



## Energy & Climate Account for 2022

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### Norwegian Property ASA

The purpose of this report is to provide an overview of the organization's greenhouse gas emissions (GHG emissions) as an integral part of our comprehensive climate strategy. Climate accounting is an important tool in the work of identifying concrete measures to reduce one's energy consumption and associated GHG emissions. This annual report enables the organization to measure key figures and thus evaluate itself over time.

The report applies to Norwegian Property ASA.

Climate account information originates from external and internal sources, but it is converted to tons of CO<sub>2</sub>equivalents (tCO<sub>2</sub>e). The analysis is based on the international standard, A Corporate Accounting and Reporting Standard, which has been developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). This is the most widely used method worldwide to measure greenhouse gas emissions. ISO Standard 14064-1 is based on this.

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2022 has almost been a full year of operation at NPRO's buildings. Society has more or less returned to normal, with the exception of a brief period at the beginning of the year. There has been some excitement as to what effect the reopening society will have on greenhouse gas accounting figures. Figures for energy consumption and waste volumes for the year indicate that we are back to a normal year, i.e. pre-2019 levels.

From 2021 to 2022, NPRO has increased its greenhouse gas emissions by 0.8 percent if one disregards the new categories included in the climate accounts for 2022. With the new categories, total emissions increase by 21.0 per cent. For 2022, emissions from one project have been reported for the first time, from energy centre refrigerants (from the energy centre at Aker Brygge) and upstream emissions that are not included in Scope 1 or 2 related to the production of fuel and energy. Without these categories, emissions would only be 0.8 percent higher than in 2021. NPRO is continuously working to develop its climate accounts to be more complete, which will mean that reported greenhouse gas emissions may increase in the years to come.

In 2022, there was also some increase in the total energy consumption in our buildings, with an increase from 105 923 MWh in 2021 to 107 128 MWh in 2022. These figures include total energy consumption in the buildings, including propane. Self-produced heating and cooling delivered to the buildings is included, while electricity used to produce heating and cooling is deducted.

As a real estate company, the bulk of energy consumption and CO<sub>2</sub>e-emissions are related to the operation of the buildings NPRO rents out. To obtain comparable figures from year to year, we look at energy consumption and emissions per m<sup>2</sup> in the leased areas, as shown in *Figure 1*. The main reason for the large decline from 2020 to 2021 is due to the fact that Snarøyveien 30 is counted from December 2020, and then the share of cleaner energy sources<sup>1</sup> increased. From 2021 to 2022, NPRO has had a slight increase in emissions due to increased energy consumption throughout the portfolio. Energy consumption per m<sup>2</sup> increased from 2020 to 2021 with the acquisition of Snarøyveien 30. There has also been a slight increase last year. It is difficult to know what proportion of this is due to increased activity after the reopening of society.

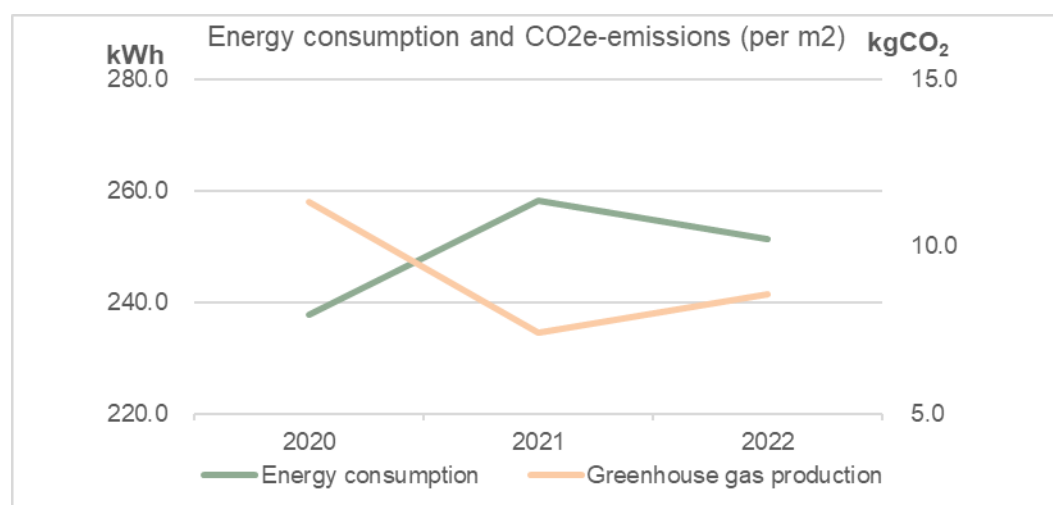


Figure 1

<sup>1</sup> In the calculation of energy consumption and CO<sub>2</sub>e emissions per m<sup>2</sup>, light and heated areas (offices, stores, restaurants and other objectives such as data halls) in buildings that have been rented out have been included, while areas such as parking, basements and warehouses have been taken out (with the exception of the parking garage at Snarøyveien 30 and storage and parking in the Terminal building, included in the climate accounts)

In February 2020, the Board of Directors of NPRO adopted the following targets for reducing energy consumption and CO<sub>2</sub>e emissions, and this must be measured in kWh or kgCO<sub>2</sub>e per m<sup>2</sup> per year:

- 30-50 percent reduction in energy consumption in renovated buildings
- 5-10 percent reduction in energy consumption in the existing portfolio
- 10-20 percent reduction in CO<sub>2</sub>e-emissions

NPRO's property portfolio has many restaurants and shops at Aker Brygge. These areas consume more energy than ordinary office spaces. We have therefore split the measurements into offices, shops and restaurants.

