

# The Planet

The long-term goal of Castellum's environmental and climate efforts is to achieve net-zero carbon emissions by 2030 at the latest. Preventing global warming based on its own operations is one of the company's key issues.

## Castellum's commitment

Castellum will responsibly and efficiently reduce resource use and carbon emissions that cause global warming.

### Efficient energy use

Castellum works continually to reduce its energy use. Its efforts focus on both optimising operations and investing in energy-efficient and renewable technologies. 94 energy efficiency projects were carried out during the year with a total investment of MSEK 86.

Energy use is continually monitored and analysed. Measures are taken and given priority based on the greatest potential for efficiency enhancements. Expansion is under way for Castellum's own portal for web-based property monitoring, to check values for operations, alarms, elevators and entries. This results in savings of both energy and time, and creates customer benefits in the form of better services through preventive measures. At present, 361 (385) properties representing 2,559,000 (2,851,000) square metres are connected to the portal. The decrease in the number of connected properties during the year is due to sales of properties.

In 2021, the normalised energy consumption for heating and property electricity in the like-for-like portfolio remained unchanged - meaning a change of 0% (-12). The major savings of 12% that were seen in the preceding year were driven in part by the pandemic. Despite some people returning to their workplaces in 2021, Castellum has been able to keep its energy use down as a result of active routine efforts and continued focus on efficiency enhancement measures. In 2021, absolute normalised energy use in the total asset portfolio increase by 6% (decrease: 8) per square metre. The increase is due primarily to portfolio shift and acquisitions in Finland during the year, as well as a colder year compared with 2020 resulting in increased heating consumption. From a long-term perspective, however, total energy use has decreased by a total of 34% (37) per square metre since 2007.

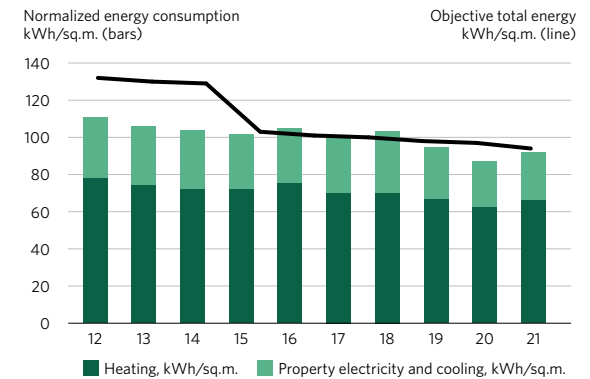
Castellum's actual use of heating, non-degree day corrected, corresponded to 65 kWh (50) per square metre and can be compared with the industry average of 112 kWh (117) per square metre (the Swedish Energy Agency's reference value for heating premises). This means that Castellum's buildings are 42% (57) more energy efficient than the Swedish average for these premises. In all, normalised heating use in the like-for-like portfolio increased 2% (decrease: 13) in 2021, while use of property electricity and cooling decreased 4% (7).

95% (95) of the total energy use is fossil-free. Since 2001, we purchase only renewable electricity in the Group, and in many of our locations we also purchase renewable district heating where possible.

Approximately 15% (13) of Castellum's customers are responsible for their own heating and 23% (23) for electricity on the property.

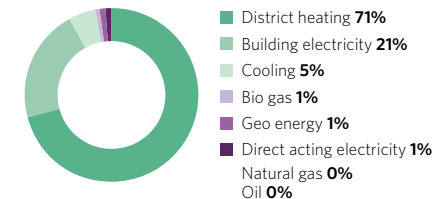
Since 2020, all our vehicles have been non-fossil fuel powered. This means that all service cars, carpool vehicles and company cars used by Castellum are either electric or run on biofuel.

## TARGET AND OUTCOME, ENERGY CONSUMPTION PER SQ. M.



The actual change in the like-for-like portfolio was 0%, degree-day adjusted. Castellum began systematically measuring energy consumption and heating in 2007, which is why it is utilised as a comparison year.

