | 0.6%    |
| Hotel nights, world                    | Visma                            | 264.0       | nights              | -            | 10.4                         | 0.1%    |
| Hotel nights, world                    |                                  | 3,404.0     | nights              | -            | 134.5                        | 1.8%    |
| Train (SE)                             | Visma                            | 2,529.0     | pkm                 | -            | -                            | -       |
| Air travel, domestic                   |                                  | 55,876.0    | pkm                 | -            | 7.3                          | 0.1%    |
| Air travel, domestic                   |                                  | 393.0       | flight trip         | -            | 23.7                         | 0.3%    |
| Air travel, domestic                   |                                  | 1.0         | tCO <sub>2</sub> e  | -            | 1.0                          | -       |
| Air travel, domestic                   |                                  | 5,106.9     | kgCO <sub>2</sub> e | -            | 5.1                          | 0.1%    |
| Air travel, domestic                   | Total Miles NA                   | 443,535.0   | pkm                 | -            | 57.7                         | 0.8%    |
| Air travel, domestic                   | Domestic flight travel           | 631.0       | flight trip         | -            | 38.0                         | 0.5%    |
| Train International                    |                                  | 14,840.0    | pkm                 | -            | 0.1                          | -       |
| Train International                    |                                  | 50.0        | kgCO <sub>2</sub> e | -            | 0.1                          | -       |
| Train International                    | Worldwide   Tekna - all entities | 29,886.0    | pkm                 | -            | 0.1                          | -       |
| Train International                    | EFR-EFM                          | 52,000.0    | pkm                 | -            | 0.2                          | -       |
| Air travel, intercontinental, incl. RF |                                  | 68,358.0    | pkm                 | -            | 13.2                         | 0.2%    |
| Air travel, intercontinental, incl. RF |                                  | 56,493.0    | kgCO <sub>2</sub> e | -            | 56.5                         | 0.7%    |
| Train (FI)                             |                                  | 2,120.0     | pkm                 | -            | -                            | -       |
| Mileage all. car (NO)                  | Alytic group total               | 32,150.1    | km                  | -            | 2.4                          | -       |
| Taxi                                   | Visma                            | 937.0       | km                  | -            | 0.2                          | -       |
| Taxi                                   |                                  | 127,319.0   | km                  | -            | 26.5                         | 0.4%    |

| Emission source                  | Description                                                                                                            | Consumption | Unit                | Energy (MWh) | Emissions tCO <sub>2</sub> e | % share     |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|--------------|------------------------------|-------------|
| Taxi                             | EFR-EFM                                                                                                                | 480.0       | km                  | -            | 0.1                          | -           |
| Bus (NO)                         | Visma                                                                                                                  | 516.0       | pkm                 | -            | -                            | -           |
| Car, petrol (avg.)               |                                                                                                                        | 167,737.0   | km                  | -            | 28.6                         | 0.4%        |
| Train (NO)                       |                                                                                                                        | 70.0        | kgCO <sub>2</sub> e | -            | 0.1                          | -           |
| Hotel nights, Nordic             |                                                                                                                        | 335.0       | nights              | -            | 1.4                          | -           |
| Air travel, intercontinental, EC |                                                                                                                        | 61,380.0    | pkm                 | -            | 4.8                          | 0.1%        |
| Hand sanitizer                   |                                                                                                                        | 1.1         | kg                  | -            | -                            | -           |
| Air travel, continental, EC      |                                                                                                                        | 145,095.6   | pkm                 | -            | 11.6                         | 0.2%        |
| Water supply, municipal          | Assume JPY275 per m <sup>3</sup>                                                                                       | 771.0       | m <sup>3</sup>      | -            | 0.1                          | -           |
| Train, diesel                    |                                                                                                                        | 356,750.0   | pkm                 | -            | 32.5                         | 0.4%        |
| Air travel, continental, BC      |                                                                                                                        | 25,362.0    | pkm                 | -            | 3.0                          | -           |
| Car travel                       |                                                                                                                        | 18,765.0    | pkm                 | -            | 3.2                          | -           |
| Mileage all. car (DK)            |                                                                                                                        | 7,348.0     | km                  | -            | 1.0                          | -           |
| Bus regional                     | EFR-EFM                                                                                                                | 400.0       | pkm                 | -            | -                            | -           |
| <b>Employee commuting total</b>  |                                                                                                                        |             |                     | -            | <b>298.5</b>                 | <b>4.0%</b> |
| Car, petrol (avg.)               | Annual mileage converted to km for business travel petrol vehicles                                                     | 85,338.0    | km                  | -            | 14.6                         | 0.2%        |
| Car, petrol (avg.)               | Worldwide   Tekna - all entities                                                                                       | 998,903.0   | km                  | -            | 170.3                        | 2.3%        |
| Car, hybrid vehicle              | Annual mileage for an electric car, entered under hybrid car as there is no electric car for UK only EU 27 and Nordic. | 1,510.0     | km                  | -            | 0.1                          | -           |
| Car, diesel (avg.)               | Annual mileage converted to for business travel Diesel vehicles km                                                     | 280,556.0   | km                  | -            | 47.9                         | 0.6%        |
| Car, petrol (medium)             | Worldwide   Tekna - all entities                                                                                       | 304,423.0   | km                  | -            | 56.2                         | 0.7%        |
| Electric car EU27                | Worldwide   Tekna - all entities                                                                                       | 171,880.0   | km                  | -            | 6.5                          | 0.1%        |
| Bus local avg.                   | Worldwide   Tekna - all entities                                                                                       | 28,790.0    | pkm                 | -            | 2.8                          | -           |
| <b>Scope 3 1 total</b>           |                                                                                                                        |             |                     | -            | -                            | -           |
| Natural gas                      |                                                                                                                        | -           | m <sup>3</sup>      | -            | -                            | -           |
| Water supply, groundwater        |                                                                                                                        | -           | m <sup>3</sup>      | -            | -                            | -           |
| Copper, recycled                 |                                                                                                                        | -           | kg                  | -            | -                            | -           |
| Plastic film, avg.               |                                                                                                                        | -           | kg                  | -            | -                            | -           |
| Plastic rigid, avg.              |                                                                                                                        | -           | kg                  | -            | -                            | -           |
| Steel, stainless recycled        |                                                                                                                        | -           | kg                  | -            | -                            | -           |
| Aluminium, recycled              |                                                                                                                        | -           | kg                  | -            | -                            | -           |

| Emission source                    | Description | Consumption | Unit | Energy (MWh)            | Emissions tCO <sub>2</sub> e | % share       |
|------------------------------------|-------------|-------------|------|-------------------------|------------------------------|---------------|
| Purchased goods and services total |             |             |      | -                       | -                            | -             |
| Cheese, soft (A1-3)                | -           | -           | kg   | -                       | -                            | -             |
| <b>Scope 3 total</b>               | -           |             |      |                         | <b>3394.3</b>                | <b>45.8%</b>  |
| <b>Total</b>                       |             |             |      | <b>25,858.5</b>         | <b>7,455.4</b>               | <b>100.0%</b> |
| KJ                                 |             |             |      | <b>93,090,605,943.6</b> |                              |               |

## REPORTING YEAR MARKET-BASED GHG EMISSIONS

| Category                                                     | Unit               | 2022    |
|--------------------------------------------------------------|--------------------|---------|
| Electricity Total (Scope 2) with Market-based calculations   | tCO <sub>2</sub> e | 4,024.0 |
| Scope 2 Total with Market-based electricity calculations     | tCO <sub>2</sub> e | 4,052.7 |
| Scope 1+2+3 Total with Market-based electricity calculations | tCO <sub>2</sub> e | 9,061.6 |



