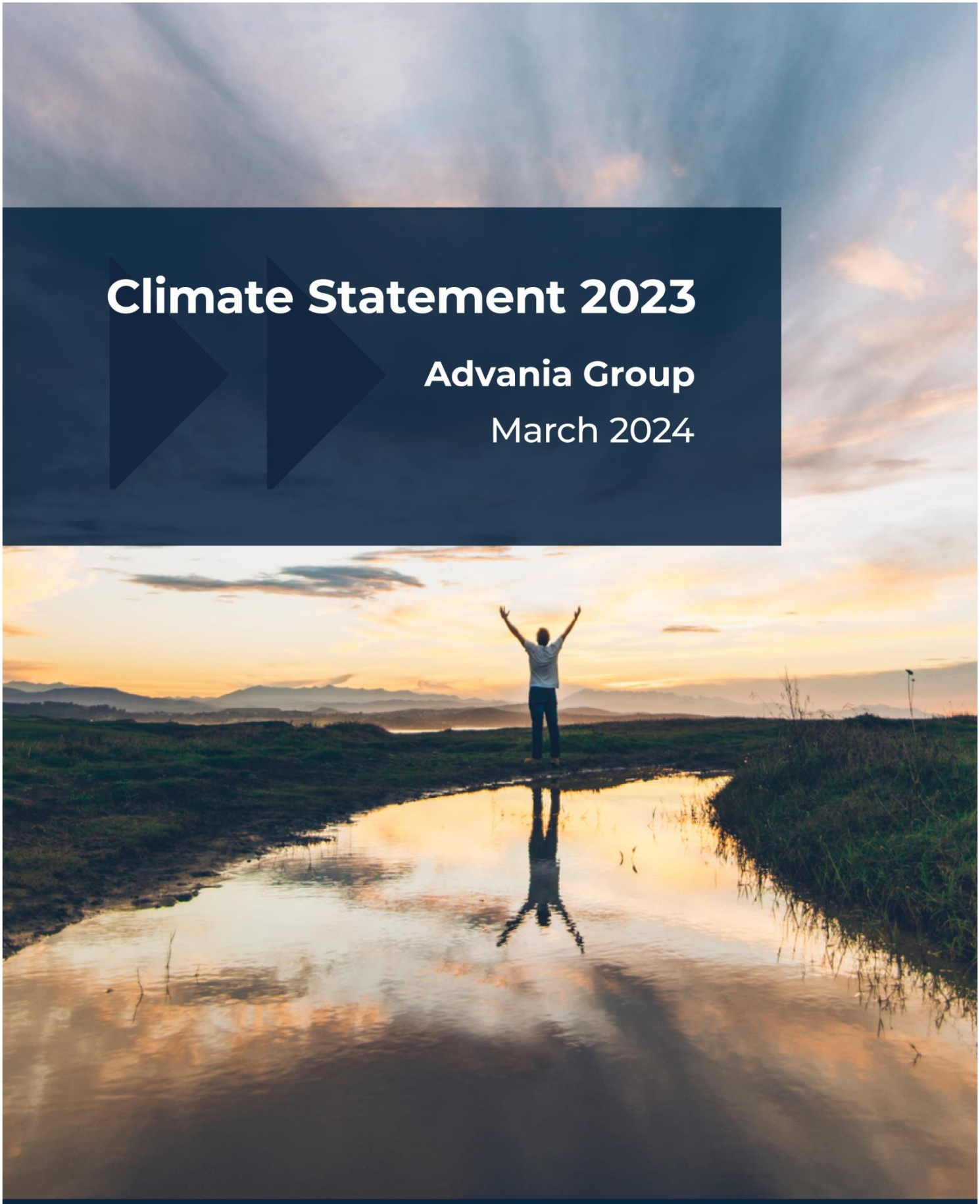
Climate Statement 2023

Advania Group

March 2024



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Fast Forward to a Greener Future

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1. Introduction

Advania Group is an international corporation with its headquarters in Stockholm, Sweden. They provide Managed services, Hardware and Software, and Professional Services to clients in both private and public sectors.