## DISTRIBUTION OF TOTAL ENERGY CONSUMPTION, 2021



### Reduced carbon emissions

Of Castellum’s carbon emissions, 6% are indirect and direct emissions generated in Scopes 1 and 2 in the form of the use of oil, natural gas, and fuel for the operation’s vehicles, refrigerant leakage, and the use of electricity and heating that Castellum is responsible for. The remaining 94% of Castellum’s carbon emissions is indirect emissions (generated in Scope 3) in the form of materials, construction processes, business travel, work commutes, transportation, waste, customers’ electricity consumption and other energy-related emissions not covered under Scopes 1 and 2. To reduce emissions, work is under way to phase out fossil fuels. Currently, 3 oil furnaces (4) are still in operation.

Looking at Castellum’s total GHG emissions (Scopes 1, 2 and 3), which can be found on page 179, however, it is clear that the majority (94%) of Castellum’s total emissions pertain to indirect emissions (Scope 3), meaning emissions that occur elsewhere but attributable to our operations. The largest part of the Scope 3 emissions originates from use of materials and the construction process in new construction and conversions. To tackle these emissions, Castellum has adopted a road map for project development with goals concerning how to reduce emissions in project development every year so as to have net-zero carbon emissions by 2030. Other major items in Scope 3 are other energy-related emissions that are not covered under Scopes 1 and 2, our customers’ waste in our properties, and customers’ use of electricity. Castellum is reviewing the possibilities going forward of offering our customers more tools and forms of collaboration in order to reduce indirect emissions in Scope 3 and reach our goal of climate-neutral operations throughout the value chain by 2030. Producing concrete measures to reduce indirect emissions is the construction and property industry’s greatest challenge, and something we plan to increase our focus on going forward in order to attain climate neutrality.

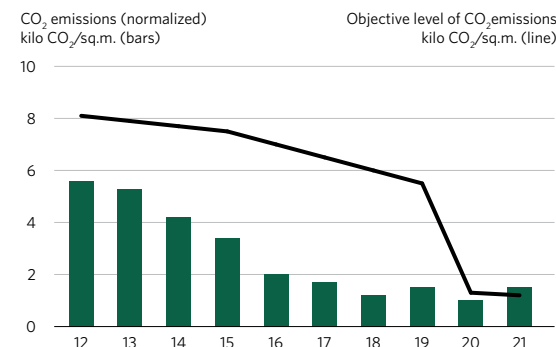
### Increased share of renewable energy sources

Fifteen large solar cells (13) were built in 2021. A total of 7,310 kW (6,181) of solar cells have been installed on Castellum’s properties, equivalent to a total of approximately 51,170 square metres (43,267) of solar cells, an increase of 18% compared with 2020. Castellum’s solar cells generated 4,637 MWh in 2021, corresponding to approximately 7% of Castellum’s total annual electricity needs for 2021. Castellum’s use of district heating means that its carbon emissions are dependent on the fuel mix used by the district heating facilities. At present, Castellum purchases from 32 (29) district-heating facilities, which represent 94% (93) of the Group’s total emissions under Scopes 1 and 2. Castellum is in dialogue with the district heating suppliers with the highest carbon emissions per kWh in order to influence these suppliers to reduce emissions. The transition to green district heating with renewable fuels is ongoing and currently amounts to 47% (48) of our district heating suppliers.

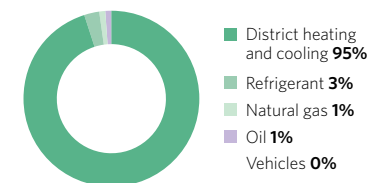
## 55 solar cells were installed on Castellum’s properties.

In 2021, direct and indirect energy-related carbon emissions in Scope 1 and 2 increased by 54% (34) per square metre; since 2007 they have decreased by 77% (85) per square metre. The increase for the year is attributable primarily to acquisitions in Finland during the year where the energy mix contains more fossil energy, which impacts the Group’s total emissions per square metre. If we exclude Finland, emissions are on par with the target for 2021 (i.e. under 1.2 kg per square metre). Efforts are under way to review possibilities of sourcing more renewable energy in Finland.

### CARBON EMISSIONS, PROPERTY MANAGEMENT (SCOPE 1 & 2, MARKET BASED)



### DISTRIBUTION OF CARBON EMISSIONS (SCOPE 1 & 2)



## The Planet

### General principles

Castellum limits its reporting to the properties where we have operational control in accordance with the principles of the Greenhouse Gas protocol. Operational control was selected since it provides Castellum with the best conditions for reporting the statistics and data that Castellum can directly influence. Properties where the customer is responsible for agreements regarding energy and water deliveries and waste removal are thus excluded. Nor does Castellum own measurement data in cases where the customer is responsible for the agreement, and it is therefore difficult to report that type of data.