Table 1

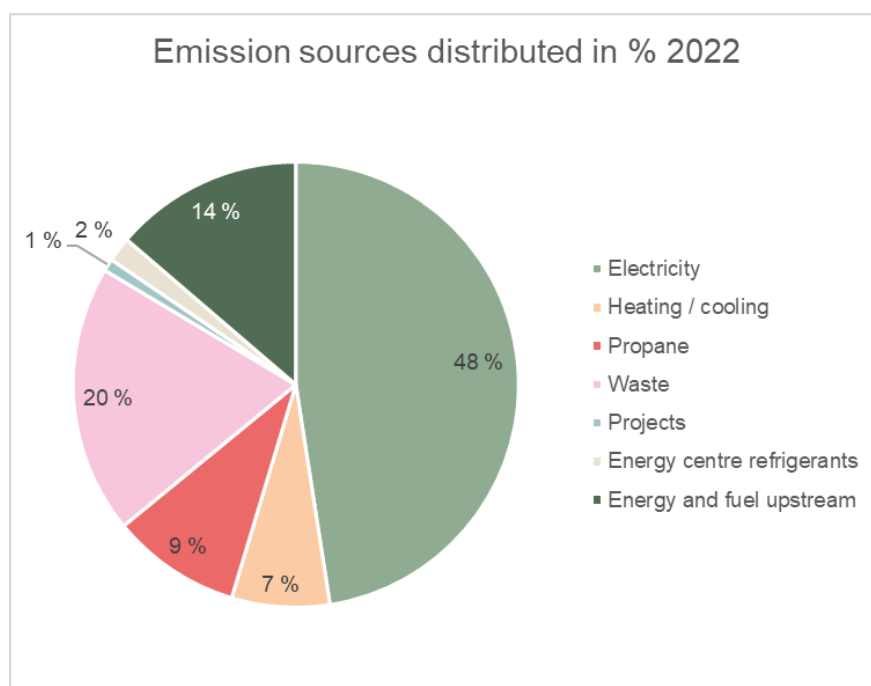
	2022	2021	2020
<b>Total consumption, MWh (excluding energy centre)<sup>1)</sup></b>	<b>107 128</b>	<b>105 923</b>	<b>55 652</b>
<b>m2</b>	<b>426 433</b>	<b>410 157</b>	<b>234 152</b>
<b>Energy consumption (kWh) per square meter</b>	<b>261</b>	<b>258</b>	<b>238</b>
<b>Change from previous year:</b>	<b>0 %</b>	<b>9 %</b>	<b>-15 %</b>
Offices	210	214	171
Stores	342	323	341
Restaurants	693	610	630
<b>Total CO<sub>2</sub>e emissions, in tons</b>	<b>3 653</b>	<b>3 038</b>	<b>2 653</b>
<b>m2</b>	<b>426 429</b>	<b>410 157</b>	<b>234 152</b>
<b>CO<sub>2</sub>e emissions in kg per square meter</b>	<b>9</b>	<b>7</b>	<b>11</b>
<b>Change from previous year:</b>	<b>16 %</b>	<b>-35 %</b>	<b>-19 %</b>
Offices <sup>2)</sup>	4	4	6
Stores <sup>2)</sup>	6	5	10
Restaurants <sup>2)</sup>	33	24	37
<b>Waste sorting rate for all buildings</b>	<b>59 %</b>	<b>60 %</b>	<b>58 %</b>
<b>Environmental CSI</b>	<b>84</b>	<b>78</b>	<b>79</b>

<sup>1)</sup> Total energy consumption includes all energy consumption in Scope 2, less the energy consumption in the Energy centre and the Heating and cooling centre. The propane consumption from Scope 3 is included.

<sup>2)</sup> CO<sub>2</sub>e-emissions by offices, stores and restaurants are calculated by the energy consumption in Scope 2. Direct emissions from propane consumption are distributed by restaurant.

## Comments

**Total floor area:** NPRO leased 410 156.7 m<sup>2</sup> in 2021 and 426 433 m<sup>2</sup> in 2022, which is an increase of 16 277 m<sup>2</sup>, or 3.97 percent. The increase is mainly due to more rental at Snarøyveien 36, and that the Felix premises and some basement premises in the Terminal building have been included in the reporting for 2022.



**Total CO<sub>2</sub>e emissions:** In 2022, NPRO's total emissions amounted to 3652.7 tCO<sub>2</sub>e. Compared to 2021, this is an increase of 21 percent and corresponds to 634.8 tCO<sub>2</sub>e. *Figure 2* shows the distribution of CO<sub>2</sub>e emissions at NPRO for 2022.

NPRO's environmental strategy aims to increase the share of clean energy sources, i.e. at the energy centre at Aker Brygge and an increase in the waste sorting rate. Efforts are also being made to

*Figure 2*

reduce overall energy consumption. A project was initiated at Aker Brygge before the pandemic to reduce the restaurants' propane consumption. The restaurants were shut down much of the pandemic, so this project was less relevant at the time. Now that the pandemic is over, there will be increased focus on this project.

**Total energy consumption:** NPRO had an energy consumption of 107 128 MWh in 2022, compared to 105 923 MWh in 2021. This is an increase of 1 percent, which corresponds to a total of 1205 MWh.

The total energy consumption includes all consumption in the buildings, including district heating and district cooling that the energy centres supply at Aker Brygge, as well as energy from the heat pump technology at Snarøyveien 36, which was installed in 2020. The electricity that the energy centres need to produce heating and cooling is subtracted so as not to count double up. The consumption of propane has also been converted to kWh and counted as energy consumption.

Electricity consumption in the table on page 13 increased by 5 percent from 63 553 MWh in 2021 to 66 738 MWh in 2022. The increase in electricity consumption is partly due to the fact that more tenants than in previous years have reported their electricity consumption, partly due to increased rentals at Snarøyveien 36, and partly because the restaurants have been fully operational again so the electricity consumption has picked up. It is generally a challenge to obtain data on tenant power consumption, as this must be requested from each tenant, so access to data may vary from year to year.

The consumption of purchased district heating and district cooling in the table on page 13 was reduced by 3 percent from 34 143 MWh in 2021 to 33 159.2 MWh in 2022.

The use of propane went from 841.5 kWh in 2021 to 1413.1 kWh in 2022, which corresponds to an increase of 67.9 percent. This is a natural development, because there was little activity in the restaurants at Aker Brygge in 2021 due to Covid-19. Consumption has thus increased after society reopened at the start of 2022, and is almost at the same level as in 2019.

The figure below shows the composition of energy consumption in 2020, 2021 and 2022. Electricity is by far the most significant source of energy. District heating and cooling (including the energy centre)

also account for a significant share of energy consumption, while at the same time providing relatively little CO<sub>2</sub>e emissions per kWh.

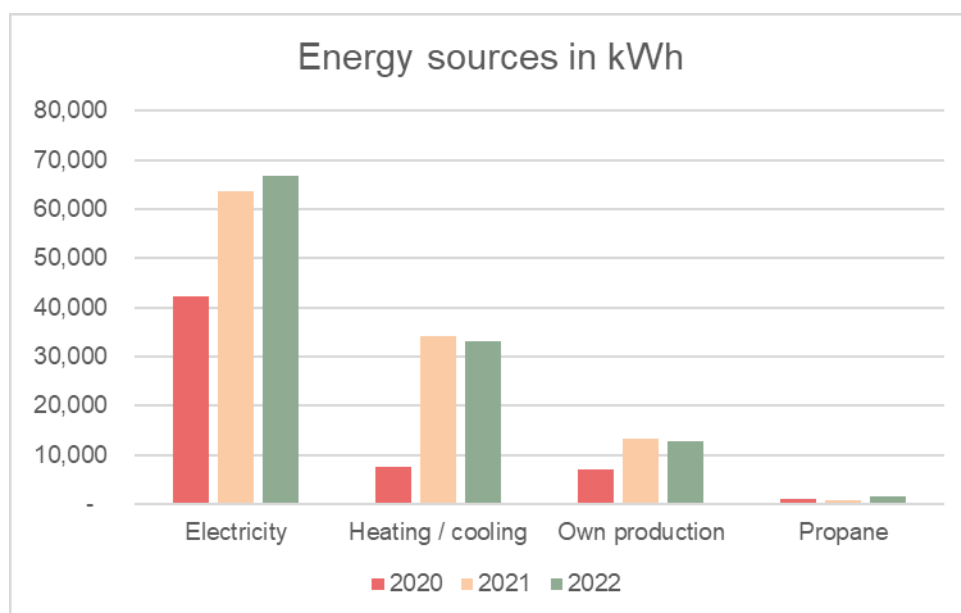


Figure 3

**Energy centre:** The new energy centre at Aker Brygge was completed in 2014 and supplies heating and cooling to the Terminal building, Workshop halls and Bryggegata 9. The energy centre uses electricity to produce heating and cooling from seawater. The energy centre also distributes some district heating and cooling to the buildings from external suppliers. Continuous efforts are being made to improve the efficiency of the energy centre. The share of energy produced compared to what it consumes was 3.23 in 2022, compared to 3.16 in 2021. The figure below shows the development in the efficiency of the energy centre from 2019 to 2022. In 2019, temperatures were at a normal level. 2020 and 2021 were generally influenced by Covid-19. 2021 was generally a cold year, so the energy centre had to supply a relatively large amount of heat to the buildings. The average temperature in 2022 was somewhat higher, and less heat was produced, but somewhat more cooling. This resulted in better efficiency.