## ANNUAL GHG EMISSIONS

| Category                           | Description                       | 2019         | 2020             | 2021           | % change from previous year |
|------------------------------------|-----------------------------------|--------------|------------------|----------------|-----------------------------|
| <b>Transportation total</b>        |                                   | <b>19.5</b>  | <b>448.9</b>     | <b>473.6</b>   | <b>5,5%</b>                 |
| Diesel                             |                                   | 19.5         | 210.7            | 305.5          | 45,0%                       |
| Diesel                             | Varebil                           | -            | 3.0              | -              | -100,0%                     |
| Diesel                             | Truck                             | -            | 1.7              | 2.6            | 50,4%                       |
| Diesel                             | Company car                       | -            | 2.9              | -              | -100,0%                     |
| Diesel                             | Transportation 2020               | -            | 105.6            | -              | -100,0%                     |
| Diesel                             | All EFR-Seyssinet Cars (x11)      | -            | 23.8             | 23.9           | 0,7%                        |
| Diesel                             | All EFR-Marcoussi Cars(x3)        | -            | 12.1             | 12.2           | 0,7%                        |
| Diesel                             | Varebil, Servicebil               | -            | -                | 6.3            | 100,0%                      |
| Petrol                             |                                   | -            | 56.7             | 81.9           | 44,5%                       |
| Petrol                             | Business travel/service           | -            | 3.3              | -              | -100,0%                     |
| Petrol                             | Transportation 2020               | -            | 14.7             | -              | -100,0%                     |
| Bioethanol (E85)                   |                                   | -            | 2.4              | -              | -100,0%                     |
| Diesel (B7)                        |                                   | -            | 1,1              | 29.6           | 2 703,9%                    |
| Diesel (B5)                        |                                   | -            | 7.9              | 7.1            | -9,3%                       |
| Gasoline (AU)                      |                                   | -            | 3.1              | 4.4            | 42,8%                       |
| <b>Stationary combustion total</b> |                                   | <b>453,4</b> | <b>137,875.6</b> | <b>1,026.6</b> | <b>-99,3%</b>               |
| Natural gas                        | Canada   TPS - Energir            | 139,3        | -                | 115.8          | 100,0%                      |
| Natural gas                        | Canada   TAM - Energir            | 314,1        | -                | 460.9          | 100,0%                      |
| Natural gas                        |                                   | -            | 137,147.4        | 155.6          | -99,9%                      |
| Natural gas                        | 31511 Dequindre Road              | -            | 70.6             | 71.0           | 0,6%                        |
| Natural gas                        | Canada   TPS - Energir/Access gas | -            | 128.0            | -              | -100,0%                     |
| Natural gas                        | 31683 Dequindre Road              | -            | 45.6             | 51.4           | 12,7%                       |
| Natural gas                        | Canada   TAM - Energir/Access gas | -            | 346.1            | -              | -100,0%                     |
| Propane (NO)                       |                                   | -            | 0.1              | 0.2            | 105,9%                      |
| LPG                                |                                   | -            | 0.7              | -              | -100,0%                     |
| LPG                                | 31683 Dequindre Road              | -            | 2.9              | 7.8            | 171,2%                      |
| LPG_                               |                                   | -            | 0.3              | 0.8            | 122,8%                      |
| Burning oil                        |                                   | -            | 107.1            | 135.9          | 26,9%                       |
| Fuel/Diesel oil                    |                                   | -            | 26.8             | 27.2           | 1,7%                        |
| <b>Chemical-process total</b>      |                                   | <b>-</b>     | <b>1.3</b>       | <b>1.4</b>     | <b>14,2%</b>                |
| Acetylene, combusted               |                                   | -            | 1.2              | 1.4            | 14,2%                       |
| Arcal Force                        |                                   | -            | -                | -              | -                           |
| SF6                                |                                   | -            | -                | -              | 100,0%                      |
| <b>Refrigerants total</b>          |                                   | <b>-</b>     | <b>-</b>         | <b>-</b>       | <b>-</b>                    |
| R-407 C                            |                                   | -            | -                | -              | -                           |
| R-410 A                            |                                   | -            | -                | -              | -                           |

| Category                 | Description                                | 2019         | 2020             | 2021           | % change from previous year |
|--------------------------|--------------------------------------------|--------------|------------------|----------------|-----------------------------|
| <b>Scope 1 total</b>     |                                            | <b>472.9</b> | <b>138,325.8</b> | <b>1,501.6</b> | <b>-98,9%</b>               |
| <b>Electricity total</b> |                                            | <b>3.4</b>   | <b>2,361.7</b>   | <b>2,758.3</b> | <b>16,8%</b>                |
| Electricity Nordic mix   |                                            | 3.4          | 8.5              | -              | -100,0%                     |
| Electricity UK (DEFRA)   |                                            | -            | 134.3            | -              | -100,0%                     |
| Electricity France       |                                            | -            | 12.8             | 11.2           | -12,6%                      |
| Electricity France       | France   TPE - Alterna                     | -            | -                | 32.1           | 100,0%                      |
| Electricity France       | France   Imphytek - sales office           | -            | -                | -              | 100,0%                      |
| Electricity USA          | 31511 Dequindre Road                       | -            | 75.1             | 88.6           | 18,0%                       |
| Electricity USA          | 31683 Dequindre Road                       | -            | 41.2             | 49.5           | 20,0%                       |
| Electricity USA          |                                            |              | 50.3             | 49.3           | -1,9%                       |
| Electricity Japan        |                                            |              | 4.2              | 3.6            | -13,3%                      |
| Electricity Denmark 125  |                                            |              | 2.2              | 1.6            | -26,8%                      |
| Electricity Germany      |                                            |              | 166.8            | 268.8          | 61,1%                       |
| Electricity Germany      | Cars                                       |              | -                | -              | 100,0%                      |
| Electricity Sweden       |                                            |              | 0.3              | 0.4            | 14,4%                       |
| Electricity Sweden       | Stockholm                                  |              | 0.1              | 0.1            | -3,9%                       |
| Electricity Sweden       | Åkersberga                                 |              | 0.1              | 0.1            | -                           |
| Electricity Switzerland  |                                            |              | 0.3              | 0.3            | 27,7%                       |
| Electricity Norway       |                                            |              | 8.7              | 15.0           | 71,8%                       |
| Electricity Norway       | Lighting, climatizing, general consumption |              | 14.0             | 18.0           | 29,2%                       |
| Electricity Norway       | Equipment testing                          |              | 3.1              | 3.8            | 22,3%                       |
| Electricity Norway       | Øksfjord                                   |              | -                | -              | 16,8%                       |
| Electricity Norway       | Leid kontorlokale i Oslo/Rebel             |              | -                | -              | 100,0%                      |
| Electricity Norway       | Vestby                                     |              | -                | 1.1            | 100,0%                      |
| Electricity China        |                                            |              | 1,053.6          | 1261.0         | 19,7%                       |
| Electricity China        | China   TPZ - Sales office                 |              | -                | 5.0            | 100,0%                      |
| Electricity Malaysia     | OFICE USE                                  |              | 14.5             | -              | -100,0%                     |
| Electricity Malaysia     |                                            |              | -                | 14.6           | 100,0%                      |
| Electricity Thailand     |                                            |              | 21.5             | 14.0           | -34,8%                      |
| Electricity Romania      |                                            |              | 96.5             | 98.3           | 1,8%                        |
| Electricity India        | Electricity cosumption for the year 2020   |              | 625.3            | -              | -100,0%                     |
| Electricity India        |                                            |              | -                | 735.7          | 100,0%                      |
| Electricity Spain        |                                            |              | 0.5              | 0.6            | 13,8%                       |
| Electricity Poland       |                                            |              | 2.7              | 59.1           | 2,110,0%                    |
| Electricity UK           |                                            |              | 24.3             | 24.5           | 0,9%                        |

| Category                                | Description                     | 2019 | 2020 | 2021 | % change from previous year |
|-----------------------------------------|---------------------------------|------|------|------|-----------------------------|
| Electricity Brazil                      |                                 |      | 0.8  | 1.4  | 73.5%                       |
| Electricity Korea                       | Korea   TPK - Sales office      |      | -    | 0.6  | 100.0%                      |
| <b>Electricity Green total</b>          |                                 |      | -    | 4.1  | -                           |
| Electricity Hydropower                  | Canada   TPS - Hydro            |      | -    | -    | -                           |
| Electricity Hydropower                  | Canada   TAM - Hydro            |      | -    | -    | -                           |
| Electricity Hydropower                  | Canada   TAM - Hydro Sherbrooke |      | -    | -    | -100.0%                     |
| Electricity Hydropower                  | Canada   TPS - Hydro Sherbrooke |      | -    | -    | -100.0%                     |
| Hydropower, Quebec                      | Canada   TAM - Hydro Sherbrooke |      | -    | 3.2  | 100.0%                      |
| Hydropower, Quebec                      | Canada   TPS - Hydro Sherbrooke |      | -    | 0.9  | 100.0%                      |
| <b>Electric vehicles total</b>          |                                 |      | -    | 0.3  | 11,135.2%                   |
| Electric car UK                         |                                 |      | -    | -    | -100.0%                     |
| Hybrid vehicles                         |                                 |      | -    | 0.3  | -                           |
| <b>District heating location total</b>  |                                 | -    | 17.8 | 10.1 | -43.5%                      |
| District heating NO/Oslo                |                                 | -    | 1.3  | 1.1  | -18.0%                      |
| District heating DK/Aarhus              |                                 | -    | 0.1  | -    | -100.0%                     |
| District heating SE/ Jonkoping          |                                 | -    | 1.7  | 2.2  | 31.6%                       |
| District heating NO/ Trondheim          |                                 | -    | 13.3 | 5.9  | -55.8%                      |
| District heating Sweden mix             |                                 | -    | 0.3  | 0.5  | 54.4%                       |
| District heating SE/ Stockholm          | Stockholm                       | -    | 0.4  | 0.3  | -20.4%                      |
| District heating SE/ Stockholm          | Åkersberga                      | -    | 0.2  | 0.1  | -19.7%                      |
| District heating SE/ Sundsvall          |                                 | -    | 0.6  | -    | -100.0%                     |
| <b>District heating general total</b>   |                                 | -    | 31.3 | 13.9 | -55.5%                      |
| District heating CHP                    |                                 | -    | 31.3 | 13.9 | -55.5%                      |
| <b>Electricity (Market based) total</b> |                                 | -    | -    | -    | -                           |
| Electricity Italy (residual)            |                                 | -    | -    | -    | -                           |
| <b>Heat fuel specific total</b>         |                                 |      | 32.3 | 49.9 | 54.5%                       |
| Heat Natural gas                        |                                 |      | 32.3 | 49.9 | 54.5%                       |