### Scope of the disclosures

Castellum works actively to gain access to the relevant data for properties it owns and manages. Having access to measurement data is important for Castellum, as it creates conditions for proper, efficient technical management in our buildings. At present, Castellum has excellent access to measurement data for nearly its entire portfolio. The size of the share of properties included in the respective indicators is shown next to the respective key metrics. Note that the share of potential objects to report under absolute figures for the respective years includes objects sold during the year in question, excluding land. Castellum does not, however, have access to all of the measurement data for all its properties. Measurement data of waste is primarily lacking due to the fact that several waste management contractors cannot provide complete data. Measurement data is also missing for energy and water. This is due to changes in the portfolio from purchases and sales of properties as well as development properties, which makes access to the relevant data more difficult. Castellum works continually on improving access to the relevant statistics. In total, Castellum owned 554 (642) properties at the end of 2021. Kungsliden, which was acquired in late 2021, has not been included in the company's sustainability reporting or sustainability key metrics. It will be included in 2022.

### No estimates

No sustainability disclosures have been estimated; unless otherwise indicated, all measurement data and all disclosures reported have been measured and assured.

### Normalisation

Castellum calculates key intensity metrics through division by the total floor area of the buildings; this is the most widely accepted method in Sweden for comparing energy use and resource consumption. Castellum uses Swedish Meteorological and Hydrological Institute (SMHI) degree days to normalise energy for heating. Energy for cooling is not currently normalised.

### Segment reporting (by property type and geography)

Castellum reports sustainability disclosures separated into the following building types: offices, logistics, retail, public buildings and light industry. Castellum's own offices are reported separately on page 181. Since Castellum owns properties primarily in Sweden and a very small share in Denmark and Finland, reporting the statistics by geographical division is not relevant.

## The Planet **energy**

### Energy consumption

Castellum reports energy we purchase and tenants' own electricity consumption. Reporting of the energy purchased by Castellum is based on actual metered consumption. The same applies for tenants' electricity consumption.

### Energy produced (GRI 302-1)

	Absolute energy (MWh)		
	2021	2020	% change
Electricity produced from own solar panel installations	4,637	1,580	193%
Production of own solar electricity, used on-site	1,946	1,512	29%
Production of own solar electricity, sold	2,691	68	3,857%
Scope of the disclosures on own solar electricity produced	46/46	31/31	

### Energy consumption (GRI 302-1, 302-3, Elec-Abs, Fuels-Abs, DH&C-Abs, Energy-Int)

Energy source	Absolute energy use (MWh)			Renewable share		
	2021	2020	2019	2021	2020	2019
Building electricity	61,587	70,357	76,895	100%	100%	100%
Electricity, geothermal and cooling	1,532	1,586	1,316	100%	100%	100%
Electricity, direct	1,485	1,155	522	100%	100%	100%
<b>1. Total electricity consumption (Elec-Abs)</b>	<b>64,604</b>	<b>73,098</b>	<b>78,733</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Biogas	1,735	1,723	2,714	100%	100%	100%
<i>Total consumption of renewable fuels</i>	<i>1,735</i>	<i>1,723</i>	<i>2,714</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>
Natural gas	219	312	223	0%	0%	0%
Oil	252	1	86	0%	0%	0%
<i>Total consumption of non-renewable fuels</i>	<i>471</i>	<i>313</i>	<i>309</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>
<b>2. Total fuels purchased by landlord (Fuels-Abs)</b>	<b>2,206</b>	<b>2,036</b>	<b>3,023</b>	<b>79%</b>	<b>85%</b>	<b>90%</b>
District heating	208,499	189,382	218,716	93%	94%	95%
District cooling	16,022	14,903	15,767	100%	95%	99%
<b>3. Total consumption of district heating and cooling (DH&amp;C-Abs)</b>	<b>224,521</b>	<b>204,285</b>	<b>234,483</b>	<b>93%</b>	<b>94%</b>	<b>95%</b>
<b>Total energy consumption (1+2+3)</b>	<b>291,331</b>	<b>279,419</b>	<b>316,239</b>	<b>95%</b>	<b>95%</b>	<b>96%</b>
<b>Total energy consumption (normalised)</b>	<b>294,111</b>	<b>326,287</b>	<b>340,645</b>	—	—	—
Energy intensity, buildings (Energy-Int)	91	75	88	—	—	—
Energy intensity, buildings (normalised)	92	87	95	—	—	—

Absolute emissions are indicated in metric tons of CO<sub>2</sub>eq, and intensity in kg per square metre. To convert from kWh to gigajoules (GJ), use a conversion factor of 3.6.