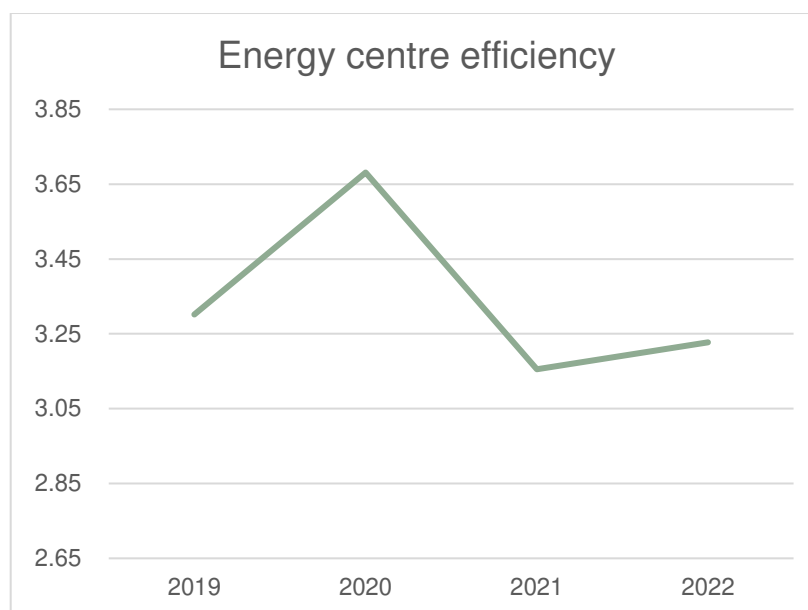


Figure 4

There is another energy centre at Aker Brygge that was built in the 1980s, based on a seawater pump. The production of renewable heating and cooling from this energy centre is estimated to produce 1.9 times what it consumes. This estimated consumption is included in the total energy consumption in NPRO's climate accounts.

New heat pump technology was installed at Snarøyveien 36 in 2021 as part of an energy-saving project. It is estimated that the new solution produced 544 000 kWh of renewable centralised heating and cooling in 2022.

**Emission factors:** The emission factors used to calculate CO<sub>2</sub>e emissions from the various energy sources in the climate accounts are updated annually. Emissions from electricity are calculated using a location-based emission factor called Nordic Mix. Due to the Nordic energy composition, this emission factor has been reduced by approximately 16.1 percent from 2021 to 2022. If the Nordic Mix had been the same as in 2021, NPRO would have had a further increase of 334 tCO<sub>2</sub>e from the electricity consumption in Scope 2. The location-based emission factors for district heating and cooling are based on information from fjernkontrollen.no, where the relevant companies can provide information on their local distribution of renewable/non-renewable heating and cooling sources. In Norway, district heating and district cooling are generally produced with a high proportion of renewable sources.

### Greenhouse gas emissions:

In 2022, NPRO's total greenhouse gas emissions amounted to 3652.7 tons of CO<sub>2</sub> equivalents (tCO<sub>2</sub>e), and had the following distribution:

Scope 1: 1.8% (67 tCO<sub>2</sub>e)  
 Scope 2: 54.6% (1994.1 tCO<sub>2</sub>e)  
 Scope 3: 43.6% (1591.6 tCO<sub>2</sub>e)

There was a reduction in Scope 2 emissions, and an increase in Scope 1 and 3 from 2021 to 2022.

## Scope 1

Scope 1 covers the Group's direct emissions from company cars, oil boilers and refrigerants. Emissions from company cars and refrigerants were not reported in 2020 and 2021, but they were included in 2022.

NPRO switched from heating oil to bio-oil at Gullhaugveien 9-13 in 2020. Bio-oil is used for heating only on the days when the capacity of the power grid is overloaded. Consumption of bio-oil has been reduced by 2700 liters compared to last year, from 4010 liters in 2021 to 1310 in 2022. Bio-oil is only used to relieve peaks in the power grid.

Refrigerants for the energy centres account for 97.8 percent of total Scope 1 emissions. In 2022, 24 kg of refrigerant was filled at Bryggegata 7-9, while the energy centre had no refill of refrigerants this year.

NPRO has 4 company cars, but consumption from company cars accounts for very little of the total emissions.

## Scope 2

Scope 2 accounts for 54.6 percent of the total greenhouse gas emissions at NPRO in 2022 and includes indirect emissions from the purchase of energy. For NPRO, emissions from energy consumption in buildings, i.e. district heating, district cooling and electricity, as well as electricity for hybrid cars, fall into this category.

**Electricity:** Electricity consumption (including energy consumption and distribution, excluding company cars) increased by 5.01 percent from 63 553.4 MWh in 2021 to 66 737.7 MWh in 2022, but still had a reduction in tCO<sub>2</sub>e of 11.9 percent. In 2022, electricity emissions were 1735.2 tCO<sub>2</sub>e, while in 2021 this figure was 1970.2 tCO<sub>2</sub>e. The reason why emissions have decreased is that the Nordic energy composition has led to a reduction in the emission factor for Nordic Mix by 16.1 percent from 2021 to 2022.

For the first time in 2022, NPRO reported the electricity consumption of the hybrid car that the company owns.

Electricity with a market-based emission factor can be found on page 10 of this report. Two of NPRO's locations (Snarøyveien 36 and the energy centre) have purchased certified green energy this year through GoOs (Guarantees of Origin). In order to calculate the market-based emissions related to all locations that have not purchased GoOs, the calculations in the market-based production are based on the emission factor Nordic Electricity residual mix. Based on this method, emissions in Scope 2 will increase by 2162.2 tCO<sub>2</sub>e, or 15.05 percent from 2021 to 2022. This approach was introduced in the GHG Protocol in 2015 and is explained in more detail in the section on methodology.

**District heating and district cooling:** Emissions from district heating and district cooling were reduced by 15.0 percent or 45.8 tCO<sub>2</sub>e from 2021 to 2022, while consumption was reduced by 2.88 percent from 34 143.2 MWh in 2021 to 33 159.2 MWh in 2022. District heating and cooling produced in the energy centre has gone from 7651.7 MWh in 2021 to 7516 in 2022; this is a reduction of 135.7 MWh or 1.77 percent.