| Category                       | Description                      | 2019 | 2020    | 2021    | % change from previous year |
|--------------------------------|----------------------------------|------|---------|---------|-----------------------------|
| <b>Scope 2 total</b>           |                                  | 3.4  | 2,443.1 | 2,836.6 | 16.1%                       |
| <b>Business travel total</b>   |                                  | 51.6 | 404.8   | 543.2   | 34.2%                       |
| Air travel, intercontinental   |                                  | 51.6 | 77.0    | 23.0    | -70.1%                      |
| Air travel, intercontinental   | Outside NA                       | -    | 7.8     | 4.0     | -49.4%                      |
| Air travel, intercontinental   | Business travel/service          | -    | 1.3     | -       | -100.0%                     |
| Flights                        |                                  | -    | 14.1    | 35.7    | 152.3%                      |
| Flights                        | Worldwide   Tekna - all entities | -    | -       | 22.8    | 100.0%                      |
| Air travel, domestic, incl. RF |                                  | -    | 11.1    | 45.4    | 308.0%                      |
| Air travel, domestic, incl. RF | EFR- All employees               | -    | 1.8     | -       | -100.0%                     |
| Air travel, domestic, incl. RF | All EFR Employees                | -    | -       | 2.6     | 100.0%                      |
| Air travel, domestic           |                                  | -    | 53.9    | 64.9    | 20.6%                       |
| Air travel, domestic           | Within NA                        | -    | 7.4     | 10.1    | 35.5%                       |
| Air travel, domestic           | Service                          | -    | 1.6     | -       | -100.0%                     |
| Air travel, continental, EC    |                                  | -    | 2.8     | 3.6     | 31.1%                       |
| Hotel nights, Europe           | 15                               | -    | -       | -       | -100.0%                     |
| Hotel nights, Europe           |                                  | -    | 35.3    | 27.4    | -22.3%                      |
| Hotel nights, Europe           | EFR-Seyssinet                    | -    | 2.2     | 1.9     | -11.0%                      |
| Hotel nights, Europe           | EFR-Marcoussis                   | -    | 3.0     | 2.7     | -11.0%                      |
| Taxi                           |                                  | -    | 2.9     | 3.6     | 22.5%                       |
| Taxi                           | Service                          | -    | 1.2     | -       | -100.0%                     |
| Hotel nights, Nordic           |                                  | -    | 0.3     | 2.4     | 684.2%                      |
| Hotel nights, Nordic           | Business travel/service          | -    | 1.4     | -       | -100.0%                     |
| Car, rental (fuel unknown)     |                                  | -    | 0.1     | 0.1     | -41.8%                      |
| Hotel nights, world            | 6                                | -    | -       | -       | -100.0%                     |
| Hotel nights, world            |                                  | -    | 86.0    | 98.7    | 14.8%                       |
| Hotel nights, world            | Within NA                        | -    | 27.1    | 39.3    | 44.9%                       |
| Hotel nights, world            | Outside NA                       | -    | 3.4     | 1.8     | -47.1%                      |
| Hotel nights, world            | Worldwide   Tekna - all entities | -    | -       | 6.2     | 100.0%                      |
| Train International            |                                  | -    | 0.1     | 0.6     | 390.1%                      |
| Train International            | Worldwide   Tekna - all entities | -    | -       | -       | 100.0%                      |
| Air travel, continental        |                                  | -    | 0.3     | 6.6     | 1,885.4%                    |
| Air travel, continental        | Business travel/service          | -    | 1.3     | -       | -100.0%                     |
| Car (avg.) DEFRA               |                                  | -    | 9.5     | 8.5     | -11.4%                      |
| Mileage all. avg. car          | Total Miles                      | -    | 29.1    | -       | -100.0%                     |
| Mileage all. avg. car          |                                  | -    | -       | 8.3     | 100.0%                      |
| Mileage all. avg. car          | Worldwide   Tekna - all entities | -    | -       | 11.3    | 100.0%                      |
| Mileage all. avg. car          | Total Miles                      | -    | -       | 41.1    | 100.0%                      |

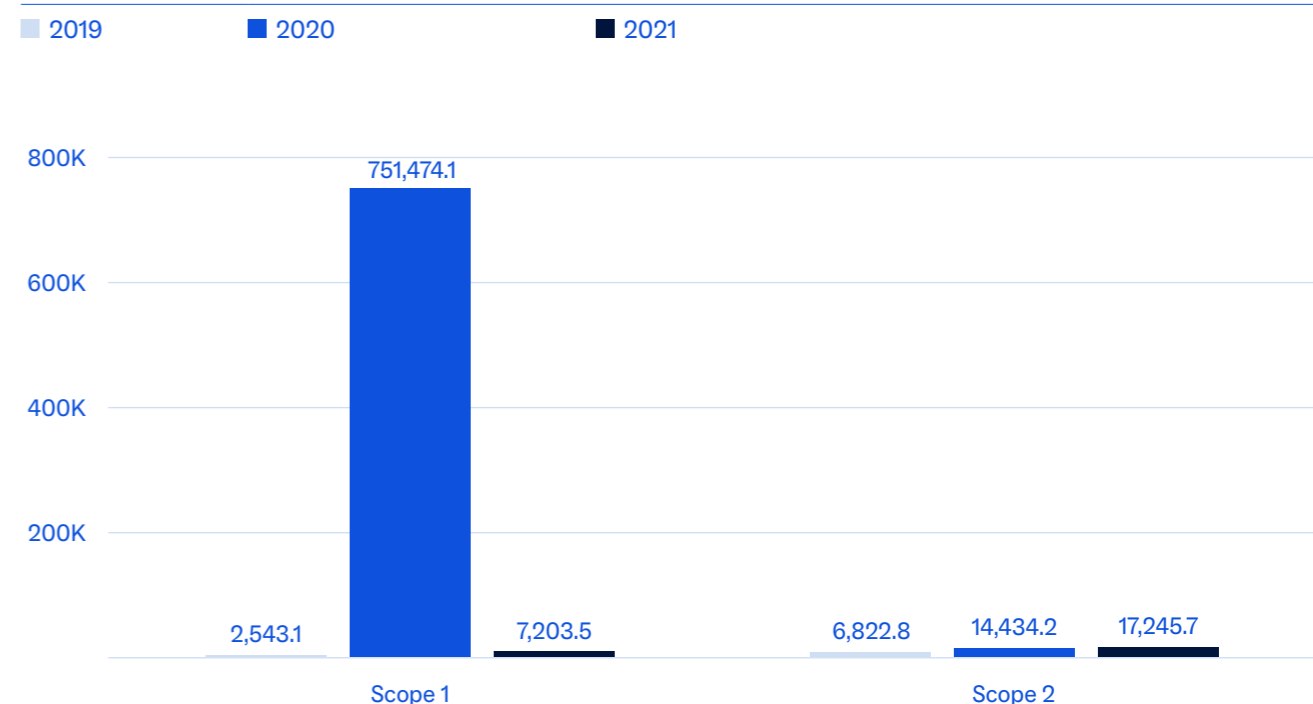
| Category                          | Description                              | 2019 | 2020        | 2021        | % change from previous year |
|-----------------------------------|------------------------------------------|------|-------------|-------------|-----------------------------|
| Train, diesel                     |                                          | -    | 21.7        | 31.8        | 46.7%                       |
| Mileage all. car (NO)             | service / sales                          | -    | 1.0         | -           | -100.0%                     |
| Air travel, continental, incl. RF |                                          | -    | -           | 38.0        | 100.0%                      |
| Mileage all. car (DK)             |                                          | -    | -           | 0.9         | 100.0%                      |
| <b>Waste total</b>                |                                          | -    | <b>76.1</b> | <b>82.3</b> | <b>8.2%</b>                 |
| Residual waste, incinerated       |                                          | -    | 36.8        | 35.0        | -5.0%                       |
| Sorted waste, recycled            |                                          | -    | 2.5         | -           | -100.0%                     |
| Wood waste, recycled              |                                          | -    | 0.6         | 0.8         | 39.7%                       |
| Wood waste, recycled              | Wooden pallets                           | -    | -           | -           | -100.0%                     |
| Wood waste, recycled              | France   TPE - wood                      | -    | -           | 0.1         | 100.0%                      |
| Wood waste, recycled              | Wooden pallets & others                  | -    | -           | 0.1         | 100.0%                      |
| Mixed waste, recycled             |                                          | -    | 1.6         | 6.5         | 302.1%                      |
| EE waste, recycled                |                                          | -    | 0.4         | -           | -88.3%                      |
| Cardboard waste, recycled         |                                          | -    | 0.6         | 0.6         | 5.1%                        |
| Cardboard waste, recycled         | Carton boxes                             | -    | -           | -           | -100.0%                     |
| Cardboard waste, recycled         | Canada   all sites - cardboard           | -    | -           | -           | 100.0%                      |
| Cardboard waste, recycled         | Carton Boxes                             | -    | -           | -           | 100.0%                      |
| Residual waste, landfill          | 31511 Dequindre Road                     | -    | 2.6         | -           | -100.0%                     |
| Residual waste, landfill          |                                          | -    | 8.3         | 16.9        | 102.6%                      |
| Plastic waste, recycled           |                                          | -    | 0.2         | 0.4         | 124.2%                      |
| Plastic waste, recycled           | Plastic drums                            | -    | -           | -           | -100.0%                     |
| Plastic waste, recycled           | France   TPE - plastics                  | -    | -           | -           | 100.0%                      |
| Plastic waste, recycled           | PLASTIC DRUMS & OTHERS                   | -    | -           | -           | 100.0%                      |
| Plastic waste, incinerated        |                                          | -    | 10.4        | 7.2         | -31.0%                      |
| Special waste, treated            |                                          | -    | -           | -           | 555.9%                      |
| Metal waste, recycled             |                                          | -    | 0.4         | 0.9         | 133.8%                      |
| Metal waste, recycled             | Metals- SS/MS                            | -    | 0.1         | -           | -100.0%                     |
| Metal waste, recycled             | Metal- MS/SS                             | -    | -           | 0.1         | 100.0%                      |
| Hazardous waste, recycled         |                                          | -    | 0.2         | 0.3         | 76.6%                       |
| Hazardous waste, recycled         | Canada   TPS - hazardous waste, recycled | -    | -           | -           | 100.0%                      |
| Paper waste, recycled             |                                          | -    | 0.5         | 6.1         | 1,090.3%                    |
| Paper waste, recycled             | France   TPE - paper and cardboard       | -    | -           | 0.1         | 100.0%                      |
| Waste water treatment             |                                          | -    | 0.6         | 2.3         | 263.9%                      |
| Hazardous waste, incinerated      |                                          | -    | 4.0         | 4.1         | 3.4%                        |
| Industrial waste, recycled        | Copper                                   | -    | -           | -           | 66.8%                       |
| Industrial waste, recycled        | Stainless steel                          | -    | -           | -           | -100.0%                     |