### Energy consumption outside the organisation (GRI 302-2)

	2021	2020	% change
Electricity (MWh)	38,130	42,852	-11%
Scope of the disclosures on tenants' energy	150/554	192/642	

The Planet energy, cont.

**Energy consumption (delivered by property owner) divided by property type, comparison (Elec-LfL, DH&C-LfL, Fuels-LfL, Energy-Int)**

	Measurement unit	Offices			Logistics			Retail		
		2021	2020	% change	2021	2020	% change	2021	2020	% change
<b>Total electricity consumption (Elec-LfL)</b>	MWh	<b>31,943</b>	<b>33,692</b>	<b>-5%</b>	<b>7,039</b>	<b>7,106</b>	<b>-1%</b>	<b>4,061</b>	<b>3,990</b>	<b>2%</b>
<i>Scope of the disclosures on electricity consumption</i>	m <sup>2</sup>	173/195	173/195		72/98	72/98		37/57	37/57	
<b>Total district heating and cooling (DH&amp;C-LfL)</b>	MWh	<b>107,664</b>	<b>90,639</b>	<b>19%</b>	<b>28,119</b>	<b>23,092</b>	<b>22%</b>	<b>14,078</b>	<b>11,371</b>	<b>24%</b>
<i>Scope of the disclosures on district heating and district cooling</i>	m <sup>2</sup>	172/172	172/172		75/76	75/76		39/39	39/39	
<b>Total fuels (Fuels-LfL)</b>	MWh	<b>843</b>	<b>815</b>	<b>3%</b>	<b>676</b>	<b>563</b>	<b>20%</b>	<b>—</b>	<b>—</b>	
<i>Scope of the disclosures on fuel</i>	m <sup>2</sup>	4/4	4/4		5/5	5/5		0/0	0/0	
<b>Total energy consumption</b>	MWh	<b>140,450</b>	<b>125,146</b>	<b>12%</b>	<b>35,834</b>	<b>30,761</b>	<b>16%</b>	<b>18,139</b>	<b>15,361</b>	<b>18%</b>
<b>Energy consumption (degree-day corrected)</b>	MWh	<b>142,019</b>	<b>142,657</b>	<b>0%</b>	<b>36,030</b>	<b>35,892</b>	<b>0%</b>	<b>18,308</b>	<b>17,692</b>	<b>3%</b>
Energy intensity, buildings (Energy-Int)	kWh/m <sup>2</sup> /yr	102	91	12%	59	51	16%	90	76	18%
Energy intensity, buildings (degree-day corrected)	kWh/m <sup>2</sup> /yr	103	104	-1%	59	59	0%	91	88	3%