In Norway, district heating and district cooling are generally produced with a high proportion of renewable sources. There have been some changes in emission factors for district heating and cooling in 2022 compared to 2021. The emission factor for district cooling at Fornebu was reduced by 21.3 percent, while district heating at Fornebu was reduced by 7.9 percent. The emission factor for district

heating in Oslo increased by 4.4 percent from 2021 to 2022, while district cooling in Nydalen also had some increase.

Overall, Scope 2 emissions have been reduced by 12.3 percent compared to 2021.

### Scope 3

Scope 3 accounts for 43.6 percent of NPRO's total greenhouse gas emissions, corresponding to 1591.6 tCO<sub>2</sub>e. As in previous years, NPRO has reported emissions related to waste and propane consumption of its tenants; business travel and a pilot project at Sandakerveien 140 are also included this year. NPRO has also chosen to report on upstream emissions (WTT emissions and T&D loss) related to the production of fuel and energy purchased and consumed by NPRO that are not included in Scope 1 or Scope 2. To summarise, the total emissions of these upstream emissions amounted to 538.6 tCO<sub>2</sub>e, which corresponds to 33.84 percent of the emissions in Scope 3 and 14.75 percent of NPRO's total emissions.

**Business trips:** NPRO has few business trips, and emissions related to this category account for 0.03 percent of NPRO's total emissions. Hotel stays and flights have been reported, amounting to 1 tCO<sub>2</sub>e in 2022.

**Waste:** Greenhouse gas emissions for waste amounted to 712.4 tCO<sub>2</sub>e in 2022, corresponding to 19.5 percent of all greenhouse gas emissions. The amount of waste from 2021 to 2022 increased by 724 385 kg or 28.33 percent, from 2 557 272 kg in 2021 to 3 281 657 kg in 2022.

In 2022, waste from projects was included for the first time, accounting for about 5-6 percent of the increase. Increased waste compared to 2021 must also be seen in connection with 2021 being characterised by 4 months of lockdown due to Covid-19. The amount of waste for 2022 is 11.7 percent higher than in 2019, which is the closest comparable normal year without lockdown. An increased waste volume of 11.7 percent from the normal year (2019) is most likely due to the purchase of the Snarøyveien 30 property in December 2020 and reporting of waste from there, as well as waste from projects in 2022.

The total sorting rate for 2022 is 59.0 percent for ordinary waste and 63.8 percent for waste from projects. The total sorting rate will then be 59.3 percent. The target set by the board is a sorting rate of 60-65 percent. Below are the results for the last four years:

	2019	2020	2021	2022
<b>Waste (kg)</b>	<b>2 937 989</b>	<b>2 282 152</b>	<b>2 557 272</b>	<b>3 281 657</b>
<b>Sorting rate (%)</b>	<b>55,7</b>	<b>58,0</b>	<b>59,8</b>	<b>59,3</b>

The largest share (71 percent) of the waste in 2022 comes from Aker Brygge without projects. Waste at Aker Brygge decreased by 338 789 kg or 12.73 percent compared with 2019, while the sorting rate at Aker Brygge has increased from 57.6 percent in 2019 to 58.6 percent in 2022.

	2019	2020	2021	2022
<b>Waste volume at Aker Brygge</b>	<b>2 661 123</b>	<b>1 923 825</b>	<b>1 853 356</b>	<b>2 322 334</b>
<b>Sorting rate for waste at Aker Brygge</b>	<b>57,6%</b>	<b>58,2%</b>	<b>58,4%</b>	<b>58,6%</b>

**Propane:** The tenants' propane consumption falls within Scope 3, especially the restaurants that use



this for cooking and, in some cases, outdoor heating. Some offices also have gas fireplaces on their premises. Work is currently underway on a sustainability project at Aker Brygge, which also looks at the restaurants' energy consumption. Raising awareness of propane consumption is part of the project.

In 2022, propane consumption by tenants emitted 345 tCO<sub>2</sub>e, of which 209 tCO<sub>2</sub>e is comparable to last year's reporting when WTT was not included. Below is a list of propane consumption from the past four years:

	2019	2020	2021	2022
<b>Propane used by tenants (kg)</b>	<b>130 270</b>	<b>80 256</b>	<b>61 427</b>	<b>103158</b>

**Project Sandakerveien 140:** In 2022, NPRO carried out greenhouse gas calculations related to the construction of a recycling and reuse park at Sandakerveien 140 in Nydalen. The project had emissions of 26.3 tCO<sub>2</sub>e for purchased materials, and emissions of 5.6 tCO<sub>2</sub>e for transport. In the years ahead, NPRO increasingly wants to include emissions related to construction and renovation projects in its annual climate accounts.

The energy consumption in the buildings used in the table on page 3 is considered total energy consumption in Scope 2 in the table above, less energy consumption by the energy centre and the Heating and cooling centre, and added to the own production of energy. Propane consumption is added, and it is converted from kg to kWh by dividing by 73.

## Energy and GHG Emissions 2022

Category	Description	Consumption	Unit	Energy (MWh)	Emission tCO <sub>2</sub> e	Share %
<b>Burning Oil</b>				<b>13.0</b>	<b>-</b>	<b>-</b>
Burning Oil		1,310.0	liters	13.0	-	-
<b>Refrigerants</b>				<b>-</b>	<b>65.5</b>	<b>1.8 %</b>
R-422 D		24.0	kg	-	65.5	1.8 %
<b>Transportation</b>				<b>6.0</b>	<b>1.4</b>	<b>-</b>
Petrol		483.0	liters	4.7	1.1	-
Diesel (NO)		92.0	liters	1.0	0.2	-
Diesel		99.4	kgCO <sub>2</sub> e	0.4	0.1	-
<b>Scope 1 total</b>				<b>19.0</b>	<b>67.0</b>	<b>1.8 %</b>
<b>Electricity</b>				<b>66,737.7</b>	<b>1,735.2</b>	<b>47.5 %</b>
Electricity Nordic mix		22,473,269.1	kWh	22,473.3	584.3	16.0 %
Electricity Nordic mix	Energy centre - consumption	2,140,155.0	kWh	2,140.2	55.6	1.5 %
Electricity Nordic mix	Tenant power consumption	29,636,828.0	kWh	29,636.8	770.6	21.1 %
Electricity Nordic mix	Data hall	8,465,272.0	kWh	8,465.3	220.1	6.0 %
Electricity Nordic mix	V/K-sentralen - consumption	4,022,189.0	kWh	4,022.2	104.6	2.9 %
<b>District heating/district cooling</b>				<b>33,159.2</b>	<b>258.9</b>	<b>7.1 %</b>
District heating NO / Nydalen		202,583.0	kWh	202.6	2.6	0.1 %
District cooling NO / Nydalen		268,439.0	kWh	268.4	1.7	-
District heating NO / Oslo		3,404,918.0	kWh	3,404.9	32.3	0.9 %
District heating NO / Oslo	Energy centre - consumption	806,843.0	kWh	806.8	7.7	0.2 %
District cooling NO / Lysaker/Fornebu/Lilleaker		9,734,117.0	kWh	9,734.1	68.1	1.9 %

