



## Content

Information about the report .....	1
Part 1: Descriptive information.....	1
Part 2: Greenhouse gas emissions data .....	4
Part 3: Biogenic CO <sub>2</sub> emissions data.....	5
Part 4: Description of methodologies and data used.....	6
Part 5: Greenhouse gas emissions in the base year.....	16
Part 6: Other information .....	17

## Information about the report

Kesko's Greenhouse gas (GHG) inventory report illustrates the reporting requirements of the GHG Protocol Corporate Standard and the Scope 3 Standard. Inventory report includes information about Kesko's Scope 1, 2, and 3 emissions and other relevant information.

## Part 1: Descriptive information

Descriptive information	
Company name	Kesko Corporation
Description of the company	Kesko is a Finnish listed trading sector company. Kesko operates in the grocery trade, the building and technical trade, and car trade. Its divisions and chains act in close cooperation with retailer entrepreneurs and other partners. Kesko has around 1,800 stores engaged in chain operations in Finland, Sweden, Norway, Estonia, Latvia, Lithuania and Poland.
Chosen consolidation approach	Financial control
Description of the businesses and operations included in the company's organizational boundary	We report direct and indirect (Scope 1, 2 and 3) GHG emissions from our operations according to the GHG Protocol standard. The GHG emissions reported under Scope 1 and 2 include all operating divisions and all operating countries. Scope 1 and 2

	<p>emissions include fuel consumed for energy production, fuel consumed for transportation and logistics, energy (electricity, heating and cooling) purchased or acquired by Kesko, and refrigerant leakages.</p> <p>Scope 3 emissions occur from sources owned or controlled by other entities in the value chain. Kesko's Scope 3 emissions include emissions from all operating divisions. From the operating countries, however, the inventory is mainly focused on Finland. Data was also collected from other operating countries where reliable data were available on a category by category basis. These deviations as well as other limitations in the boundary are reported in connection with the categories and indicators in question.</p>
<p>The reporting period covered</p>	<p>1.1.-31.12.2022</p>
<p>A list of Scope 3 activities included in the report</p>	<p>The following Scope 3 activities are included in the report:</p> <p>Category 1: Purchased goods and services</p> <ul style="list-style-type: none"> <li>• Purchased goods for resale</li> <li>• Fresh water</li> </ul> <p>Category 2: Capital goods</p> <ul style="list-style-type: none"> <li>• New constructed buildings</li> </ul> <p>Category 3: Fuel- and energy-related activities (not included in scope 1 and 2)</p> <ul style="list-style-type: none"> <li>• Upstream emissions</li> <li>• Transport and distribution losses</li> </ul> <p>Category 4: Upstream transportation and distribution</p> <ul style="list-style-type: none"> <li>• Postal services</li> <li>• Outsourced contract operators</li> </ul> <p>Category 5: Waste generated in operations</p> <ul style="list-style-type: none"> <li>• Waste</li> <li>• Waste water</li> </ul> <p>Category 6: Business travel</p> <p>Category 7: Employee commuting</p> <p>Category 9: Downstream transportation and distribution</p> <ul style="list-style-type: none"> <li>• Customer commuting</li> </ul> <p>Category 11: Use of sold products</p>

	<p>Category 12: End-of-life treatment of sold products</p> <p>Category 14: Franchises</p>
<p>A list of Scope 1, Scope 2, and Scope 3 activities excluded from the report with justification for their exclusion</p>	<p>The following list presents the Scope 3 activities excluded from the report:</p> <p>Category 2: Capital goods – category limitations</p> <ul style="list-style-type: none"> <li>• This category is relevant for Kesko. The category includes buildings, store and office furniture. Buildings are included in the 2022 inventory. Emissions from store and office furniture are not included, since reliable information was not available.</li> </ul> <p>Category 4: Upstream transportation and distribution – category limitations</p> <ul style="list-style-type: none"> <li>• Life cycle emissions of purchased products for resale are assumed to include emissions from transportation. Hence, these emissions are not calculated and reported separately in order to avoid double accounting.</li> </ul> <p>Category 8: Upstream leased assets – category excluded</p> <ul style="list-style-type: none"> <li>• This category is not relevant for Kesko. Kesko does not have assets that are leased and not already included in the Scope 1, 2 or 3 activities.</li> </ul> <p>Category 10: Processing of sold products – category excluded</p> <ul style="list-style-type: none"> <li>• This category is not relevant for Kesko. Kesko does not sell any intermediate products.</li> </ul> <p>Category 13: Downstream leased assets – category excluded</p> <ul style="list-style-type: none"> <li>• This category is not relevant for Kesko. Kesko does not have assets that are leased for other companies and are not already included in the Scope 1, 2 or 3 activities.</li> </ul> <p>Category 15: Investments – category excluded</p> <ul style="list-style-type: none"> <li>• This category is not relevant for Kesko. Kesko does not have Scope 3 emissions associated with investments and the company does not provide financial services.</li> </ul>
<p>The year chosen as base year and rationale for choosing the base year</p>	<p>Kesko has set science-based 1.5°C emissions reduction targets approved by the Science Based Targets initiative (SBTi). Base year of the SBT targets is 2020.</p>