cont.	Measurement unit	Public sector properties			Light industry			Castellum total		
		2021	2020	% change	2021	2020	% change	2021	2020	% change
<b>Total electricity consumption (Elec-LfL)</b>	MWh	<b>13,175</b>	<b>13,138</b>	<b>0%</b>	<b>1,988</b>	<b>1,974</b>	<b>1%</b>	<b>58,206</b>	<b>59,900</b>	<b>-3%</b>
<i>Scope of the disclosures on electricity consumption</i>	m <sup>2</sup>	57/67	57/67		21/30	21/30		360/447	360/447	
<b>Total district heating and cooling (DH&amp;C-LfL)</b>	MWh	<b>39,292</b>	<b>33,090</b>	<b>19%</b>	<b>7,800</b>	<b>6,682</b>	<b>17%</b>	<b>196,953</b>	<b>164,874</b>	<b>19%</b>
<i>Scope of the disclosures on district heating and district cooling</i>	m <sup>2</sup>	57/57	57/57		23/23	23/23		366/367	366/367	
<b>Total fuels (Fuels-LfL)</b>	MWh	<b>—</b>	<b>—</b>		<b>234</b>	<b>97</b>	<b>141%</b>	<b>1,753</b>	<b>1,475</b>	<b>19%</b>
<i>Scope of the disclosures on fuel</i>	m <sup>2</sup>	0/0	0/0		1/1	1/1		10/10	10/10	
<b>Total energy consumption</b>	MWh	<b>52,467</b>	<b>46,228</b>	<b>13%</b>	<b>10,022</b>	<b>8,753</b>	<b>14%</b>	<b>256,911</b>	<b>226,249</b>	<b>14%</b>
<b>Energy consumption (degree-day corrected)</b>	MWh	<b>52,872</b>	<b>52,775</b>	<b>0%</b>	<b>10,079</b>	<b>10,181</b>	<b>-1%</b>	<b>259,308</b>	<b>259,196</b>	<b>0%</b>
Energy intensity, buildings (Energy-Int)	kWh/m <sup>2</sup> /yr	94	83	13%	105	92	14%	91	80	14%
Energy intensity, buildings (degree-day corrected)	kWh/m <sup>2</sup> /yr	94	94	0%	105	106	-1%	91	91	0%

Scope of the reporting	2021	2020	2019
Properties covered by disclosures on electricity consumption	395/554	482/642	444/473
Properties covered by disclosures on district heating and district cooling	401/414	486/501	479/508
Properties covered by disclosures on fuels	13/13	16/16	15/15

## The Planet **emissions**

### Emissions

Castellum monitors its greenhouse gas emissions annually in accordance with the Greenhouse Gas (GHG) Protocol. 2017 was chosen as the base year for Castellum's Science Based Target of net-zero CO<sub>2</sub> emissions by 2030. This is because it was the first year when a complete Scope 3 inventory could be carried out. For scopes 1 and 2, and for business travel, there is comparable data back to 2007.

The Conversion Factors table on page 180 reports on the activities, assumptions and conversion factors forming the basis for reporting Castellum's energy use and greenhouse gas emissions. It is worth noting that in 2021, the database for Scope 3 emissions that are calculated based on the costs of the current period were replaced with a newer database. The previous database with emissions factors from the

World Input Output database, which is from 2013, has been replaced with a newer database – Exiobase 3. This database is considered to be the most reliable today for these types of calculations, and has updated emissions factors that better take economic activities into account with improved sectoral granularity. Previous years have not been updated.

### Complete inventory of greenhouse gas emissions (GRI 305-1, 305-2, 305-3, 305-4, 305-5, GHG-Dir-Abs, GHG-Indir-Abs [market-based], GHG-Indir-Abs [facility-based])