District cooling NO/Lysaker/Fornebu/Lilleaker	Data hall	6,037,053.0	kWh	6,037.1	42.3	1.2 %
District heating NO/Lysaker/Fornebu/Lilleaker		12,705,230.0	kWh	12,705.2	104.2	2.9 %
<b>Electric vehicles</b>				<b>0.4</b>	-	-
Electric car Nordic		400.0	kWh	0.4	-	-
<b>Scope 2 total</b>				99897.3	1,994.1	54.6 %

Emission source	Description	Consumption	Unit	Energy (MWh)	Emission tCO2e	Share %
<b>Waste total</b>					<b>712.4</b>	<b>19.5 %</b>
Residual waste, incinerated		1,336,499.0	kg	-	670.9	18.4 %
Organic waste, treated		386,270.0	kg	-	8.2	0.2 %
Paper waste, recycled		409,357.0	kg	-	8.7	0.2 %
Glass waste, recycled		345,040.0	kg	-	7.3	0.2 %
Plastic waste, recycled		17,013.0	kg	-	0.4	-
EE waste, recycled		96,790.0	kg	-	2.1	0.1 %
Hazardous waste, treated		513.0	kg	-	-	-
Organic solvents (H), incinerated		199.0	kg	-	-	-
Fluorescent tubes waste (H), recycled		655.0	kg	-	-	-
Organic sludge, anaerobic digestion		495,500.0	kg	-	10.6	0.3 %
Wood waste, incinerated		27,380.0	kg	-	0.6	-
Organic waste, incinerated		3,965.0	kg	-	0.1	-
Paint warnish waste (H), incinerated		3,007.0	kg	-	0.1	-
Industrial waste, recycled		2,049.0	kg	-	-	-
Construction foam waste (H), incinerated		108.0	kg	-	-	-
Metal waste, recycled		63,828.0	kg	-	1.4	-
Industrial waste, recycled		14,750.0	kg	-	0.3	-
Soils contaminated, landfill		67,373.0	kg	-	1.2	-
Plastic EPS waste, recycled		1,842.0	kg	-	-	-
Wood waste, recycled		1,101.0	kg	-	-	-
Hazardous waste, recycled		541.0	kg	-	-	-
Mineral oil waste, incinerated		115.0	kg	-	0.3	-
Batteries waste (H), recycled		2,324.0	kg	-	-	-
Chemical waste (H), incinerated		269.0	kg	-	-	-
Acidic waste (H), landfill		68.0	kg	-	-	-
Organic waste, composting		400.0	kg	-	-	-
Soil non-contaminated, landfill		4,680.0	kg	-	0.1	-
Fuel waste (H), incinerated		4.0	kg	-	-	-
Organic non-halogenic waste (H), incinerated		14.0	kg	-	-	-
KFK/HFK waste (H), incinerated		3.0	kg	-	-	-
<b>Fuel-and-energy-related activities</b>				-	<b>501.4</b>	<b>13.7 %</b>
Biodiesel HVO (WTT)		1,310.0	liters	-	0.5	-
Electricity Nordic mix (WTT)		66,737,714.1	kWh	-	413.8	11.3 %
Electricity Nordic mix (WTT)	Company car	2,000.0	pkm	-	-	-
Electricity Nordic mix (T&D loss)		66,737,714.1	kWh	-	86.8	2.4 %
Electricity Nordic mix (T&D loss)	Company car	400.0	kWh	-	-	-
Petrol (WTT)	Company car	483.0	liters	-	0.3	-
Diesel (WTT)	Company car	92.0	liters	-	0.1	-
Diesel (WTT)	Company car	99.4	kgCO2e	-	0.1	-
<b>Propane</b>				-	<b>345.0</b>	<b>9.4 %</b>
Propane		103,158.0	kg	-	309.2	8.5 %
Propane (WTT)		103,158.0	kg	-	35.8	1.0 %
<b>Business travel</b>				-	<b>1.0</b>	-
Hotel nights, Nordic		26.0	nights	-	0.1	-
Air travel, domestic, incl. RF		1,974.0	pkm	-	0.5	-
Air travel, continental, incl. RF		1,922.0	pkm	-	0.3	-
Air travel avg. (WTT)		3,896.0	pkm	-	0.1	-

<b>Project Sandakerveien 140</b>					<b>31.9</b>	<b>0.9%</b>
Materials	Project Sandakerveien 140	26,254.0	kgCO <sub>2</sub> e	-	26.3	0.7 %
Transportation	Project Sandakerveien 140	4,460.0	kgCO <sub>2</sub> e	-	4.5	0.1 %
Transportation (WTT)	Project Sandakerveien 140	1.1	tCO <sub>2</sub> e	-	1.1	-
Scope 3 total					1,591.6	43.6 %
Total					3,652.7	100 %

## Market Based Emissions 2022

Category	Unit	2022
Electricity market based	tCO <sub>2</sub> e	16,273.5
Scope 2 market based	tCO <sub>2</sub> e	16,532.4
Total market based	tCO <sub>2</sub> e	18,191.0

## Annual Market Based Emissions

Category	Unit	2020	2021	2022
Electricity market based	tCO <sub>2</sub> e	11 114,2	14 065,5	16,273.5
Scope 2 market based	tCO <sub>2</sub> e	11 207,8	14,370.2	16,532.4
Total market based	tCO <sub>2</sub> e	12 034,8	15,113.2	18,191.0
Percentage change			25,6 %	20.4 %

Annual GHG Emissions (tCO<sub>2</sub>e)