Advania Group spans over eight countries, all of which are separate companies. All of Advania Group's companies are included in this report, namely:

- Advania Sweden
- Advania Norway
- Advania Finland
- Advania Denmark
- Advania Iceland
- Advania UK (including South Africa)
- Advania Serbia
- Advania Sri Lanka

As separate entities, the countries have progressed differently in their sustainability efforts and the extent to which they monitor their emission sources. Both Advania Sweden and Advania Iceland have established Science Based Targets, a process that involved conducting a complete Scope 3 screening. Although the countries share similarities and differences, the emission sources and their importance are comparable. As technology companies, a significant portion of emissions originates from the procurement of hardware that they subsequently sell. Additionally, providing data center services consumes substantial amounts of electricity, resulting in emissions. Finally, emissions from business travel, vehicles, and energy consumption in facilities are among the sources monitored in this climate statement.

What does this climate statement entail?

A climate statement, like a financial statement, is a summary of a company's climate impact during a financial year. A climate statement summarises emissions in carbon dioxide equivalents in a standardised way. The purpose of a climate statement is to identify a company's greenhouse gas emissions for all material (i.e. significant) parts of its operations.

What can this climate statement be used for?

A climate statement is often the foundation of a company's climate work, as it can be used as a basis for decision-making in strategy development, investment decisions and target setting, as well as for reporting to voluntary initiatives and legal requirements. Once goals and strategies are defined, the climate statement is an important tool for monitoring the climate work. The information in a climate statement can be used as a basis for:

- Setting and monitoring climate targets for the organisation.
- Reporting according to parts of the European Sustainability Reporting Standard (ESRS) E1 - Climate change, which is part of the Corporate Sustainability Reporting Directive (CSRD).
- Reporting according to parts of the CDP.
- Demonstrating the company's commitment and concrete actions towards key stakeholders.

2. Methodology

In this chapter, the overarching methodology used for all of Advania Group's countries is presented. Detailed methodology and assumptions for each country are presented in chapter 4.

The Greenhouse Gas Protocol

To calculate Advania Group's climate impact the Greenhouse Gas Protocol (GHG Protocol) has been used, which is the most recognised global standard for calculating greenhouse gas emissions from a company's operations. The calculations have been carried out according to the three[1] associated standards: The Corporate Standard, The Corporate Value Chain (Scope 3) Standard and Technical Guidance for Calculating Scope 3 Emissions.

According to the GHG Protocol, an activity's emissions must be reported in three Scopes (see Figure 1 below), where:

- Scope 1 represents direct emissions from the own operations.
- Scope 2 includes indirect emissions generated during the production of purchased electricity, district heating, cooling, and process steam.
- Scope 3 comprises other indirect emissions, both upstream and downstream in the value chain, arising from activities such as purchased travel, transportation, production of purchased goods and services, and commuting trips of employees.