	2021		2020		2019		2018		2017		Calculation method <sup>1)</sup>
	Absolute emissions	Intensity	Absolute emissions	Intensity	Absolute emissions	Intensity	Absolute emissions	Intensity	Absolute emissions	Intensity	
<b>Scope 1</b>											
Direct emissions (GHG-Dir-Abs) <sup>2)</sup>	322	0.1	284	0.1	458	0.1	675	0.2	1,122	0.3	Fuel-based
Biogenic emissions (GHG-Dir-Abs)	342	0.1	339	0.1	535	0.1	664	0.2	924	0.2	Fuel-based
<b>Scope 2</b>											
Market-based method (GHG-Indir-Abs)	5,403	1.4	3,991	0.9	5,764	1.4	4,362	1.00	6,133	1.3	Fuel-based
Market-based method (GHG-Indir-Abs)	16,418	4.3	18,128	4.1	37,222	8.8	47,818	11.3	48,560	11.0	Fuel-based
<b>Scope 1+2 (market-based method)</b>	<b>5,725</b>	<b>1.5</b>	<b>4,275</b>	<b>1.0</b>	<b>6,222</b>	<b>1.5</b>	<b>5,037</b>	<b>1.2</b>	<b>7,255</b>	<b>1.6</b>	
<b>Scope 1+2 (facility-based method)</b>	<b>16,740</b>	<b>4.4</b>	<b>18,412</b>	<b>4.2</b>	<b>37,680</b>	<b>8.9</b>	<b>48,493</b>	<b>11.5</b>	<b>49,682</b>	<b>11.3</b>	
<b>Scope 3<sup>3)</sup></b>											
1. Goods and services purchased	71,130	18.5	274,307	61.8	266,860	62.8	273,279	64.6	322,279	73.6	Cost-based
3. Fuel- and energy-related activities <sup>4)</sup>	3,452	0.9	—	—	—	—	—	—	—	—	Fuel-based
4. Transportation and distribution, upstream	465	0.1	227	0.1	172	0.1	166	0.1	289	0.1	Cost-based
5. Waste generated in the operation	2,043	0.5	2,717	0.6	2,161	0.5	2,038	0.5	1,839	0.4	Cost-based
6. Business travel	35	0.0	49	0	127	0.0	151	0.0	138	0.0	Average method
7. Employee commutes	169	0.0	160	0	166	0.0	158	0.0	156	0.0	Average method
8. Leased assets, upstream	20	0.0	88	0	68	0.0	59	0.0	51	0.0	Cost-based
13. Leased assets, downstream <sup>5)</sup>	8,860	2.3	12,627	2.9	54	0.0	54	0.0	54	0.0	Average method
Biogenic emissions	—	—	—	—	—	—	—	—	—	—	
<b>Scope 3</b>	<b>86,174</b>	<b>22.4</b>	<b>290,175</b>	<b>65.4</b>	<b>269,608</b>	<b>63.4</b>	<b>275,905</b>	<b>65.2</b>	<b>324,806</b>	<b>74.1</b>	
<b>Scope 1+2+3 (market-based method)</b>	<b>91,899</b>	<b>23.9</b>	<b>294,450</b>	<b>66.4</b>	<b>275,830</b>	<b>64.9</b>	<b>280,942</b>	<b>66.4</b>	<b>332,061</b>	<b>75.7</b>	
<b>Scope 1+2+3 (facility-based method)</b>	<b>102,914</b>	<b>26.8</b>	<b>308,587</b>	<b>69.6</b>	<b>307,288</b>	<b>72.3</b>	<b>324,398</b>	<b>76.7</b>	<b>374,488</b>	<b>85.4</b>	

Absolute emissions are indicated in metric tons of CO<sub>2</sub>eq, and intensity in kg CO<sub>2</sub>e per square metre.

2017 is set as the base year for Castellum's Science Based Target, since this was the first year that Castellum measured the Group's entire emissions in Scope 3. No material emissions of greenhouse gases have been excluded.

1. According to GHG Protocol Corporate Value Chain Standard.

2. In addition to fuel consumption in properties and refrigerants, also includes emissions from Castellum's own vehicles of 23 metric tonnes of CO<sub>2</sub>e in 2021 compared with 14 metric tonnes of CO<sub>2</sub>e in 2020.

3. The following Scope 3 emissions are not considered relevant for Castellum (approved by SBTi): 2. Capital goods, 9. Downstream transportation and distribution, 10. Processing of sold products, 11. Use of sold products, 12. End processing of sold products, 14. Franchises, 15. Investments.

4. In 2021, Castellum updated and calculated emissions for fuel- and energy-related activities.

5. The emissions factor has been updated in accordance with the residual mix emission factor of each country from Grexel's database from 2020 and onward. We believe that Grexel's residual mix emissions factor reflects carbon emissions from electricity consumption better than the Swedish Energy Markets Inspectorate's weighted residual mix emissions factors that were used in previous years. This has no significant impact on the total carbon footprint – less than 5% – which is why we have not updated either previous years or the base year.