Category	Description	2020	2021	2022	% change from previous year
<b>Burning Oil</b>		<b>0.6</b>	<b>0.1</b>	<b>-</b>	<b>-67.3 %</b>
Burning Oil		0.6	0.1	-	-67.3 %
<b>Refrigerants</b>		<b>-</b>	<b>-</b>	<b>65.5</b>	<b>-</b>
R-422 D		-	-	65.5	100.0 %
<b>Transportation</b>		<b>-</b>	<b>-</b>	<b>1.4</b>	<b>-</b>
Petrol		-	-	1.1	100.0 %
Diesel (NO)		-	-	0.2	100.0 %
Diesel		-	-	0.1	100.0 %
<b>Scope 1 total</b>		<b>0.6</b>	<b>0.1</b>	<b>67.0</b>	<b>46,808.0 %</b>
<b>Electricity</b>		<b>1,732.6</b>	<b>1,970.2</b>	<b>1,735.2</b>	<b>-11.9 %</b>
Electricity Nordic mix		1,428.0	1,227.1	584.3	-52.4 %
Electricity Nordic mix	Energy centre - consumption	68.7	71.1	55.6	-21.8 %
Electricity Nordic mix	Tenant power consumption	12.2	245.4	770.6	214.0 %
Electricity Nordic mix	Data hall	143.6	304.3	220.1	-27.7 %
Electricity Nordic mix	Jan-nov	-	-	-	-
Electricity Nordic mix	December	80.1	-	-	-
Electricity Nordic mix	V/K-sentralen - consumption	-	122.2	104.6	-14.4 %
<b>District heating/district cooling</b>		<b>93.7</b>	<b>304.7</b>	<b>258.9</b>	<b>-15.0 %</b>
District cooling water to air		11.3	-	-	-
District heating NO / Nydalen		3.2	4.3	2.6	-40.3 %
District heating NO / Oslo		48.1	49.1	32.3	-34.1 %
District heating NO / Oslo	Energy centre - consumption	8.1	5.5	7.7	39.6 %
District heating NO/Lysaker/Fornebu/Lilleaker	Jan-nov	-	-	-	-
District heating NO/Lysaker/Fornebu/Lilleaker	December	14.3	-	-	-
District heating NO/Lysaker/Fornebu/Lilleaker		-	112.3	104.2	-7.2 %
District heating NO/Lysaker/Fornebu/Lilleaker	Jan-nov	-	-	-	-
District heating NO/Lysaker/Fornebu/Lilleaker	December	8.5	-	-	-
District cooling NO/Lysaker/Fornebu/Lilleaker		-	76.1	68.1	-10.4 %
District cooling NO/Lysaker/Fornebu/Lilleaker	Data hall	-	57.5	42.3	-26.5 %
District cooling NO / Nydalen		-	-	1.7	-
<b>Electric vehicles</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Electric car Nordic		-	-	-	100.0 %
<b>Scope 2 total</b>		<b>1,826.3</b>	<b>2,274.9</b>	<b>1,994.1</b>	<b>-12.3 %</b>
<b>Business travel</b>		<b>2.5</b>	<b>-</b>	<b>1.0</b>	<b>-</b>
Air travel, domestic		0.7	-	-	-100.0 %
Mileage all. car (NO)		1.7	-	-	-100.0 %
Hotel nights, Nordic		-	-	0.1	100.0 %
Air travel, domestic, incl. RF		-	-	0.5	100.0 %
Air travel, continental, incl. RF		-	-	0.3	100.0 %
Air travel avg. (WTT)		-	-	0.1	100.0 %
<b>Propane</b>		<b>235.9</b>	<b>180.6</b>	<b>345.0</b>	<b>91.1 %</b>
Propane		235.9	180.6	309.2	71.3 %
Propane (WTT)		-	-	35.8	100.0 %
<b>Purchased goods and services</b>		<b>0.1</b>	<b>0.1</b>	<b>26.3</b>	<b>41,573.0 %</b>
Other material inputs		0.1	0.1	-	-100.0 %

Materials	Project Sandakerveien 140	-	-	26.3	100.0 %
<b>Waste</b>		<b>588.0</b>	<b>562.2</b>	<b>712.4</b>	<b>26.7 %</b>
Residual waste, incinerated	Not sorted	553.0			
Mixed waste, recycled	Sorted	35.0			
Residual waste, incinerated		-	511.3	670.9	31.2 %
Mixed waste, recycled		-	1.6	-	-100.0 %
Sorted waste, recycled		-	0.1	-	-100.0 %
Organic waste, treated		-	15.1	8.2	-45.6 %
Organic waste, composting		-	-	-	-91.1 %
Wood waste, recycled		-	0.2	-	-89.2 %
Hazardous waste, recycled		-	0.1	-	-84.6 %
Cardboard waste, recycled		-	0.4	-	-100.0 %
Paper waste, recycled		-	7.0	8.7	24.0 %
Glass waste, recycled		-	5.0	7.3	46.3 %
Special waste, treated		-	0.5	-	-100.0 %
EE waste, recycled		-	1.3	2.1	55.9 %
Plastic waste, recycled		-	-	0.4	711.3 %
Metal waste, recycled		-	1.1	1.4	21.1 %
Plastic waste, incinerated		-	18.1	-	-100.0 %
Residual waste, landfill		-	0.2	-	-100.0 %
Hazardous waste, incinerated		-	0.1	-	-100.0 %
Hazardous waste, treated		-	-	-	100.0 %
Organic solvents (H), incinerated		-	-	-	100.0 %
Fluorescent tubes waste (H), recycled		-	-	-	100.0 %
Organic sludge, anaerobic digestion		-	-	10.6	100.0 %
Wood waste, incinerated		-	-	0.6	100.0 %
Organic waste, incinerated		-	-	0.1	100.0 %
Paint warnish waste (H), incinerated		-	-	0.1	100.0 %
Industrial inert waste, landfill		-	-	-	100.0 %
Herdere (H), treated		-	-	-	100.0 %
Industrial waste, recycled		-	-	0.3	100.0 %
Soils contaminated, landfill		-	-	1.2	100.0 %
Plastic EPS waste, recycled		-	-	-	100.0 %
Mineral oil waste, incinerated		-	-	0.3	100.0 %
Batteries waste (H), recycled		-	-	-	100.0 %
Chemical waste (H), incinerated		-	-	-	100.0 %
Acidic waste (H), landfill		-	-	-	100.0 %
Soil non-contaminated, landfill		-	-	0.1	100.0 %
Fuel waste (H), incinerated		-	-	-	100.0 %
Organic non-halogenic waste (H), incinerated		-	-	-	100.0 %
KFK/HFK waste (H), incinerated		-	-	-	100.0 %
<b>Fuel-and-energy-related activities</b>		-	-	<b>501.4</b>	-
Biodiesel HVO (WTT)		-	-	0.5	100.0 %
Electricity Nordic mix (WTT)		-	-	413.8	100.0 %
Electricity Nordic mix (WTT)	Company car	-	-	-	100.0 %
Electricity Nordic mix (T&D loss)		-	-	86.8	100.0 %
Electricity Nordic mix (T&D loss)	Company car	-	-	-	100.0 %
Petrol (WTT)	Company car	-	-	0.3	100.0 %
Diesel (WTT)	Company car	-	-	0.2	100.0 %
<b>Upstream transportation and distribution</b>		-	-	<b>5.6</b>	-
Transportation	Project Sandakerveien 140	-	-	4.5	100.0 %
Transportation (WTT)	Project Sandakerveien 140	-	-	1.1	100.0 %

Scope 3 total	826.4	742.9	1,591.6	114.3 %
Total tCO <sub>2</sub> e	2,653.3	3,017.9	3,652.7	21.0 %
Percentage change	100.0 %	13.7 %	21.0 %	