| Category                                        | Description                              | 2019 | 2020         | 2021           | % change from previous year |
|-------------------------------------------------|------------------------------------------|------|--------------|----------------|-----------------------------|
| Industrial waste, recycled                      | Steel                                    | -    | -            | -              | 69.3%                       |
| Industrial waste, recycled                      | Stainless steel                          | -    | -            | -              | 100.0%                      |
| Glass waste, recycled                           |                                          | -    | -            | -              | 355.9%                      |
| Wood waste, incinerated                         |                                          | -    | 0.1          | 0.1            | -26.0%                      |
| Organic waste, treated                          |                                          | -    | 0.2          | 0.2            | 0.5%                        |
| Mineral oil waste, incinerated                  |                                          | -    | 6.0          | -              | -100.0%                     |
| Hazardous waste, treated                        | Canada   TPS - hazardous waste, treated  | -    | -            | -              | 100.0%                      |
| Hazardous waste, landfill                       | Canada   TPS - hazardous waste, landfill | -    | -            | -              | 100.0%                      |
| Hazardous waste, landfill                       | France   TPE - hazardous, landfill       | -    | -            | 0.2            | 100.0%                      |
| Municipal solid waste, landfill (AU)            | France   TPE - municipal waste, treated  | -    | -            | -              | 100.0%                      |
| <b>Fuel-and-energy-related activities total</b> |                                          | -    | <b>985.8</b> | <b>1,562.9</b> | <b>58.5%</b>                |
| Diesel (WTT)                                    |                                          | -    | 77.2         | 88.8           | 15.1%                       |
| Electricity Nordic mix (WTT)                    |                                          | -    | 6.0          | -              | -99.8%                      |
| Electricity UK (upstream)                       |                                          | -    | 23.8         | 9.0            | -62.3%                      |
| Electricity Denmark (upstream)                  |                                          | -    | 0.5          | 0.8            | 53.6%                       |
| Electricity Germany (upstream)                  |                                          | -    | 1.1          | 50.0           | 4,536.1%                    |
| Electricity Norway (upstream)                   |                                          | -    | 5.5          | 13.7           | 150.8%                      |
| Heat & steam (upstream)                         |                                          | -    | 11.2         | 2.6            | -76.9%                      |
| Electricity Sweden (upstream)                   |                                          | -    | 0.1          | 0.1            | 135.4%                      |
| Electricity Switzerland (upstream)              |                                          | -    | -            | 0.1            | 152.1%                      |
| Natural gas (WTT)                               |                                          | -    | 247.1        | 167.8          | -32.1%                      |
| Electricity Canada (upstream)                   |                                          | -    | 135.7        | 284.2          | 109.5%                      |
| District heating NO/SE (upstream)               |                                          | -    | 2.1          | 2.7            | 25.9%                       |
| Natural gas                                     |                                          | -    | 71.2         | -              | -100.0%                     |
| Petrol (WTT)                                    |                                          | -    | 19.9         | 22.0           | 10.8%                       |
| Electricity USA (upstream)                      |                                          | -    | 21.5         | 48.2           | 124.4%                      |
| LPG (WTT)                                       |                                          | -    | 2.9          | 1.0            | -64.5%                      |
| Electricity China (upstream)                    |                                          | -    | 184.4        | 409.5          | 122.0%                      |
| Electricity India (upstream)                    |                                          | -    | 106.7        | 339.9          | 218.6%                      |
| Electricity Malaysia (upstream)                 |                                          | -    | 2.3          | 4.7            | 107.1%                      |

| Category                                  | Description                      | 2019 | 2020           | 2021         | % change from previous year |
|-------------------------------------------|----------------------------------|------|----------------|--------------|-----------------------------|
| Electricity Thailand (upstream)           |                                  | -    | 3.3            | 4.5          | 35.2%                       |
| Electricity Japan (upstream)              |                                  | -    | 0.6            | 1.0          | 70.6%                       |
| Electricity France (upstream)             |                                  | -    | 1.0            | 9.0          | 801.2%                      |
| Electricity Italy (upstream)              |                                  | -    | 0.6            | 0.6          | -0.1%                       |
| Electricity Poland (upstream)             |                                  | -    | 33.3           | 19.2         | -42.3%                      |
| Electricity Spain (upstream)              |                                  | -    | 0.2            | 0.2          | 48.7%                       |
| Electricity Brazil (upstream)             |                                  | -    | 0.1            | 0.5          | 454.6%                      |
| Diesel (B5) (WTT)                         |                                  | -    | 1.9            | 1.7          | -9.2%                       |
| Bioethanol (WTT)                          |                                  | -    | 3.5            | -            | -100.0%                     |
| Burning oil (WTT)                         |                                  | -    | 22.3           | 28.3         | 26.8%                       |
| Propane/Butane (WTT)                      |                                  | -    | -              | -            | 98.8%                       |
| Electricity Korea (upstream)              |                                  | -    | -              | 0.2          | 100.0%                      |
| Electricity Romania (upstream)            |                                  | -    | -              | 45.6         | 100.0%                      |
| Fuel oil (WTT)                            |                                  | -    | -              | 7.0          | 100.0%                      |
| <b>Investments total</b>                  |                                  | -    | <b>2,386.1</b> | -            | -                           |
| Electricity Nordic mix                    | Beyonder, 3.9% ownership         | -    | 0.6            | -            | -100.0%                     |
| Electricity Nordic mix                    | NorSun, 15.7% ownership          | -    | 828.2          | -            | -100.0%                     |
| Other material inputs                     | Beyonder, 3.9% ownership         | -    | 0.9            | -            | -100.0%                     |
| Other material inputs                     | NorSun, Scope 1, 15.7% ownership | -    | 1,380.6        | -            | -100.0%                     |
| Air travel, intercontinental              | Beyonder, 3.9% ownership         | -    | 0.3            | -            | -100.0%                     |
| Services, post/bank/telecom               | Beyonder, 3.9% ownership         | -    | -              | -            | -100.0%                     |
| Truck 17t+                                | NorSun, 15.7% ownership          | -    | 175.5          | -            | -100.0%                     |
| <b>Scope 31 total</b>                     |                                  | -    | <b>24.3</b>    | <b>109.4</b> | <b>349.6%</b>               |
| Water supply, groundwater                 |                                  | -    | 0.6            | 0.7          | 15.2%                       |
| Plastic film, avg.                        |                                  | -    | 0.5            | 0.4          | -22.2%                      |
| Plastic rigid, avg.                       |                                  | -    | 1.4            | 0.8          | -40.5%                      |
| Steel, stainless recycled                 |                                  | -    | 20.8           | 24.0         | 15.6%                       |
| Aluminium, recycled                       |                                  | -    | 0.9            | 0.9          | -0.6%                       |
| Copper, recycled                          |                                  | -    | 0.2            | 0.1          | -40.7%                      |
| Natural gas                               |                                  | -    | -              | 82.5         | 100.0%                      |
| <b>Purchased goods and services total</b> |                                  | -    | -              | -            | -                           |
| Cheese, soft (A1-3)                       |                                  | -    | -              | -            | 100.0%                      |

| Category          | Description | 2019         | 2020             | 2021           | % change from previous year |
|-------------------|-------------|--------------|------------------|----------------|-----------------------------|
| Scope 3 total     |             | 51.6         | 3,877.1          | 2,297.9        | -40.7%                      |
| <b>Total</b>      |             | <b>527.9</b> | <b>144,646.1</b> | <b>6,636.1</b> | <b>-95.4%</b>               |
| Percentage change |             | 100.0%       | 27,301.6%        | -95.4%         |                             |