## Part 2: Greenhouse gas emissions data

Scopes and categories	Metric tons CO <sub>2</sub> e
Scope 1: Direct emissions from owned/controlled operations	47,681
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling*	27,824
* Following the GHG Protocol standard, a market-based and a location-based emission figures for electricity consumption has been reported in Kesko's Sustainability Report 2022. For heating consumption in Finland, a market-based emission figure is reported for the first time in 2022. The market-based figures are used for emission totals whenever available.	
Upstream Scope 3 emissions	
Category 1: Purchased goods and services	7,164,100
Category 2: Capital goods	10,500
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	18,300
Category 4: Upstream transportation and distribution	7,900
Category 5: Waste generated in operations	6,900
Category 6: Business travel	5,700
Category 7: Employee commuting	11,100
Category 8: Upstream leased assets	n/a
Downstream Scope 3 emissions	
Category 9: Downstream transportation and distribution	137,800
Category 10: Processing of sold products	n/a
Category 11: Use of sold products	1,153,900
Category 12: End-of-life treatment of sold products	336,900
Category 13: Downstream leased assets	n/a

Category 14: Franchises	113,600
Category 15: Investments	n/a

### Part 3: Biogenic CO<sub>2</sub> emissions data

Kesko, as a retail operator, does not practice any operations that would cause biogenic emissions. Retail products include grocery products which life cycle emissions may include biogenic emissions e.g. due cultivation. However, emissions from products for resale are estimated in a high level and it would be challenging to divide those emissions in subcategories. Due to these issues biogenic emissions are not reported.

## Part 4: Description of methodologies and data used

Scope	Description of the types and sources of data used to calculate emissions	Methodologies used to calculate or measure emissions, providing a reference or link to any calculation tools used
Scope 1	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>Fuel consumption for heat production (Finland): MWh of heat produced and registered in the EnerKey Portal (SaaS service).</li> <li>Fuel consumption for electricity and heat production (other operating countries): MWh of energy production reported or liters of reported fuel consumption.</li> <li>Amount of refrigerant leakages (Finland): kilograms of reported refrigerant fill-ups.</li> <li>Fuel consumption for transportation (Finland): Kesko Logistics fuel consumption and emissions are based on kilometres driven. Other transportation and logistics are based on consumption of fuel in liters.</li> <li>Fuel consumption for transportation and logistics (other operating countries): liters or kilograms of fuel reported.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>Fuel for energy production: <a href="#">Statistics Finland. Fuel classification 2022.</a></li> <li>GWP's of refrigerants: <a href="#">R404A</a>, <a href="#">R452A</a>, <a href="#">R717</a> and <a href="#">R744</a>.</li> <li>Fuel consumption for transportation: Diesel: <a href="#">European Environment Agency. EMEP/EEA air pollutant emission inventory guidebook 2019.</a> Biodiesel: <a href="#">Neste Oyj. 2022.</a></li> </ul>	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>The emission reporting of heat production in Finland was updated in Kesko's Sustainability Report 2022. Previously, the figures included also estimated consumption of fuel in heat production. Because of improved consumption monitoring, we now report emissions based on actual consumption figures from the EnerKey Portal.</li> <li>Emissions from refrigerant leakages in Finland is reported for the first time in Sustainability Report 2022.</li> <li>Fuel consumption for transportation and logistics of other operation countries was more extensive in Sustainability Report 2022 than in previous years.</li> <li>All operating countries are covered in the calculation. At some properties located in leased premises outside Finland, the heating data is not reported because it is included in the lease or the data is not available.</li> </ul>