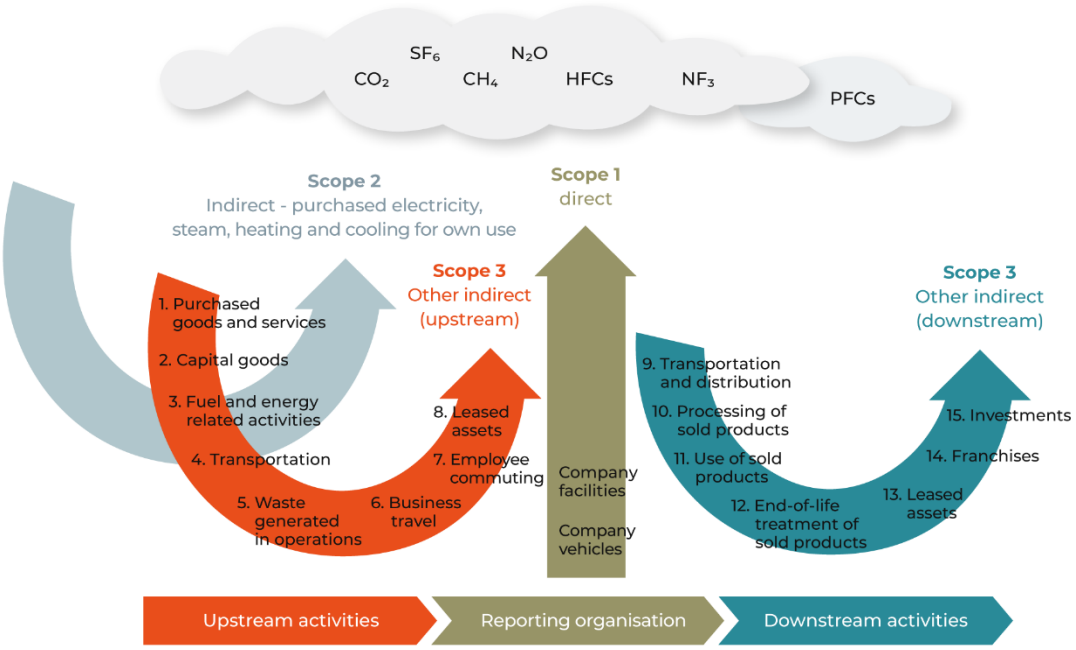


Figure 1. Schematic figure of emissions related to an activity and its value chain, according to the GHG Protocol.

[1] Starting from the fiscal year 2024 (preliminary), the GHG Protocol's standard Land Sector and Removals Guidance can also be utilised, for which there is currently a draft https://ghgprotocol.org/land-sector-and-removals-guidance.

An in-depth description of the calculation methods for all Scopes and categories, including details on data sources, assumptions, default values and emission factors, is available in the Common Methodology further down in this chapter and the Specific Methodology and Assumptions under each country (chapter 4).

Control Approach

Companies have different legal and organisational structures. The GHG Protocol therefore requires a control approach to be determined, either the *operational control approach* or the *financial control approach*. The allocation of greenhouse gas emissions in Scope 3 is affected by the chosen control approach and is therefore important to report.

For Advania Group‘s climate statement, the operational control approach is used. This means that greenhouse gas emissions are classified as direct emissions when the activity gives rise to emissions during use, for example when leasing vehicles or operating in rented premises.

Method for Scope 2

According to the GHG Protocol guidelines for Scope 2, emissions from purchased energy are calculated using either a location-based method or a market-based method. For Advania Group's climate accounts, the market-based method is used. Using the market-based method means the emission factors reflect the choices of origin Advania Group has made for its purchased energy use in Scope 2. When using the location-based method, emission factors represent the average emission intensity of the grid and thus do not take active choices of the origins of purchased energy into account. The chosen method for calculating Scope 2 emissions should be presented along with the non-chosen method. The Scope 2 emissions calculated using both the market- and location-based methods are available in chapter 3 in this report.

System Boundaries

Advania Group‘s climate statement does not exclude any emissions in Scope 1 and 2. Greenhouse gas emissions in Advania Group‘s value chain are reported in Scope 3 and are categorised according to the GHG Protocol in 15 different categories. Table 1 below shows which Scope 3 categories are included and excluded in the climate accounts. The Scope 3 boundaries for Advania Group’s climate statement are based on the results from a complete Scope 3 screening made for Advania Sweden’s SBTi submission process. The screening showed that the emissions in the excluded Scope 3 categories in total fell below SBTi’s 2/3 inclusion criteria, which states that companies setting near-term SBTs must include at least two thirds of their Scope 3 emissions in a Scope 3 target.

Some of the countries reported data outside Advania Sweden’s Scope 3 target boundary, i.e. from non-hardware purchases in category 3.1 and from category 3.7. Which countries reported data in the optional categories are detailed under Specific Methodology and Assumptions in chapter 4.

Table 1. Included and excluded Scope 3 categories. Which of the Advania companies that reported the optional categories (noted as partly in the table) is detailed in chapter 4 under Specific Methodology and Assumptions.

Scope 3 category		Inclusion/Exclusion from Scope	Activities included
3.1	Purchased goods and services	Included (partly)	Production and manufacturing of hardware, data center services, purchased food and IT services (optional)
3.2	Capital goods	Excluded	
3.3	Upstream fuel and energy-related activities not included in Scopes 1 and 2	Included	Upstream emissions from fuels and energy reported in Scope 1 and 2
3.4	Upstream transportation and distribution	Included	Transported hardware from supplier to warehouse
3.5	Waste management	Excluded	
3.6	Business travel	Included	Business air, train and taxi travel, public transport, hotel stays
3.7	Employee commuting	Included (partly)	Employee commuting to and from the workplace. Optional category, see inclusion under each country in chapter 4.
3.8	Upstream leased assets	Excluded	
3.9	Downstream transportation and distribution	Included	Transported hardware from warehouse to customer, estimated for all countries except Iceland based on purchased weight.
3.10	Processing of sold goods	Excluded	
3.11	End use of sold goods	Excluded	
3.12	End-of-life treatment/disposal of sold goods	Excluded	
3.13	Downstream leased assets	Excluded	
3.14	Operation of franchises	Excluded	
3.15	Operation of investments	Excluded	

Common Methodology

For more information on specific methodology and assumptions, please refer to each country's section in chapter 4.

