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.

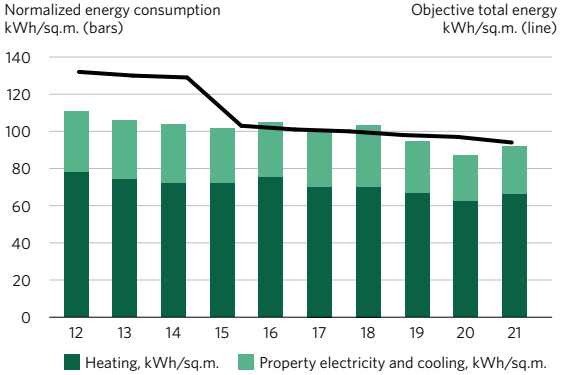
Castellum's actual use of heating, non-degree day corrected, corresponded to 65 kWh (50) per square metre and can be compared with the industry average of 112 kWh (117) per square metre (the Swedish Energy Agency's reference value for heating premises). This means that Castellum's buildings are 42% (57) 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.

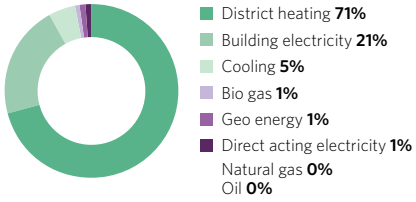
Since 2020, all our vehicles have been non-fossil fuel powered. This means that all service cars, carpool vehicles and company cars used by Castellum are either electric or run on biofuel.

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.

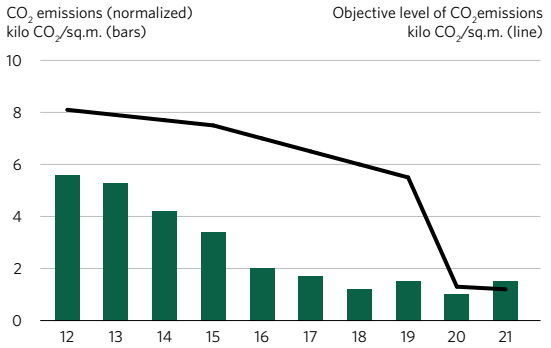
Increased share of renewable energy sources

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.

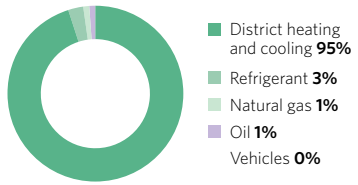
55 solar cells were installed on Castellum's properties.

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)



Reduced amounts of waste

Castellum works systematically to reduce the amount of waste that goes to landfill and incineration and to increase the proportion of recycled waste. Waste linked to Castellum's operations is generated from the operation's tenants as well as in conjunction with new construction, extensions and reconstructions. Waste sorting is offered at all properties that are managed by Castellum, and waste management requirements are imposed on all contractors in conjunction with projects. Monitoring the work is complicated by the fact that several different waste management contractors have been hired, only a few of which can report a complete follow-up. Moreover, tenant operations differ, which means their needs for waste management differ as well. Data is currently obtained from 53% (41) of the waste management contractors and Castellum is working actively to increase the amount of available data. The follow-up comprises volumes of waste from buildings managed by Castellum, but not waste from construction. Available data shows that the total amounts of waste increased during the year. This is likely due primarily to a larger amount of data being made available and an increase in our customers' operations in 2021 compared with the pandemic year of 2020, which thus generated more waste.

In 2019, Castellum signed agreements with a waste management contractor who can supply more complete waste data. Efforts are in progress to link the contractors to all our properties. This will help us obtain more data on the volumes of waste. Waste data (from the above contractors) is now being recorded in Castellum's energy management system, which provides us with better access to waste data that will make better monitoring of the flows and a focus on increased sorting possible.

As regards waste from construction, requirements are imposed on – for example – waste plans in projects. Project-specific targets are also set on waste, such as the maximum proportion of waste that can comprise hazardous waste. There must be clear guidelines regarding how waste is to be sorted so that the workforce on the construction site can easily be informed of this. Opportunities for sorting in every project and requirements for the use of re-used and circular material – which are monitored in the respective projects – are also demands that Castellum imposes.

Water use

Castellum utilises only water from the municipal water system, monitors consumption and takes measures to reduce use in conjunction with administration, new construction and reconstruction. In 2017, Castellum adopted an objective of reducing water use per square metre in the like-for-like portfolio by 1% per year. Conservation in the like-for-like portfolio was 6% (13) compared with 2020. Total water use in the entire portfolio decreased by 6% (12) per square metre during the year. Measures that are being implemented to reduce water use include installation of low-flow toilets, leak detectors and installation of tap aerators. Other measures being implemented on a smaller scale include the collection of rainwater for flushing toilets.