Petrol, LPG and gas oil: [GHG Protocol GHG Emission Calculation Tool, 2022.](#)

Activity data (primary data):

- Electricity (Finland): MWh of consumption registered in the EnerKey Portal.
- District heating and cooling (Finland): MWh of heat and cooling consumed and registered in the EnerKey Portal.
- Electricity and district heating (other operating countries): MWh of consumption reported.

Emission factors (secondary data):

- Electricity, market-based (Finland): For electricity purchases with Renewable Energy Guarantees of Origin (REGOs) and for nuclear electricity, emission factor used is 0 gCO<sub>2</sub>/MWh.
- Electricity, location-based (Finland): national average of electricity production in 2018-2020 89 kgCO<sub>2</sub>/MWh: [Motiva Oy, 2022.](#)
- Electricity, market-based (other operating countries): For electricity purchases with Renewable Energy Guarantees of Origin (REGOs) emission factor used is 0 gCO<sub>2</sub>/MWh.
- Electricity, location-based (other operating countries): [AIB, European Residual Mixes 2021.](#)
- District heating, market-based (Finland): Location specific emission factors: [Paikallisvoima ry. The emission calculator of district heating, 2022.](#)
- District heating, location-based (Finland): national average of district heating production in 2018-2020 117 kgCO<sub>2</sub>/MWh: [Motiva Oy, 2022.](#)

Scope 2

Description of the methodologies:

- Electricity figure of Finland includes all electricity purchased by Ankkuri-Energia Oy, electricity produced by Kesko's solar plants, and Kesko's share of electricity purchased elsewhere by the K-retailers and lessors.
- In Sustainability Report 2022, location-specific emission factors for district-heating (market-based) (Finland) was used for the first time.
- In Sustainability Report 2022, location-based emissions of electricity (other operating countries) was calculated using AIB's country specific residual mixes 2021 for the first time.
- Production diffusion by [International Energy Agency IEA \(Statistics, 2021\)](#) was used to calculate location-based emissions of district heat (other operating countries).
- All operating countries are covered in the calculation. At some properties located in leased premises outside Finland, the heating data is not reported because it is included in the lease or the data is not available.

- District heating, location-based (other operating countries): Emission factors: [International Energy Agency IEA. Emission factors. 2022.](#)
- District cooling, location-based (Finland): 0 gCO<sub>2</sub>/kWh: [Helen Oy, 2022.](#)

Scopes and categories	Description of the types and sources of data used to calculate emissions	Description of the data quality of reported emissions	Description of the methodologies, allocation methods, and assumptions used to calculate emissions	Percentage of emissions calculated using data obtained from suppliers or other value chain partners
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Upstream Scope 3 emissions

Category 1: Purchased goods and services	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>• Purchased goods for resale, grocery trade and building and technical trade: Calculations are based on sold volumes of product categories. 30 grocery products and 14 building and technical trade products were chosen to represent the overall product categories. Products were divided into trade divisions based on relative revenue. Where data was available, chosen products were from the top of the most sold product list.</li> </ul>	Fair	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>• Calculation includes all the accumulated lifecycle emissions of products for resale divided in emissions before use, from use and from end-of-life treatment.</li> <li>• In Sustainability Report 2022 life-cycle-emissions of new sold cars was updated. Starting in 2022, emissions are calculated based on average emission factor of the new cars sold, average kilometres driven per car</li> </ul>	0 %
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- Purchased goods for resale, car trade: average emission factor of the new cars sold in 2022, average kilometres driven per car per year, number of cars sold in 2022 and average age of the cars in Finland.
- Consumption of fresh water (Finland): consumption data in cubic meters based on the consumption registered in the EnerKey Portal.
- Consumption of fresh water (other operation countries): reported consumption in cubic meters.