Emissions from Purchased Hardware

Emissions from purchased hardware have been calculated using average values for different product categories. The product categories are Desktop, Laptop, Monitor, Printer, Server, Smartphone, Tablet, Computer mouse, Router, Headphones, and Other hardware (e.g., cables, web cameras, and docking stations).

The averages are based on the sales figures for Advania Sweden in 2023 and applied to all Advania Group's countries. Purchased hardware is assumed to be of the same magnitude as sold hardware. The averages are weighted, which means that they consider the sales volumes of different products and those products' specific production emissions. The production data has been retrieved from product carbon footprints (PCFs) from suppliers and includes all steps from the raw material extraction to a finished product. Where specific PCFs were unavailable, the calculations are based on several PCFs for products similar to those reported by Advania Sweden.

The averages look rather different from those calculated in 2022. This is due to mainly two reasons. Firstly, many of the larger manufacturers have updated their PCFs. While some of the decreases are because of their increased efforts, some can be due to methodology changes and increased details in data. The underlying changes are difficult to separate, thus last year has not been changed to correlate, but rather the effects are included. This is an uncertainty in the factors and calls for greater transparency in the underlying changes in the PCFs. Secondly, the averages depend on Advania Sweden's sales figures within each product category. For 2023, there have been shifts in which manufacturers' products are most common. As PCFs differ between manufacturers, this is visible in the averages and reflects changes in Advania Sweden's purchases within different product categories. For example, HP laptops constituted 43% of the average for 2022, but has increased to 83% for 2023 with average production emissions included in the 2023 average being 165 kg CO2e/unit. Dell laptops constituted 35% of the average for 2022, but only 6% for 2023 with average production emissions included in the 2023 average being 235 kg CO2e/unit.

The aim was to cover 80% of the products purchased to obtain average values that were as representative as possible. However, some products did not have PCFs available. In these cases, as many products as possible have been included. The average value is weighted based on how many models Advania Group has purchased. Table 2 below presents the proportion of the mean value based on PCFs.

Table 2. Average emissions per product in each product category calculated based on PCFs and a share of the products sold within the product category. For instance 42 PCFs covered 75% of the purchased laptops, averaging 170 kg CO_2e/product (weighted average). The production emissions relate to the process from raw material to a finished product.

Category	Production emissions per product kg CO_2e/unit	Share of sold products on which the value is based	Number of PCFs on which the value is based	Comment
Laptop	170	75%	42	95% of the average consists of laptops from HP (83%), Dell (6%), and Lenovo (6%).
Monitor	268	77%	29	95% of the average consists of monitors from HP (84%) and Philips (11%).
Desktop	202	75%	15	97% of the average consists of monitors from HP (85%) and Dell (12%).
Printer	216	1%	4	Value is based partly on specific PCFs, partly on similar calculations as for 2022 and 2021, where 17 PCFs were used.
Server	951	17%	13	HP and Dell servers.
Smartphone	40	55%	10	Apple and Samsung PCFs.
Tablet	57	81%	2	Mostly iPads within this category.
Computer mouse	3,5	18%	15	All PCFs come from Logitech.
Headphones	4,3	9%	4	PCFs come from Jabra.
Router	130	0%	0	Based on one general LCA from Ecoinvent.
Other hardware	3,5	-	-	Assumed to be of the same magnitude as computer mice.

Transportation and Distribution of Purchased Hardware

Advania Group has little information on the transportation of their purchased hardware apart from it being produced in Asia and mostly sold in Europe. Therefore, emissions from transportation are estimated based on product weights (as provided by the hardware PCFs) and values provided by Advania Sweden regarding distances and the shares of transportation modes. Advania Sweden has discussed the share of air and sea freight with their suppliers and made a conservative assumption on the shares of each transportation mode. Table 3 below displays the methodology for the transports.