## Annual Energy Consumption (MWh)

Category	Description	2020	2021	2022
<b>Transportation</b>				<b>6</b>
Petrol		-	-	4.7
Diesel (NO)		-	-	1
Diesel		-	-	0.4
<b>Stationary combustion</b>		<b>34.6</b>	<b>38.4</b>	<b>13</b>
Burning oil		34.6	38.4	13
<b>Scope 1 total</b>		<b>34.6</b>	<b>38.4</b>	<b>19</b>
<b>Electricity</b>		<b>42 259.2</b>	<b>63 553.4</b>	<b>66 737.7</b>
Electricity Nordic mix		34 830.1	39 585.4	22 473.3
Electricity Nordic mix	Energy centre - consumption	1 674.8	2 295.1	2 140.2
Electricity Nordic mix	Data hall	3 501.3	9 815.2	8 465.3
Electricity Nordic mix	Tenant power consumption	298.6	7 917.3	29 636.8
Electricity Nordic mix	December	1 954.4	-	-
Electricity Nordic mix	H&C centre - consumption	-	3940.4	4022.2
<b>District heating/district cooling</b>		<b>7 479.2</b>	<b>34 143.2</b>	<b>33 159.2</b>
District heating NO / Oslo		3 390.3	5391	3 404.9
District heating NO / Oslo	Energy centre - consumption	573.8	603.5	806.8
District cooling water to air		755.9	-	-
District heating NO/Lysaker/Fornebu/Lilleaker		-	12 617.4	12 705.2
District heating NO/Lysaker/Fornebu/Lilleaker	December	1 484.7	-	-
District heating NO / Nydalen		152	295.6	202.6
District cooling NO/Lysaker/Fornebu/Lilleaker	December	1 122.5	-	-
District cooling NO/Lysaker/Fornebu/Lilleaker		-	8 545.4	9 734.1
District cooling NO/Lysaker/Fornebu/Lilleaker	Data hall	-	6457	6037.1
District cooling NO / Nydalen		-	233.3	268.4
<b>Electric vehicles</b>		<b>-</b>	<b>-</b>	<b>0.4</b>
Electric car Nordic		-	-	0.4
<b>Scope 2 total</b>		<b>49 738.4</b>	<b>97 696.5</b>	<b>99 897.3</b>
<b>Totalt scope 1,2, 3</b>		<b>49 773.1</b>	<b>97 734.9</b>	<b>99 916.4</b>
<b>Percentage change</b>			<b>96.36%</b>	<b>2.23%</b>

The energy consumption in the buildings used in the table on page 3 is considered total energy consumption in Scope 2 in the table above, minus energy consumption in the Energy Centre and the heating and cooling centre, and added to own production of energy. The propane consumption is added, and it is converted from kg to kWh by dividing by 73.

## Self-production of energy

In line with the GHG Protocol, we only show purchased energy from external suppliers in Scope 2. We therefore choose to show our own production of energy in a separate table. NPRO's energy centres produced the following amounts of heating and cooling:

Category	Description	Consumption	Unit	Energy (MWh)	Emission tCO <sub>2</sub> e	Emission %
<b>District heating/district cooling</b>		<b>12,785,840.0</b>		<b>12,785.8</b>	-	-
District heating, renewable	Production H&C-centre	2,599,234.0	kWh	2,599.2	-	-
District heating, renewable	Energy centre - production	4,215,815.0	kWh	4,215.8	-	-
District cooling, renewable	Energy centre - production	3,300,147.0	kWh	3,300.1	-	-
District cooling, renewable	Production H&C-centre	2,126,644.0	kWh	2,126.6	-	-
District heating, renewable	Production heat pump	317,000.0	kWh	317.0	-	-
District cooling, renewable	Production heat pump	227,000.0	kWh	227.0	-	-
<b>Total energy production</b>		<b>12,785,840.0</b>	<b>kWh</b>	<b>12,785.8</b>	<b>0</b>	<b>0%</b>

## Annual energy production (MWh):

Category	Description	2020	2021	2022
<b>District heating/district cooling</b>		<b>7062.5</b>	<b>13364.8</b>	<b>12785.8</b>
District heating, renewable	Energy centre - production	3571.5	4487.6	4215.8
District heating, renewable	Energy centre - production	-	-	-
District heating, renewable	Production H&C-centre	-	2430.4	2599.2
District cooling seawater	Energy centre - production	3161.7	-	-
District cooling seawater	Energy centre - production	-	-	-
District cooling seawater		-	392.5	-
District cooling, renewable		329.4	-	-
District cooling, renewable	Energy centre - production	-	3164.1	3300.1
District cooling, renewable	Production H&C-centre	-	1988.5	2126.6
District heating, renewable	Production heat pump	-	423.8	317
District cooling, renewable	Production heat pump	-	477.8	227
<b>Total energy production</b>		<b>7 062.5</b>	<b>13 364.8</b>	<b>12 785.8</b>

## Data collection and data quality

Norwegian Property has collected energy data both from tenants and directly from energy suppliers for their locations. The table below shows an overview of the locations NPRO has included in its Energy and Climate Account Report for 2022.

NPRO has implemented a new energy monitoring system in 2022 (Energinet) and in the transition phase between new and old systems there has been somewhat more uncertainty around the data collection than before. This applies in particular to the properties in Nydalen. In some cases, data comes partly from the old system and partly from the new system.

At Aker Brygge, Dokkbygget, Fondbygget, Kaibbygg 1 and Kaibbygg 2 are all connected to a common Heating and cooling centre that produces heating and cooling from seawater. It is not possible to measure how much heating and cooling is supplied to each building or the different areas in the buildings. However, Erichsen&Horgen calculate that the Heating and cooling centre produces 1.9 times as much heat and cooling as the electricity it consumes. The buildings are also connected to common ventilation and other common functions that require electricity, and it is also not possible to measure how much goes to each building. The buildings also have a mix of offices, stores, restaurants and homes – in addition to there being several owners of different sections of the buildings. The distribution of energy consumption therefore follows the distribution keys agreed for shared costs, and is not necessarily precise for each building.

The production of heating and cooling from the heat pump at Snarøyveien 36 is also an estimate as it is not possible to measure. The amount is calculated by Energima, which was the supplier of the solution.

It varies between buildings how easy it is to get an overview of the building's total energy consumption. Some buildings have all electricity meters connected to the energy monitoring system, for other buildings the electricity provider's or grid provider's grid portal will provide a complete overview of both shared and tenant electricity. However, there are several buildings where data on tenant power is not available, and then it depends on whether tenants provide this information on request or not. Tenant electricity can therefore vary considerably from year to year.

For most buildings, the number of square meters is physical square meters measured by OPAK. However, we have chosen to use the floor space stated in the contracts for Dokkbygget, Fondbygget, Kaibbygg 1 and Kaibbygg 2. That is because distribution happens according to the distribution keys for shared costs. For most buildings, we have only included lighted areas, i.e. the categories offices, stores, restaurants and cultural zones. For some buildings, indoor parking or basement/storage facilities have also been included if this has been necessary to distribute energy consumption and emissions.