Emission factors (secondary data):

- Emission factors for grocery trade products: The emission factors used in the [K-Ostokset carbon footprint calculator](#) developed in collaboration with the Natural Resources Institute Finland (Luke).
- Emission factors for building and technical trade products we acquired from different life-cycle analyses.
- Life-cycle emissions of sold cars were expanded based on use-phase emission calculation; 15% production, 80% use, 5% end-of-life treatment. Source: [Autoalan tiedotuskeskus. Life cycle effects of cars. 2022.](#)
- Fresh water: [Helsinki Region Environmental Services Authority's \(HSY\). Energy and material balances and greenhouse gas emissions.](#) Water production emission factor

per year, number of cars sold and average age of the cars in Finland.

- The calculation methodology and sources used contain significant amount of uncertainties and can only be used as a very high level estimate of the actual climate impact.
- All operating countries are covered in the calculation.

Assumptions:

- Calculations include only new passenger and commercial vehicles sold in 2022. Assumption is that life-cycle-emissions of used cars sold are already accounted by the original seller of the car when bought the first time.
- Fresh water production emissions are assumed to be higher in other operating countries than in Finland. That is why older and higher emission factor for fresh water production is used.

	2021 used for Finland and 2019 emission factor for other operating countries.			
Category 2: Capital goods	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>Gross square footage and frame construction materials of new buildings constructed in 2022.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li><a href="#">Sitra, 2012, Rakennuksen elinkaaren hiilijalanjälki. The Concrete Centre, Embodied CO2 of Structural Frames.</a></li> </ul>	Fair	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>Calculations are based on area of buildings and emission factors for construction per square meter.</li> <li>Emission factors do not include maintenance, demolition and recycling of material.</li> <li>All operating countries are covered in the calculation.</li> </ul> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> <li>Emission factor of steel framed buildings is assumed to be same than in concrete. This is supported by <a href="#">the report by the Concrete Centre.</a></li> </ul>	0 %
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>See Scope 1 and 2 descriptions of the types and sources of data used to calculate emissions.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>Emissions of purchased energy and own energy production: See Scope 1 and 2 descriptions of the types and sources of data used to calculate emissions.</li> <li>Emission factors for transmission and distribution losses: Vantaan energia (2013),</li> </ul>	Good	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>All operating countries are covered in the calculation.</li> </ul>	100 %

	<p>transmission and distribution losses for electricity and district heat in Finland.</p> <ul style="list-style-type: none"> <li>Upstream emission factor for non-renewable energy sources: <a href="#">Weisser, Daniel. A guide to life-cycle greenhouse gas (GHG) emissions from electric supply technologies National renewable energy laboratory, Life Cycle Greenhouse Gas Emissions from Electricity Generation.</a></li> <li>Upstream emission factor for nuclear power: <a href="#">National Renewable Energy Laboratory. Life Cycle Greenhouse Gas Emissions from Electricity Generation. 2013.</a></li> </ul>			
Category 4: Upstream transportation and distribution	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>Postal services (Finland): Customer-specific GHG emission report by Posti Oyj.</li> <li>Outsourced transportation (Kesko Logistics): emission of fuel consumption based on kilometres driven.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>Outsourced transportation, diesel: <a href="#">European Environment Agency. EMEP/EEA air pollutant emission inventory guidebook 2019.</a></li> </ul>	Good	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>Coverage of the calculations is Finland.</li> </ul>	100 %
Category 5: Waste generated in operations	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>Waste amounts (Finland): Waste data is collected in tonnes from Kesko's waste operators.</li> </ul>	Good	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>The category includes waste that is generated in Kesko's operations. The waste accumulated by K-retailers is not included in the category</li> </ul>	100 %