The same transportation assumptions have been applied to all countries, which is a factor of uncertainty. Although the emissions from transports and distribution are uncertain, there is room for improvement regarding the geography-specific assumptions.

Table 3. Underlying assumptions used to estimate the emissions from transportation and distribution.

Category	Direction of transport	Estimated distance (km)	Estimated share of transports	Emission factor sources	Assumptions
Air freight	Inbound	7 500	60%	NTM (2022)	Estimated average distance from Asia to warehouse in Hamburg. An RFI factor of 2.7 has been applied.
Sea freight	Inbound	20 000	40%	NTM (2022)	Estimated average distance from Asia to warehouse in Hamburg. Assumed DWT 6 000 and cargo load factor 60%.
Road freight	Inbound	1 600	100%	NTM (2023)	Distance from warehouse in Hamburg to Stockholm.
Road freight	Outbound	150	100%	NTM (2023). Swedish Energy Agency (2023), DEFRA (2023)	Estimated average distance from warehouse in Stockholm to customers.

Average Value for Refrigerant Leakage in Data Centers

Data on refrigerant leakages is generally hard to come by for the data centers, especially when including the share that should be allocated to Advania's operations in the data center. To cope with this, an average refrigerant leakage per consumed kWh has been calculated based on data from Advania Sweden's data centers. The same average value is applied to all data centers in Advania Group where actual data has not been obtained.

Refrigerant leakages are assumed to be the same size as the refilled amount during a year. As refills do not occur every year, the data span over the years 2019 to 2022 to cope with differences over time. The data centers have reported on their total electricity consumption in the time period, and how much refrigerant refills they have had. Two kinds of refrigerants have been in use by the data centers, R134A and R410A.

The resulting value is in emissions per electricity consumption, g CO2e/kWh, which is then be multiplied with Advania's operational electricity in the data centers to retrieve the estimated emissions.

As refrigerant leakage in general happens at discrete points in time rather than continuously, it is not uncommon that there is no leakage for one year. Therefore, applying this average to non-reporting data centers might not be representative for one specific year, but should be more accurate over time.

Table 4. Data as a basis for calculating the average value used for refrigerant leakage in data centers.

No. of data centers	Years included in data	No. of refrigerants	Sources for refrigerant EFs	Unit
7	4	2	The Swedish Environmental Protection Agency (2022)	g CO_2e/kWh

Methodological Changes and Updates

For the calculations of this year's climate accounts, more specific information has been gathered concerning facilities' energy consumption and production. No large differences in emissions has been seen because of this.

There have been updates to the climate calculations of 2019 and 2022 as a result of more accurate data and assumptions. Below, the implications for the 2022 figures are outlined:

- Electricity consumption: Each year, the emission factor for Nordic Residual mix is updated. The emission factor constitutes the grid mix for the remaining electricity sources after guarantees of origins have been withdrawn. As more companies actively source renewable electricity, the share of fossil fuels in the Nordic Residual mix increases, resulting in higher emissions. For 2023, the emission factor has increased with 24% compared to 2022.
- Refrigerant leakage in data centers: The previously used average value for refrigerant leakage has been replaced with the one calculated as part of this year's climate statement (see more details above). Refrigerant leakages in data centers have also been moved from Scope 1 to Scope 3, as Advania Group does not have operational control over the cooling of the data centers. The updated average value displays emissions that are 992 tons CO_2e lower than previously reported.
- Transportation and distribution: While last year, the assumption made was that 85% of the goods came by air freight from Asia to Sweden, 7,5% by boat and 7,5% by road, this has been changed. Instead, it is assumed 85% came by air freight and 15% by boat to Germany, from which all goods went by road to Sweden. This has increased the emissions from transportation and distribution by about 52,9 tons of CO_2e. As mentioned previously, the same assumptions have been made for all of Advania's countries, which could be detailed going forward.
    - An error was discovered in the calculations for the previous year. This has been corrected, changing the emission with +177 tons of CO2e.
- Hardware: An error was discovered in the calculations for the previous year regarding the average values for purchased hardware. These have been corrected. Together with an update of purchased hardware by Advania Sweden, the change in emissions is -37 678 tons of CO_2e.