## ANNUAL ENERGY CONSUMPTION (MWH) SCOPE 1 &amp; 2



## ANNUAL MARKET-BASED GHG EMISSIONS

| Category                                                     | Unit               | 2019    | 2020      | 2021    |
|--------------------------------------------------------------|--------------------|---------|-----------|---------|
| Electricity Total (Scope 2) with Market-based calculations   | tCO <sub>2</sub> e | -       | 3,689.7   | 4,231.2 |
| Scope 2 Total with Market-based electricity calculations     | tCO <sub>2</sub> e | -       | 3,771.1   | 4,309.5 |
| Scope 1+2+3 Total with Market-based electricity calculations | tCO <sub>2</sub> e | 3,954.4 | 145,974.1 | 8,109.0 |
| Percentage change                                            |                    | 100.0%  | 3,591.4%  | -94.4%  |

## Methodology and sources

The Greenhouse Gas Protocol initiative (GHG Protocol) was developed by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). This analysis is done according to A Corporate Accounting and Reporting Standard Revised edition, currently one of four GHG Protocol accounting standards on calculating and reporting GHG emissions. The reporting considers the following greenhouse gases, all converted into CO<sub>2</sub>-equivalents: CO<sub>2</sub>, CH<sub>4</sub> (methane), N<sub>2</sub>O (laughing gas), SF<sub>6</sub>, HFCs, PFCs and NF<sub>3</sub>.

For corporate reporting, two distinct approaches can be used to consolidate GHG emissions: the equity share approach and the control approach. The most common consolidation approach is the control approach, which can be defined in either financial or operational terms.

The carbon inventory is divided into three main scopes of direct and indirect emissions.

Scope 1 includes all direct emission sources. This includes all use of fossil fuels for stationary combustion or transportation, in owned and, depending on the consolidation approach selected, leased, or rented assets. It also includes any process emissions, from e.g. chemical processes, industrial gases, direct methane emissions etc.

Scope 2 includes indirect emissions related to purchased energy; electricity and heating/cooling where the organisation has operational control. The electricity emission factors used in Cemsys are based on national gross electricity production mixes from the International Energy Agency's statistics (IEA Stat).

Emission factors per fuel type are based on assumptions in the IEA methodological framework. Factors for district heating/cooling are either based on actual (local) production mixes, or average IEA statistics.

In January 2015, the GHG Protocol published new guidelines for calculating emissions from electricity consumption. Primarily two methods are used to allocate the GHG emissions created by electricity generation to the end consumers of a given grid. These are the location-based and the market-based methods. The location-based method reflects the average emission intensity of the grids on which energy consumption occurs, while the market-based method reflects emissions from electricity that companies have purposefully chosen (or not chosen).

Organisations who report on their GHG emissions will now have to disclose both the location-based emissions from the production of electricity, and the market-based emissions related to the potential purchase of Guarantees of Origin (GoOs) and Renewable Energy Certificates (RECs).

The purpose of this amendment in the reporting methodology is on the one hand to show the impact of energy efficiency measures, and on the other hand to display how the acquisition of GoOs or RECs affect the GHG emissions. Using both methods in the emission reporting highlights the effect of all measures regarding electricity consumption.

**The location-based method:** The location-based method is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period. Within this boundary, the different energy producers utilize a mix of energy resources, where the use of fossil fuels (coal, oil, and gas) result in direct GHG-emissions. These emissions are reflected in the location-based emission factor.

**The market-based method:** The choice of emission factors when using this method is determined by whether the business acquires GoOs/RECs or not. When selling GoOs or RECs, the supplier certifies that the electricity is produced exclusively by renewable sources, which has an emission factor of 0 grams CO<sub>2</sub>e per kWh. However,

for electricity without the GoO or REC, the emission factor is based on the remaining electricity production after all GoOs and RECs for renewable energy are sold. This is called a residual mix, which is normally substantially higher than the location-based factor. As an example, the market-based Norwegian residual mix factor is approximately 7 times higher than the location-based Nordic mix factor. The reason for this high factor is due to Norway's large export of GoOs/RECs to foreign consumers. In a market perspective, this implies that Norwegian hydropower is largely substituted with an electricity mix including fossil fuels.

Scope 3 includes indirect emissions resulting from value chain activities. The scope 3 emissions are a result of the company's upstream and downstream activities, which are not controlled by the company, i.e. they are indirect. Examples are business travel, goods transportation, waste handling, consumption of products etc.

In general, the carbon accounting should include information that users, both internal and external to the company, need for their decision making. An important aspect of relevance is the selection of an appropriate inventory boundary which reflects the substance and economic reality of the company's business relationships.

### SOURCES

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- WBCSD/WRI (2004). The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition). World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland / World Resource Institute (WRI), Washington DC, USA, 116 pp.
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- WBCSD/WRI (2015). GHG protocol Scope 2 guidance: An amendment to the GHG protocol corporate standard. World Business Council on Sustainable Development (WBCSD), Geneva, Switzerland / World Resource Institute (WRI), Washington DC, USA, 117 pp.
- The reference list above is incomplete but contains the essential references used in CEMAsys. In addition, several local/national sources may be relevant, depending on which emission factors are used.

## Disclaimer for CEMAsys' Nordic customers and Licenced Users of CEMAsys' Emissions Factor database (EF DB)

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Arendal Fossekompagni report emissions in our own operations and value chain based on the Green House Gas Protocol. The carbon accounting calculation is based on the following methodology. The emissions considered for scope 1, 2, and 3 are CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFC, PFC, and NF<sub>3</sub>, expressed in ton CO<sub>2</sub> equivalents (tCO<sub>2</sub>e). The global warming potential (GWP) used to calculate CO<sub>2</sub>e is based on the Fourth Assessment Report (AR4) by the Intergovernmental Panel on Climate Change (IPCC) for a 100-year period. For both Scope 1, 2, and 3 the emission consolidation method is through operational control. All calculations for scope 1, 2, and 3 are consistent with the GHG Protocol, using recognised emission factor sources. Majority of all Scope 1 and 2 data is calculated using consumption data, as well as Scope 3; Category 5 Waste generated in operations has for some units been estimated based on national statistics due to unavailable data. In scope 2, for some locations due to lagging data or complexity to receive consumption data, data has been estimated based on square meters. For scope 1, general emissions factors of diesel and petrol have been applied when a specified type of fuel (% of bio-blend) is not specified from the data source.

Arendal Fossekompagni tracks all operational and value chain emissions according to the GHG Protocol and has been using a carbon accounting software tool to record emissions since 2021.