	<ul style="list-style-type: none"> <li>• Waste amounts (other operating countries): reported waste amounts in tonnes.</li> <li>• Waste water (Finland): consumption data in cubic meters based on the consumption registered in the EnerKey Portal.</li> <li>• Waste water (other operation countries): reported consumption in cubic meters.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>• Emission factors of waste: WWF Climate Calculator. Original sources: HSY. Henna Teerihalme. 2018.; SYKE, Dahlbo ym. 2011; HSY. Andrea Weckman. 2021. SYKE, Ilmastodieetti. 2019.</li> <li>• Emission factor of waste water: <a href="#">Helsinki Region Environmental Services Authority's (HSY). Energy and material balances and greenhouse gas emissions.</a> Emission factor of sewage treatment in 2021.</li> </ul>		<ul style="list-style-type: none"> <li>• All operating countries are covered in the calculation.</li> </ul> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> <li>• Amount of waste water is assumed to be same than fresh water consumption.</li> </ul>	
<p>Category 6: Business travel</p>	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>• Customer-specific GHG emission report by travel agency.</li> <li>• Car use: Calculations are based on mileage data gathered from Kesko's travel system.</li> <li>• Customer-specific GHG emission report by ferry companies.</li> <li>• Amount of hotel nights reported by travel agency.</li> </ul> <p><u>Emission factors (secondary data):</u></p>	<p>Good</p>	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>• Calculation includes emissions from business related air, rail and boat travel, milage data of road travel and hotels nights.</li> <li>• Coverage of the calculations is Finland.</li> </ul>	<p>100 %</p>

	<ul style="list-style-type: none"> <li>• Average emission factor of passenger cars in 2021: 147.1 gCO<sub>2</sub>/km: <a href="#">Traficom. 2022.</a></li> <li>• <a href="#">Average CO2 emissions of Tallink Grupp's core shipping routes. Tallink. 2022.</a></li> <li>• Emission per quest night 1.96 kg/CO<sub>2</sub>e: <a href="#">Scandic Hotels Sustainability info. 2019.</a></li> </ul>			
Category 7: Employee commuting	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>• Employee survey in October 2020: Emission calculations are based on the following information: average distance, transportation mode used (car, public transport, walking, cycling, carpooling) and number of workers.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>• The HSL Commuting Calculator for the Helsinki Area.</li> </ul>	Fair	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>• Employee commuting includes travelling between homes and working places.</li> <li>• Coverage of the calculations is Finland.</li> </ul>	5 %
Category 8: Upstream leased assets	n/a			
Downstream scope 3 emissions				
Category 9: Downstream transportation and distribution	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>• Calculation is based on customer information of K-Plussa membership cards in Kesko's operational systems. The membership card information includes: distance between home</li> </ul>	Fair	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>• Calculation data includes approximately 95 % of all K-Plussa households that have used the card when paying their shopping. This data is used to calculate the number of all customer visits that led to a transaction in 2022.</li> </ul>	0 %

	<p>and stores and numbers of customer visits and geographical regions.</p> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>• Emission factors for bus 55 gCO<sub>2</sub>e/passenger-km. Source: VTT Lipasto</li> <li>• Emission factor for commuter train, tram and metro 0 gCO<sub>2</sub>e: <a href="#">HSL. 2022.</a></li> <li>• Emission factor for bus (Helsinki region): HSL Environmental report 2017.</li> <li>• Average emission factor of passenger cars in 2021: 147.1 gCO<sub>2</sub>/km. Source: <a href="#">Traficom. 2022.</a></li> </ul>		<ul style="list-style-type: none"> <li>• Average distances between stores and homes were calculated based on median data about distances calculated from customers' postal codes and Kesko's store locations.</li> <li>• Coverage of the calculations is Finland.</li> </ul> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> <li>• Calculation assume that road-distance is 28% higher than beeline.</li> </ul>	
Category 10: Processing of sold products	n/a			
Category 11: Use of sold products				
Category 12: End-of-life treatment of sold products	See Category 1: Purchased goods for resale.	Poor	See Category 1: Purchased goods for resale.	
Category 13: Downstream leased assets	n/a			