SUSTAINABILITY

Scope	Activity	Activity data	Conversion factor
Scope 1	Oil consumption at properties where the tenant does not have separate metering or billing of actual consumption.	Internal collection of statistics relating to consumption at properties heated by oil.	Heating oil: 0.28 tonnes CO <sub>2</sub> e/MWh Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 1	Natural gas consumption at properties where the tenant does not have separate metering or billing of actual consumption.	Internal collection of statistics relating to consumption at properties heated by natural gas.	Natural gas: 0.203 tonnes CO <sub>2</sub> e/MWh Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 1	Business travel with company vehicles.	Travel with company vehicles is based on meter readings. Greenhouse gas emissions are based on distance covered and on combined-cycle fuel consumption for each vehicle.	Gasoline: 0.0002375 tonnes CO <sub>2</sub> e/km Diesel: 0.0002798 tonnes CO <sub>2</sub> e/km Biofuel: 0 tonnes CO <sub>2</sub> e/km CNG: 0.0000505 tonnes CO <sub>2</sub> e/km Electric hybrid: 0.00005 tonnes CO <sub>2</sub> e/km Electric car: 0 tonnes CO <sub>2</sub> e/km Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 1	Refrigerants.	Refrigerant emission data is collected from the mandatory refrigerant report of each respective property.	Statistics from Svenska Kyl & Värmepumpsföreningen. The data is reported in connection with the Fluorinated Greenhouse Gas regulation, EU/517/2014, and appurtenant Swedish legislation, which is declared based on applicable practices.
Scope 2	Consumption of electricity in properties where the tenant does not have separate measurement or invoicing of actual consumption.	Internal collection of statistics for properties where Castellum is responsible for electricity use.	Origin-labelled renewable electricity: 0 g CO <sub>2</sub> e/MWh Residual mix: Sweden: 0.02318 tonnes CO <sub>2</sub> e/MWh Denmark 0.4277 tonnes CO <sub>2</sub> e/MWh Finland 0.2682 tonnes CO <sub>2</sub> e/MWh Source: Grexel
Scope 2	Consumption of district heating and district cooling in properties where the tenant does not have separate measurement or invoicing of actual consumption.	Internal collection of statistics for properties where Castellum is responsible for district heating and district cooling. District heating consumption is adjusted based on SMHI degree days and vacancy rate.	Statistics from respective district heating providers. <sup>1)</sup>
Scope 3	Business travel, taxi.	The majority of the data from suppliers and manual retrieval.	0.000147 tonnes CO <sub>2</sub> e/km Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 3	Business travel, air.	The majority of the data from suppliers and manual retrieval.	Nordic region: 0.000171 tonnes CO <sub>2</sub> e/km Europe: 0.000092 tonnes CO <sub>2</sub> e/km World: 0.000083 tonnes CO <sub>2</sub> e/km Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 3	Business travel, train.	The majority of the data from suppliers.	0.0000002 tonnes CO <sub>2</sub> e/km Source: SJ
Scope 3	Business travel, private vehicles.	Internal monitoring of kilometres driven on business with private vehicles.	0.000147 tonnes CO <sub>2</sub> e/km Source: GHG Protocol, GWP 2014 IPCC Fifth Assessment Report
Scope 3	Employee commutes.	Employee commutes in km are estimated based on data from Transport Analysis combined with emission factors from Naturvårdsverket, the Swedish Environmental Protection Agency.	Source: Naturvårdsverket and Transport Analysis
Scope 3	Assets leased downstream.	Calculated from a template of tenants' energy use.	Residual mix: Sweden: 0.05022 tonnes CO <sub>2</sub> e/MWh Denmark 0.46521 tonnes CO <sub>2</sub> e/MWh Finland 0.31013 tonnes CO <sub>2</sub> e/MWh Source: BELOK, Grexel
Scope 3	Fuel- and energy-related activities.	Calculated using actual monitoring of energy use combined with emissions factors from 2021 from the UK Department for Environment, Food and Rural Affairs (Defra).	Country-specific emissions factors Source: Defra
Scope 3	Other GHG emissions.	The carbon footprint is calculated based on how much is spent on suppliers from various industry sectors (e.g. transportation, travel, consultants, etc.). Emissions are then calculated using sector data from Exiobase 3 in accordance with the recommendations of the Greenhouse Gas Protocol for a Scope 3 screening.	Source: Exiobase 3

1. Since the district heating suppliers' conversion factor for the preceding year (2021) was only calculated in 2022, the conversion factor for 2020 is used for emissions linked to traditional district heating.