## SCOPE 1, 2 + 3 EMISSION FACTORS

| Field name                  | Unit                | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|---------------------|--------------------------|----------|------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bioethanol (E85)            | liters              | 0,3586                   | 7,02     | 85               | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Diesel                      | kgCO <sub>2</sub> e | 1                        | 3,95     | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Petrol                      | kgCO <sub>2</sub> e | 1                        | 4,14     | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Air travel, continental, BC | pkm                 | 0,1198                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Petrol                      | gal (us)            | 8,8567                   | 36,67    | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Diesel (B7)                 | liters              | 2,5233                   | 10,58    | 7                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Autogas, LPG                | liters              | 1,5571                   | 7,26     | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Diesel (NO)                 | liters              | 2,086                    | 10,39    | 24,5             | 0                                       | Calculated based on DEFRA 2022 and Norwegian Environmental Agency                                                                                                                                                                                                                                                                 |
| Gasoline (AU)               | liters              | 2,3188                   | 9,5      | 0                | 0                                       | Australian Government - Department of Industry, Science, Energy and Resources, 2022                                                                                                                                                                                                                                               |
| Burning oil                 | liters              | 2,54013                  | 10,276   | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Natural gas                 | kWh                 | 0,184                    | 1        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Natural gas                 | m <sup>3</sup>      | 2,0316                   | 11,05    | 0                | 0                                       | Note: Should only be used for Nm <sup>3</sup> (or similar), NOT m <sup>3</sup> measured while gas is compressed. DEFRA 2022                                                                                                                                                                                                       |
| LPG                         | liters              | 1,55709                  | 7,259    | 0                | 0                                       | NOTE: Liquid form. Should not be used for gaseous LPG. DEFRA 2022                                                                                                                                                                                                                                                                 |
| LPG                         | kg                  | 2,9393                   | 13,7     | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Propane (NO)                | kg                  | 3,002                    | 12,89    | 0                | 0                                       | Miljødirektoratet Nasjonale standardfaktorer, 2015<br>See calculation in Excel sheet in folder Library/Fuel calculations<br><br><a href="https://www.miljodirektoratet.no/ansvarsomrader/klimate/klimakvoter/kvotepiktig-industri/">https://www.miljodirektoratet.no/ansvarsomrader/klimate/klimakvoter/kvotepiktig-industri/</a> |
| Fuel/Diesel oil             | liters              | 2,709                    | 10,2     | 0                | 0                                       | Miljødirektoratet, Nasjonale standardfaktorer: Versjon 24. februar 2015<br><a href="http://www.miljodirektoratet.no/Global/dokumenter/tema/klimate/Metodetrinn_2a_standard_utslippsfaktor.pdf">http://www.miljodirektoratet.no/Global/dokumenter/tema/klimate/Metodetrinn_2a_standard_utslippsfaktor.pdf</a>                      |
| Natural gas (UK grid)       | kWh                 | 0,1825                   | 1        | 0,5              | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| Propane                     | kg                  | 2,99755                  | 14       | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                                                                                        |
| SF6                         | tCO <sub>2</sub> e  | 1000                     | 0        | 0                | 0                                       |                                                                                                                                                                                                                                                                                                                                   |
| Acetylene, combusted        | kg                  | 3,38                     | 0        | 0                | 0                                       | Greenhouse gas emissions during the construction phase of a building: A case study in China', Journal of Cleaner Production, Hong, J. et al. (2015)                                                                                                                                                                               |

| Field name                        | Unit                | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                      |
|-----------------------------------|---------------------|--------------------------|----------|------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Arcal Force                       | kg                  | 0,18                     | 0        | 0                | 0                                       | AirLiquide Arcal force produktdatablad                                                                                       |
| Liquid Oxygene (LOx)              | m <sup>3</sup>      | 0                        | 0        | 0                | 0                                       | CEMASys calculation                                                                                                          |
| Aviform L50                       | liters              | 0,35                     | 0        | 0                | 0                                       | Avinor 2016                                                                                                                  |
| Aviform S-solid                   | kg                  | 0,63                     | 0        | 0                | 0                                       | Avinor 2016, oyvind.oskarsen.due@addcon.com<br>www.addcon.com                                                                |
| R-407 C                           | kg                  | 1774                     | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| R-422 D                           | kg                  | 2729                     | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| R-410 A                           | kg                  | 2088                     | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Electricity Nordic mix            | kgCO <sub>2</sub> e | 1                        | 0        | 76               | 0                                       | Based on IEA 2022                                                                                                            |
| Air travel, continental, incl. RF | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                                                                                                                              |
| Electricity Denmark 125           | kWh                 | 0,142                    | 1        | 72,5             | 0,411                                   | 1) Miljødeklarering af 1 kWh el, 2021 (Energinet, 2022)<br>2) Generel deklaration 2021 (Energinet, 2022)<br>3) %RE: IEA 2022 |
| Electricity Sweden                | kWh                 | 0,01                     | 1        | 66,9             | 0,077                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                |
| Electricity Germany               | kWh                 | 0,313                    | 1        | 39,8             | 0,618                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                |
| Electricity Norway                | kWh                 | 0,007                    | 1        | 95,9             | 0,405                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA 2022                           |
| Electricity USA                   | kWh                 | 0,355                    | 1        | 19,2             | 0,45                                    | 1) IEA (2022), Emission Factors<br>2) 2021 Green-e Residual Mix Emission Rates (2019 data)                                   |
| Electricity France                | kWh                 | 0,051                    | 1        | 25,2             | 0,048                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA 2022                           |
| Electricity Spain                 | kWh                 | 0,154                    | 1        | 43,8             | 0,296                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA 2022                           |
| Electricity Italy                 | kWh                 | 0,266                    | 1        | 37,5             | 0,456                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA 2022                           |
| Electricity Japan                 | kWh                 | 0,478                    | 1        | 19,5             | 0,478                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA 2022                                        |
| Electricity China                 | kWh                 | 0,618                    | 1        | 23,3             | 0,618                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA 2022                                        |

| Field name                             | Unit | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                                                                                                                                                              |
|----------------------------------------|------|--------------------------|----------|------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electricity UK                         | kWh  | 0,195                    | 1        | 41,4             | 0,351                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                                                                                                                                                        |
| Electricity Thailand                   | kWh  | 0,477                    | 1        | 16,5             | 0,477                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                                                                                                                                                     |
| Electricity Brazil                     | kWh  | 0,093                    | 1        | 84,1             | 0,093                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                                                                                                                                                     |
| Electricity Finland                    | kWh  | 0,073                    | 1        | 48,8             | 0,285                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                                                                                                                                                        |
| Air travel, intercontinental, incl. RF | pkm  | 0,1931                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                                           |
| Electricity Romania                    | kWh  | 0,274                    | 1        | 35,7             | 0,282                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                                                                                                                                                        |
| Electricity Switzerland                | kWh  | 0,025                    | 1        | 60,9             | 0,019                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                                                                                                                                                        |
| Electricity India                      | kWh  | 0,693                    | 1        | 21,1             | 0,693                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                                                                                                                                                     |
| Electricity Korea                      | kWh  | 0,467                    | 1        | 5,7              | 0,467                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                                                                                                                                                     |
| Electricity Malaysia                   | kWh  | 0,654                    | 1        | 16,2             | 0,654                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                                                                                                                                                     |
| District heating SE/Stockholm          | kWh  | 0,042                    | 1        | 43,3             | 0                                       | Lokala miljövården 2021 (Energiföretagen)                                                                                                                                                                                                                            |
| District heating NO/Oslo               | kWh  | 0,0095                   | 1        | 14               | 0                                       | Based on Fjernkontrollen.no 2021 and Norsk Energi 2020                                                                                                                                                                                                               |
| District heating Sweden mix            | kWh  | 0,0461                   | 1        | 42,8             | 0                                       | Energiforetagen.se, 2022                                                                                                                                                                                                                                             |
| District heating NO/Trondheim          | kWh  | 0,0335                   | 1        | 3                | 0                                       | Based on Fjernkontrollen.no 2021 and Norsk Energi 2020                                                                                                                                                                                                               |
| District heating NO/Grimstad           | kWh  | 0,0231                   | 1        | 80               | 0                                       | Based on Fjernkontrollen.no 2021 and Norsk Energi 2020                                                                                                                                                                                                               |
| District heating SE/Jonkoping          | kWh  | 0,056                    | 1        | 41,6             | 0                                       | Lokala miljövården 2021 (Energiföretagen)                                                                                                                                                                                                                            |
| District heating DE/Karlsruhe          | kWh  | 0,081                    | 1        | 0                | 0                                       | Stadtwerke Karlsruhe, 2022                                                                                                                                                                                                                                           |
| District heating Poland mix            | kWh  | 0,2835                   | 1        | 0                | 0                                       | Based on data provided by Energetyka Polska, 2015 ( <a href="http://www.energetyka-polska.pl/default_034.html">http://www.energetyka-polska.pl/default_034.html</a> )<br><br>75,1% coal, 4,3% burning oil, 8% LNG, 7,8% renewables, 4,8% other fuels (assumed waste) |