<p>Category 14: Franchises</p>	<p><u>Activity data (primary data):</u></p> <ul style="list-style-type: none"> <li>• The store areas of properties owned or leased by entrepreneurs were gathered from Kesko's operational systems.</li> <li>• Energy purchased by K-retailers in properties transmitted by Kesko.</li> <li>• Amount of refrigerant leakages of K-retailers: reported refrigerant fill-ups on kilograms.</li> </ul> <p><u>Emission factors (secondary data):</u></p> <ul style="list-style-type: none"> <li>• Kesko specific electricity and heat consumptions by EnerKey Oy.</li> <li>• Electricity: residual distribution emission factor of Finland in 2021 was 234.9 gCO<sub>2</sub>/kWh: <a href="#">Energy Authority, Residual distribution 2021.</a></li> <li>• District heating: national average of district heating production in 2018-2020 117 kgCO<sub>2</sub>/MWh: <a href="#">Motiva Oy. 2022.</a></li> <li>• GWP's of refrigerants: <a href="#">R404A</a>, <a href="#">R452A</a>, <a href="#">R717</a> and <a href="#">R744</a>.</li> </ul>	<p>Fair</p>	<p><u>Description of the methodologies:</u></p> <ul style="list-style-type: none"> <li>• Emissions of energy use in stores owned or leased by K-retailers are calculated based on store areas and specific electricity and heat consumptions.</li> <li>• Electricity consumption of properties transmitted by Kesko to K-retailers is calculated based difference between estimation of total energy consumption of K Group and electricity noted under Scope 2.</li> <li>• Emissions from refrigerant leakages is reported for the first time in Sustainability Report 2022.</li> <li>• Coverage of the calculations is Finland.</li> </ul> <p><u>Assumptions:</u></p> <ul style="list-style-type: none"> <li>• Specific electricity and heating consumptions in K-retailer's properties is assumed to be similar to the stores managed by Kesko.</li> </ul>	<p>100 %</p>
<p>Category 15: Investments</p>	<p>n/a</p>			

## Part 5: Greenhouse gas emissions in the base year

Kesko has set science-based 1.5°C emissions reduction targets approved by the Science Based Targets initiative (SBTi). Base year of the targets is 2020.

Scopes and categories	Metric tons CO <sub>2</sub> e
Scope 1: Direct emissions from owned/controlled operations	38,413
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling  Following the GHG Protocol standard, a market-based and a location-based emission figures for electricity consumption has been reported in Sustainability Report 2022. For heating consumption in Finland, a market-based emission figure is reported for the first time in 2022. The market-based figures are used for emission totals whenever available.	31,940
Upstream scope 3 emissions	
Category 1: Purchased goods and services	7,258,000
Category 2: Capital goods	5,500
Category 3: Fuel- and energy-related activities (not included in scope 1 or scope 2)	12,100
Category 4: Upstream transportation and distribution	10,800
Category 5: Waste generated in operations	6,000
Category 6: Business travel	900
Category 7: Employee commuting	11,500
Category 8: Upstream leased assets	n/a
Upstream scope 3 emissions	
Category 9: Downstream transportation and distribution	80,600
Category 10: Processing of sold products	n/a
Category 11: Use of sold products	2,053,000
Category 12: End-of-life treatment of sold products	154,900
Category 13: Downstream leased assets	n/a
Category 14: Franchises	59,500



## Part 6: Other information

### Nitrogen oxides (NO<sub>x</sub>), sulphur oxides (SO<sub>2</sub>) and other significant emissions to air

The electricity and heating energy consumed in properties in Finland in 2022 caused:

- NO<sub>x</sub> emissions: 89.3 tonnes
- SO<sub>2</sub> emissions: 76.9 tonnes
- Amount of radioactive waste produced by nuclear power: 0.25 tonnes

The particulate emissions in 2022 for Kesko's Logistics in Finland were:

- NO<sub>x</sub> emissions: 28.3 tonnes
- SO<sub>2</sub> emissions: 0.07 tonnes

Emission factors:

- Energy consumption in properties: [VTT Tutkimusraportti VTT-R-06150-10. 2010.](#)
- Transportation: [European Environment Agency. EMEP/EEA air pollutant emission inventory guidebook 2019.](#)

### Kesko's Science Based Targets

Kesko's science-based emission reduction targets are:

- Kesko Corporation commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2030 from a 2020 base year.
- Kesko Corporation also commits to reduce absolute scope 3 GHG emissions from the use of sold products 17% by 2026 from a 2020 base year.
- Kesko Corporation commits that 67% of its suppliers by spend covering purchased goods and services, will have science-based targets by 2026.

In 2017, Kesko was the first company in Finland to set science-based 2°C emissions reductions targets approved by the Science Based Targets initiative (SBTi). In autumn 2021, the SBTi approved the new, even more challenging science-based emissions reductions targets with which we commit to limiting global warming to 1.5°C.