## Castellum's agenda for the sustainable city

Key metrics – sustainability	2021	2020	2019	2018	2017	Targets
<b>Resource efficiency</b>						
Total energy use, kWh/sq. m., year	91 <sup>1)</sup>	75	88	97	94	
Total energy use, degree-day corrected, kWh/sq. m., year	92 <sup>2)</sup>	87	95	103	100	Max 89 kWh/sq. m. in 2021, and 80 kWh/sq. m. in 2025 (22% reduction 2025 cf. with 2015)
1. of which actual heating	65	50	60	64	64	
2. of which degree-day corrected heating	66	62	67	70	70	
3. of which electricity and cooling	26	25	28	33	30	
Energy savings per year in the like-for-like portfolio, rolling 12 months, % (degree-day corrected)	0%	-12%	-8%	3%	-6%	-2.5% energy savings/year in the like-for-like portfolio
Energy savings per year in the like-for-like portfolio, rolling 12 months, % (actual energy use)	+13%	-11%	-9%	3%	-7%	
Total water use, m <sup>3</sup> /sq. m., year	0.2	0.3	0.3	0.3	0.3	
Water savings per year in the like-for-like portfolio, rolling 12 months, %	-6%	-13%	-3%	-1%	-4%	1% water conservation/year in the like-for-like portfolio
<b>Fossil-free</b>						
Share of non-fossil energy	95%	95%	96%	95%	95%	100% fossil-free energy by 2030
Fossil fuel-free vehicles, %	100%	100%	86%	62%	34%	100% fossil fuel-free vehicles
No. of charging posts for electric vehicles	674	—	—	—	—	New measurement point, 2021
No. of large solar panels installed	46	39	26	22	16	100 solar cell installations by 2025
<b>Road map to climate neutrality by 2030</b>						
Property management – CO <sub>2</sub> emissions in kg/sq. m., year (market-based) <sup>3)</sup>	1.5	1.0	1.5	1.2	1.7	1.2 kg/sq. m. 2021 and 0 kg/sq. m. 2030
of which Scope 1	0.1	0.1	0.1	0.2	0.3	
of which Scope 2 (market-based)	1.4	0.9	1.4	1.0	1.4	
of which Scope 2 (location-based)	4.3	4.1	8.8	11.3	11	
Project Development – Reduced emissions in project development portfolio (Scope 3), %	-15%	—	—	—	—	New target from 2021. 15% reduction in CO <sub>2</sub> emissions per sq. m. in new production of offices
<b>Sustainability certification</b>						
Sustainability certification, % of sq. m.	48%	39%	36%	33%	29%	50% certified area by 2025
Sustainability certification, number of properties	206	202	164	141	129	
Sustainability certification, % of rental income	61%	52%	47%	43%	39%	
Sustainability certification, % of property value	63%	55%	51%	48%	43%	
<b>ESG benchmarks</b>						
GRESB points (0-100)	95	91	92	92	95	Global Sector Leader 2021, GRESB, received 15 October 2021
DJSI points (0-100)	80	81	79	73	72	Only Nordic property company included in DJSI
CDP mark (A to D-)	A-	A	A-	B	A-	CDP: Highest marks of all Nordic property companies.
<b>Social key metrics</b>						
Sick leave, % (long-term and short-term)	2.9%	2.2%	2.9%	3.8%	2.0%	Max 2% short-term and 3% long-term sick leave
Equality, % women and men	43%/57%	40%/60%	39%/61%	42%/58%	38%/62%	Between 40–60%
Diversity, international background, %	9%	8%	6%	6%	No measurement	20% 2025
Apprentices, % of employees	4%	2%	5%	6%	4%	4% per year

Castellum will be one of the most sustainable property companies in Europe. The company's sustainability agenda, "The sustainable city," is divided into four areas of focus: The Planet, Future-proofing, Well-being and Social responsibility. These areas of focus ensure that operations are conducted responsibly, creating long-term solutions from an economic, ecological and social perspective. Kungsleden, which was acquired in late 2021, has not been included in the company's sustainability reporting or sustainability key metrics. It will be included in 2022.

1. The increase in total energy consumption compared with 2020 is due primarily to the portfolio shift and acquisitions in Finland that took place in 2021, and a colder year compared with 2020 resulting in increased heating.

2. The small increase in the degree-day corrected consumption is due primarily to the portfolio shift and acquisitions in Finland that took place in 2021. Castellum's actual enhancements to energy efficiency in the like-for-like portfolio can be seen further down in the table and totals 0% savings per square metre, rolling 12 months.

3. This list includes all CO<sub>2</sub> emissions from property management (i.e. scopes 1 and 2). Detailed information on Castellum's CO<sub>2</sub> emissions and complete Scope 3 emissions outside of property management can be found on page 179. Total energy consumption is the sum of 1 and 3. Total normalised energy use is the sum of 2 and 3.