| Field name                    | Unit           | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                                                                                   |
|-------------------------------|----------------|--------------------------|----------|------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural gas                   | kWh            | 0,184                    | 1        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Natural gas                   | m <sup>3</sup> | 2,0316                   | 11,05    | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Propane                       | kg             | 2,9976                   | 14       | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Electricity w/GoO             | kWh            | 0                        | 1        | 100              | 0                                       |                                                                                                                                                                                           |
| Hydropower, Quebec            | kWh            | 0,0006                   | 1        | 100              | 0,359                                   | 1) Taux d'émission de CO associés aux approvisionnements en électricité d'Hydro-Québec 1990-2021, Hydro Quebec<br>2) 2021 Green-e Residual mix Emissions Rates (2019 data, approximation) |
| District heating CHP          | kWh            | 0,1707                   | 1        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Electric car Nordic           | km             | 0,005                    | 0,19     | 76               | 0                                       | Norsk Elbilforening and IEA, 2022                                                                                                                                                         |
| Electric car EU27             | km             | 0,038                    | 0,19     | 33,2             | 0                                       | Based on IEA 2022                                                                                                                                                                         |
| R-407 C                       | kg             | 1774                     | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Aviform L50                   | liters         | 0,35                     | 0        | 0                | 0                                       | Avinor 2016, (oyvind.oskarsen.due@addcon.com www.addcon.com)                                                                                                                              |
| Aviform S-Solid               | kg             | 0,63                     | 0        | 0                | 0                                       | Avinor 2016, (oyvind.oskarsen.due@addcon.com www.addcon.com)                                                                                                                              |
| Aluminium, recycled           | kg             | 0,4561                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Steel profile                 | kg             | 2,58                     | 0        | 0                | 0                                       | EPD Light gauge steel profiles and components, Europrofile                                                                                                                                |
| Hand sanitizer                | kg             | 0,931                    | 0        | 0                | 0                                       | Ecoinvent 3.7.1                                                                                                                                                                           |
| Monitor 27"                   | Qty            | 394                      | 0        | 0                | 0                                       | Based on Dell E2720HS Monitor (2020)                                                                                                                                                      |
| Diesel (WTT)                  | liters         | 0,6287                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Diesel                        | liters         | 2,6988                   | 10,66    | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Diesel                        | liters         | 2,6988                   | 10,66    | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| EE waste, recycled            | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                |
| Electric car Nordic           | kWh            | 0,026                    | 1        | 77               | 0                                       | Calculated based on IEA 2022                                                                                                                                                              |
| Electricity Nordic mix (WTT)  | kWh            | 0,0062                   | 0        | 0                | 0                                       | DEFRA 2022 and IEA 2022, weighted average for 4 Nordic countries                                                                                                                          |
| Printer toner module          | kg             | 12,14                    | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                                                                                             |
| Electricity Poland (upstream) | kWh            | 0,1889                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                                                                               |
| Electricity Poland            | kWh            | 0,626                    | 1        | 14,4             | 0,85                                    | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                                                                             |
| Wood (softwood)               | kg             | 1,23                     | 0        | 0                | 0                                       | CEMA sys Textile Research                                                                                                                                                                 |
| Cheese, soft (A1-3)           | kg             | 4,8                      | 0        | 0                | 0                                       | mat.se 2020                                                                                                                                                                               |

| Field name               | Unit                | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                       |
|--------------------------|---------------------|--------------------------|----------|------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------|
| Electricity Poland       | kWh                 | 0,626                    | 1        | 14,4             | 0,85                                    | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA |
| Diesel                   | kgCO <sub>2</sub> e | 1                        | 3,95     | 0                | 0                                       | DEFRA 2022                                                                                    |
| Propane/Butane (WTT)     | kg                  | 0,34701                  | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| District heating NO/Oslo | kWh                 | 0,0095                   | 1        | 14               | 0                                       | Based on Fjernkontrollen.no 2021 and Norsk Energi 2020                                        |
| Electricity Nordic mix   | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                                                                                               |
| Burning oil (WTT)        | liters              | 0,5281                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Petrol                   | kgCO <sub>2</sub> e | 1                        | 4,14     | 0                | 0                                       | DEFRA 2022                                                                                    |
| Glass waste, recycled    | kg                  | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Natural gas (WTT)        | m <sup>3</sup>      | 0,3434                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Natural gas (WTT)        | kWh                 | 0,0311                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Natural gas              | m <sup>3</sup>      | 2,0316                   | 11,05    | 0                | 0                                       | DEFRA 2022                                                                                    |
| Natural gas              | kWh                 | 0,184                    | 1        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Electricity Germany      | kWh                 | 0,313                    | 1        | 39,8             | 0,618                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA |
| Electricity China        | kWh                 | 0,618                    | 1        | 23,3             | 0,618                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA              |
| LPG                      | liters              | 1,55709                  | 7,259    | 0                | 0                                       | NOTE: Liquid form. Should not be used for gaseous LPG.<br>DEFRA 2022                          |
| LPG                      | kg                  | 2,9393                   | 13,7     | 0                | 0                                       | DEFRA 2022                                                                                    |
| LPG (WTT)                | liters              | 0,1838                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| LPG (WTT)                | kg                  | 0,34701                  | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Electricity France       | kWh                 | 0,051                    | 1        | 25,2             | 0,048                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA |
| Electricity Italy        | kWh                 | 0,266                    | 1        | 37,5             | 0,456                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA |
| Electricity Spain        | kWh                 | 0,154                    | 1        | 43,8             | 0,296                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA |
| Fuel oil (WTT)           | liters              | 0,6972                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                    |
| Diesel (B7)              | liters              | 2,5233                   | 10,58    | 7                | 0                                       | DEFRA 2022                                                                                    |
| Burning oil              | liters              | 2,5401                   | 10,28    | 0                | 0                                       | DEFRA 2022                                                                                    |
| Electricity Brazil       | kWh                 | 0,093                    | 1        | 84,1             | 0,093                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA              |



| Field name                     | Unit   | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                      |
|--------------------------------|--------|--------------------------|----------|------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Electricity Finland            | kWh    | 0,073                    | 1        | 48,8             | 0,285                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                |
| Hazardous waste, recycled      | kg     | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                                          |
| E85 Bioethanol (WTT)           | liters | 0,4439                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Diesel (B5) (WTT)              | liters | 0,6144                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Electricity Japan              | kWh    | 0,478                    | 1        | 19,5             | 0,478                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                             |
| Propane                        | kg     | 2,9976                   | 14       | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Diesel (NO)                    | liters | 2,086                    | 10,39    | 24,5             | 0                                       | Calculated based on DEFRA 2022 and Norwegian Environmental Agency                                                            |
| Electricity Sweden             | kWh    | 0,01                     | 1        | 66,9             | 0,077                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                |
| Electricity Thailand           | kWh    | 0,477                    | 1        | 16,5             | 0,477                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                             |
| Electricity Norway             | kWh    | 0,007                    | 1        | 95,9             | 0,405                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                |
| District heating Sweden mix    | kWh    | 0,0461                   | 1        | 42,8             | 0                                       | Energiforetagen.se, 2022                                                                                                     |
| District heating CHP           | kWh    | 0,1707                   | 1        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Electricity India              | kWh    | 0,693                    | 1        | 21,1             | 0,693                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                             |
| Electricity USA                | kWh    | 0,355                    | 1        | 19,2             | 0,459                                   | 1) IEA (2022), Emission Factors<br>2) 2020 Green-e Residual Mix Emission Rates (2018 data)                                   |
| Electricity Canada (upstream)  | kWh    | 0,0352                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                  |
| Electricity UK (upstream)      | kWh    | 0,0631                   | 0        | 0                | 0                                       | IEA (2022) and DEFRA 2022                                                                                                    |
| Heat & steam (upstream)        | kWh    | 0,0332                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                   |
| Electricity Denmark 125        | kWh    | 0,142                    | 1        | 72,5             | 0,411                                   | 1) Miljødeklarering af 1 kWh el, 2021 (Energinet, 2022)<br>2) Generel deklarasjon 2021 (Energinet, 2022)<br>3) %RE: IEA 2022 |
| Electricity Korea              | kWh    | 0,467                    | 1        | 5,7              | 0,467                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                             |
| Electricity Sweden (upstream)  | kWh    | 0,003                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                  |
| Electricity Denmark (upstream) | kWh    | 0,025                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                  |
| Electricity Finland (upstream) | kWh    | 0,0201                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                  |

| Field name                         | Unit   | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                           |
|------------------------------------|--------|--------------------------|----------|------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Electricity Norway (upstream)      | kWh    | 0,002                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Switzerland            | kWh    | 0,025                    | 1        | 60,9             | 0,019                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                     |
| Electricity Malaysia               | kWh    | 0,654                    | 1        | 16,2             | 0,654                                   | 1) IEA (2022), Emission Factors<br>2) No residual emission factor<br>3) %RE: IEA                                                  |
| Electricity India (upstream)       | kWh    | 0,2909                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Thailand (upstream)    | kWh    | 0,145                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Germany (upstream)     | kWh    | 0,0899                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity USA (upstream)         | kWh    | 0,1028                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity France (upstream)      | kWh    | 0,0159                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Japan (upstream)       | kWh    | 0,1385                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity China (upstream)       | kWh    | 0,177                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Brazil (upstream)      | kWh    | 0,038                    | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Switzerland (upstream) | kWh    | 0,0071                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Korea (upstream)       | kWh    | 0,1286                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Malaysia (upstream)    | kWh    | 0,2046                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| District heating NO/SE (upstream)  | kWh    | 0,005                    | 0        | 0                | 0                                       | SE: Energiforetagen, 2021, NO: SSB, 2021 and Norsk Energi, 2020                                                                   |
| Electricity Spain (upstream)       | kWh    | 0,0519                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Electricity Italy (upstream)       | kWh    | 0,0792                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| District heating NO/Trondheim      | kWh    | 0,0335                   | 1        | 3                | 0                                       | Based on Fjernkontrollen.no 2021 and Norsk Energi 2020                                                                            |
| Electricity Romania                | kWh    | 0,274                    | 1        | 35,7             | 0,282                                   | 1) IEA (2022), Emission Factors<br>2) AIB (2022), European Residual Mixes 2021<br>3) %RE: IEA                                     |
| Electricity Romania (upstream)     | kWh    | 0,0946                   | 0        | 0                | 0                                       | IEA (2022), Emission Factors and DEFRA 2022                                                                                       |
| Diesel (B7) (WTT)                  | liters | 0,6102                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                        |
| Aluminium                          | kg     | 9,1226                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                        |
| Steel, stainless recycled          | kg     | 2,91                     | 0        | 0                | 0                                       | ISSF (2015) 'Stainless steel and CO <sub>2</sub> : Facts and scientific observations', International Stainless Steel Forum (ISSF) |