Locations with defined floor areas	Offices	Stores	Restaurants	Cultural	Other	Total m <sup>2</sup>
Bryggegata 7-9 and Støperiet	1 209	6 380,0	759	2 588		10 936
Dokkbygget	2 070		248			2 318
Fondbygget	13 185	1 856	637	5 461		21 139
Kaibbygg 1	21 584	4 024	1 627			27 235
Kaibbygg 2		314	1 657			1 971
Stranden	2 672	158				2 830
Terminalbygget	17 636	1 365	1 627		3 100	23 728
Tingvalla Ling Ling			1 202			1 202



Verkstedhallene	19 310	3 691	4 075			27 076
Gjerdrumsvei 3					463	463
Gjerdrumsvei 5	1 710					1 710
Gjerdrumsvei 8	7 726					7 726
Gjerdrumsvei 10 G	2 139					2 139
Gjerdrumsvei 14 and 16	5 363					5 363
Gjerdrumsvei 17	806					806
Gullhaug Torg 3	7 793					7 793
Gullhaugveien 9-13	23 504					23 504
Nydalsveien 15	3 711					3 711
Nydalsveien 17					1 691	1 691
Sandakerveien 130	5 542					5 542
Drammensveien 60	8 974					8 974
Lille Grensen 7	5 135	1 694				6 829
Snarøyveien 30	144 717				45 578	144 717
Snarøyveien 36	32 526					32 526
Vinslottet		7 293	1 629			8 922
<b>Locations with no defined areas</b>						
Snow melting plant						-
Tingvalla (marina)						-
Sandakerveien 130 (data hall)						-
Snarøyveien 30 (technical installations, street heating, parking garage)						-
Energy centre and Heating and cooling centre						-

## Methods and principles for climate reporting

### Method

The GHG Protocol has been developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The analysis in this report is carried out according to A Corporate Accounting and Reporting Standard (revised edition), one of four accounting standards under the GHG Protocol. In line with the standard, NPRO's greenhouse gas accounts include the following greenhouse gases, which are converted to CO<sub>2</sub> equivalents: CO<sub>2</sub>, CH<sub>4</sub> (methane), N<sub>2</sub>O (nitrous oxide), SF<sub>6</sub>, NF<sub>3</sub>, HFCs and PFCs.

Global Warming Potential (GWP) used in the calculation of CO<sub>2</sub>e is based on the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC). NPRO's climate accounts have been developed using emission factors using calculation methods that CEMAsys considers credible. However, we are aware that there are other emission factors as well, and there may be different opinions on which emission factors are best to use. CEMAsys uses emission factors from well-known, internationally recognised sources, including DEFRA, IEA and Ecoinvent. CEMAsys is transparent about the sources and calculation methodology used in the emission factors and strives for consistency throughout the reporting periods. If there are changes in methodology, NPRO will communicate this in the reporting.

NPRO's climate accounting practices are in line with the 5 principles of the GHG Protocol: relevance, completeness, consistency, transparency and accuracy. In the climate accounts, NPRO has chosen to report on the emissions that are most significant and relevant to the company, such as energy

consumption at the properties owned by NPRO. There is also a desire to be open about which sources have been used, and where there is uncertainty in the data. Third-party verification of the 2022 climate accounts ensures accuracy, completeness and credibility of the reported emissions. The verified climate accounts are communicated to NPRO's stakeholders through public publication on our website.

### **Approach to climate accounting**

NPRO is a real estate company with properties located mainly in the Oslo area; where we own, develop and manage the Group's properties. NPRO has chosen operational control as an approach to climate accounting at company level. The choice of approach defines what should be included in the climate accounting of an organization's operating assets, as well as the distribution between the different scopes.

In the method, a distinction is made between operational control and financial control. In the case of operational control, NPRO shall include emission sources that the organization physically controls, but does not necessarily own. Thus, neither do we report emission sources that we own but do not have control over. NPRO has nevertheless chosen to include tenant power in its Scope 2, but will in the years to come try to clarify the distinction between tenant power shared electricity, thus placing tenant power in Scope 3, in line with the GHG Protocol.

The method of climate accounting is consistent with previous reporting periods, unless otherwise specified. NPRO strives to express transparency in reporting, and communicate where assumptions have been made and whether information has been excluded. NPRO has not conducted a complete Scope 3 screening, but we have begun to include relevant Scope 3 categories. The climate reporting for Scope 3 is thus not complete for 2022. In years to come, NPRO will include emission calculations related to construction and renovation projects in Scope 3. NPRO included one pilot project in 2022 in Scope 3.

The climate accounts are divided into three levels (scopes) consisting of both direct and indirect emission sources.

Scope 1: Mandatory reporting, including all emission sources related to fixed assets where the organization has operational control. This includes any use of fossil fuels for stationary use or transportation needs (proprietary, rented or leased vehicles, oil boilers etc.). Furthermore, any direct process emissions (of the six greenhouse gases) are included. Scope 1 reporting is defined as complete.

Scope 2: Mandatory reporting of indirect emissions related to purchased energy; electricity or district heating/cooling. This applies e.g. to buildings that one rents but does not necessarily own. The emission factors used in CEMAsys for electricity are based on national gross production mixes from International Energy Agency statistics (IEA Stat). The Nordic Mix factor covers production in Sweden, Finland, Norway and Denmark and reflects the common Nordic market area (Nord Pool Spot). In relation to emission factors for district heating, either the actual production mix is used based on information obtained from the individual producer, or an average mixer based on IEA statistics (see the source reference).

In January 2015, the GHG Protocol's (2015) new guidelines for calculating emissions from electricity consumption were published. This allows for two-part reporting of electricity consumption. In practice, this means that companies that report their greenhouse gas emissions must highlight both real greenhouse gas emissions derived from the production of electricity and the market-based emissions associated with the purchase of GoOs. The purpose of this change is, on the one hand, to show the effect of energy efficiency and saving measures (physical), and on the other hand to show

the effect of entering into the purchase of renewable electricity through the market (Guarantee of Origin). This sheds light on the effect of all the measures that an enterprise can implement related to the consumption of electricity.

**Physical perspective (location-based method):** This emission factor is based on actual emissions associated with electricity generation within a specific area. Within this area, there are various energy producers that use a mix of energy carriers, where the fossil energy carriers (coal, gas, oil) cause direct emissions of greenhouse gases. These greenhouse gases are reflected through the emission factor and are thus distributed to each individual consumer.

**Market-based perspective:** The calculation of emission factor is based on whether the business chooses to purchase GoOs or not. When purchasing GoOs, the supplier documents that purchased electricity comes from only renewable sources, which gives an emission factor of 0 grams of CO<sub>2</sub>e per kWh.

Electricity that is not linked to GoOs is given an emission factor based on the production that remains after the GoOs for renewable share have been sold. This is called Residual Mix, and is normally significantly higher than the location-based factor.

The Scope 2 reporting is defined as complete, with the exception of some tenant power where NPRO has not been granted data access, and which is therefore not included in the climate accounts.

**Scope 3:** Voluntary reporting of indirect emissions related to purchased goods or services. These emissions can be indirectly linked to the organization's activities but that take place outside their control (hence indirect). In Scope 3, NPRO has reported emissions related to waste, propane consumption of tenants, business travel and transport and materials for a pilot project at Sandakerveien 140. NPRO has also chosen to report on upstream emissions (WTT emissions and T&D loss) related to the production of fuel and energy purchased and consumed by NPRO that are not included in Scope 1 or Scope 2.

Scope 3 calculations are not defined as complete. NPRO will strive to complete Scope 3 in the years to come.

In general, climate accounting should include enough relevant information so that it can be used as a decision-making tool by company management. To achieve this, it is important to include those elements that have economic relevance and weight, and that it is possible to do something about.

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The reference list above is not complete, but contains the main references used in CEMAsys. There will be a number of local/national sources that may be relevant depending on which emission factors are used.