| Field name                                 | Unit                | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources             |
|--------------------------------------------|---------------------|--------------------------|----------|------------------|-----------------------------------------|---------------------|
| Steel, unalloyed                           | kg                  | 1,8615                   | 0        | 0                | 0                                       | Ecoinvent 3.8       |
| Copper, recycled                           | kg                  | 0,0345                   | 0        | 0                | 0                                       | Ecoinvent 3.8       |
| Brass                                      | kg                  | 5,549                    | 0        | 0                | 0                                       | Ecoinvent 3.8       |
| Plastic film, avg.                         | kg                  | 2,574                    | 0        | 0                | 0                                       | DEFRA 2022          |
| Plastic rigid, avg.                        | kg                  | 3,277                    | 0        | 0                | 0                                       | DEFRA 2022          |
| Metal waste, recycled                      | kg                  | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Mileage all. avg. car                      | km                  | 0,1707                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Mixed waste, recycled                      | kg                  | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022 |
| Paper waste, recycled                      | kg                  | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Paper, recycled                            | kg                  | 0,7394                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Petrol (WTT)                               | liters              | 0,6028                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental                    | kgCO <sub>2</sub> e | 1000                     | 0        | 0                | 0                                       |                     |
| Air travel, continental                    | flight trip         | 89,94                    | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental                    | pkm                 | 0,0812                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental                    | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Air travel, intercontinental               | flight trip         | 661,68                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, intercontinental               | pkm                 | 0,1021                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, intercontinental               | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Air travel, domestic                       | tCO <sub>2</sub> e  | 1000                     | 0        | 0                | 0                                       |                     |
| Air travel, domestic                       | flight trip         | 60,2                     | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, domestic                       | pkm                 | 0,13                     | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, domestic                       | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Flights                                    | tCO <sub>2</sub> e  | 1000                     | 0        | 0                | 0                                       |                     |
| Flights                                    | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Petrol                                     | liters              | 2,3397                   | 9,69     | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental, incl. RF          | pkm                 | 0,1535                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental, incl. RF          | tCO <sub>2</sub> e  | 1000                     | 0        | 0                | 0                                       |                     |
| Petrol                                     | liters              | 2,3397                   | 9,69     | 0                | 0                                       | DEFRA 2022          |
| Plastic waste, recycled                    | kg                  | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, intercontinental, incl. RF     | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Air travel, domestic, incl. RF             | pkm                 | 0,2459                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, domestic, incl. RF             | flight trip         | 113,84                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, domestic, incl. RF             | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                     |
| Air travel, intercontinental, BC, incl. RF | flight trip         | 2779,61                  | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, continental, EC                | pkm                 | 0,0798                   | 0        | 0                | 0                                       | DEFRA 2022          |
| Air travel, intercontinental, EC           | pkm                 | 0,0782                   | 0        | 0                | 0                                       | DEFRA 2022          |

| Field name                  | Unit                | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                                                                                                                                                        |
|-----------------------------|---------------------|--------------------------|----------|------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Taxi                        | km                  | 0,2083                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Bus regional                | pkm                 | 0,0273                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Train (SE)                  | pkm                 | 0,00028                  | 0        | 0                | 0                                       | SJ AB Års- och hållbarhetsredovisning 2021                                                                                                                                                                                                     |
| Residual waste, incinerated | kg                  | 0,502                    | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                                                                                                                                                  |
| Car, rental (fuel unknown)  | km                  | 0,1707                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Hotel nights, Nordic        | nights              | 4,25                     | 0        | 0                | 0                                       | Based on hotelfootprints                                                                                                                                                                                                                       |
| Hotel nights, Europe        | nights              | 14,59                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Mileage all. car (NO)       | km                  | 0,075                    | 0        | 0                | 0                                       | Based on OFV, Norsk Elbilforening and IEA 2022                                                                                                                                                                                                 |
| Hotel nights, world         | nights              | 39,5                     | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Train, diesel               | pkm                 | 0,091                    | 0        | 0                | 0                                       | Semestern och klimatet Metodrapport version 2.0                                                                                                                                                                                                |
| Mileage all. avg. car       | mile                | 0,2747                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Mileage all. avg. car       | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                                                                                                                                                                                                                                                |
| Car, petrol (avg.)          | km                  | 0,1705                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Car travel                  | pkm                 | 0,1705                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Mileage all. car (DK)       | km                  | 0,14                     | 0        | 0                | 0                                       | Danmarks Statistik <a href="https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=29398">https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=29398</a> Skat.dk <a href="https://skat.dk/skat.aspx?oid=2234870">https://skat.dk/skat.aspx?oid=2234870</a> |
| Car, petrol (medium)        | km                  | 0,1847                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Train (NO)                  | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                                                                                                                                                                                                                                                |
| Electric car Nordic         | km                  | 0,005                    | 0,19     | 0                | 0                                       | Based on Norsk Elbilforening and IEA 2022                                                                                                                                                                                                      |
| Bus (NO)                    | pkm                 | 0,02                     | 0        | 0                | 0                                       | Ruter arsrapport 2021                                                                                                                                                                                                                          |
| Car, diesel (avg.)          | km                  | 0,1708                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Car, hybrid vehicle         | km                  | 0,0935                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Bus local (avg.)            | pkm                 | 0,0965                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Electric car EU27           | km                  | 0,038                    | 0,19     | 0                | 0                                       | Based on IEA 2022                                                                                                                                                                                                                              |
| Train (FI)                  | pkm                 | 0,0022                   | 0        | 0                | 0                                       | VR Group Annual Report 2021                                                                                                                                                                                                                    |
| Residual waste, incinerated | m <sup>3</sup>      | 133,34                   | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                                                                                                                                                  |
| Paper waste, recycled       | m <sup>3</sup>      | 3,2401                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Train International         | kgCO <sub>2</sub> e | 1                        | 0        | 0                | 0                                       |                                                                                                                                                                                                                                                |
| Metal waste, recycled       | m <sup>3</sup>      | 2,758                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Train International         | pkm                 | 0,0045                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Organic waste, treated      | m <sup>3</sup>      | 10,98                    | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                                                                                                                                                            |
| Organic waste, treated      | kg                  | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                                                                                                                                                            |
| Plastic waste, recycled     | m <sup>3</sup>      | 1,5348                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| EE waste, recycled          | m <sup>3</sup>      | 2,4088                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |
| Wood waste, recycled        | kg                  | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                                                                                                                                                     |

| Field name                           | Unit           | kg CO <sub>2</sub> /unit | KWh/unit | Renewable energy | kg CO <sub>2</sub> /Unit (Marked-based) | Sources                                                                                                           |
|--------------------------------------|----------------|--------------------------|----------|------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Wood waste, recycled                 | tonne          | 21,32                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Special waste, treated               | kg             | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                               |
| Mineral oil waste, incinerated       | liters         | 2,505                    | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                     |
| Hazardous waste, incinerated         | kg             | 2,4166                   | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                     |
| Waste water treatment                | m <sup>3</sup> | 0,272                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Mixed waste, recycled                | m <sup>3</sup> | 2,66                     | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                               |
| Residual waste, landfill             | kg             | 0,4462                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Residual waste, landfill             | m <sup>3</sup> | 111,56                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Sorted waste, recycled               | kg             | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                               |
| Cardboard waste, recycled            | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Hazardous waste, treated             | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Hazardous waste, landfill            | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Industrial waste, recycled           | kg             | 0,0213                   | 0        | 0                | 0                                       | Based on DEFRA 2022                                                                                               |
| Commercial waste, landfill           | kg             | 0,467                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Organic waste, composting            | kg             | 0,009                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Plastic waste, incinerated           | kg             | 2,368                    | 0        | 0                | 0                                       | Ecoinvent 3.8                                                                                                     |
| Municipal solid waste, landfill (AU) | kg             | 1,6                      | 0        | 0                | 0                                       | Australian Government, National Greenhouse Account factors; Australian National Greenhouse Accounts (August 2021) |
| Fluorescent tubes waste (H), treated | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Metal aluminium waste, recycled      | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Metal copper waste, recycled         | kg             | 0,0213                   | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Water supply, municipal              | m <sup>3</sup> | 0,149                    | 0        | 0                | 0                                       | DEFRA 2022                                                                                                        |
| Water supply, groundwater            | m <sup>3</sup> | 0,577                    | 0        | 0                | 0                                       | ELCD                                                                                                              |

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