For changes in previous year's calculations for specific countries, please refer to each country in chapter 4.

3.Results for Advania Group

This chapter contains a presentation of the results from the climate calculations for the Advania Group in 2023.

Total Emissions per Category and Scope

For the year 2023, the total amount of greenhouse gas emissions for Advania Group is 129 346 tons of CO_2e, of which 614 tons (0,5%) of CO_2e are attributed to Scope 1, 2 619 tons (2%) to Scope 2, and 126 113 tons (97,5%) to Scope 3 (see Figure 2). Emissions in the optional Scope 3 categories are 1 945 tons. Overall, 88% of the mandatory emissions are based on actual activity data provided by Advania, whilst the remaining 12% comes from estimated activity data. More information regarding data quality is provided under each category and country. In Table 5, a categorisation of the Scope 3 emissions in accordance with the Greenhouse Gas Protocol is visualized including the optional categories.

Figure 2. Total amount of greenhouse gas emissions from Advania Group, divided into scopes.

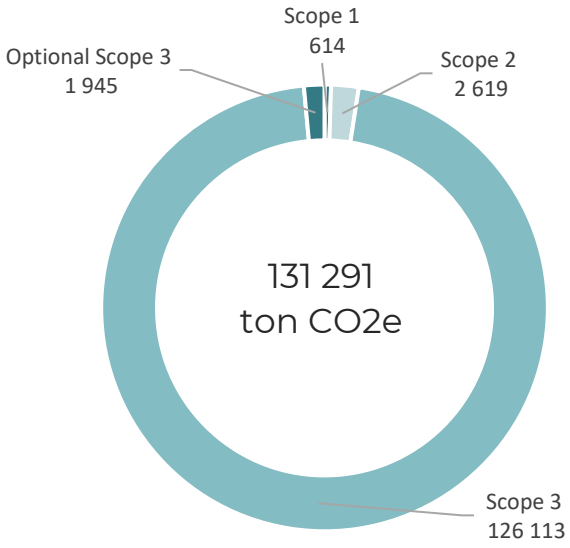
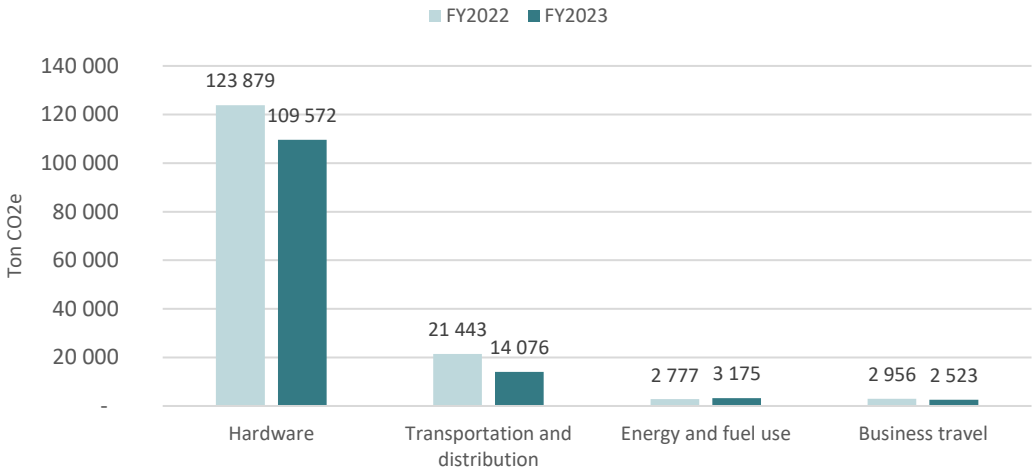


Table 5. Scope 3 emissions divided into GHG Protocol categories. Emissions marked with an asterisk (*) are not included in Advania Group's mandatory reporting for the countries. Thus, it is therefore not included in the column "Share of emissions". For more information on each country's reporting, refer to chapter 4.

CATEGORIZATION OF SCOPE 3 EMISSIONS	Total emissions 2023 [ton CO2e]	Share of emissions 2023
Scope 3	**126 113**	**97,5%**
Scope 3 including optional reporting	128 058	N/A
3.1 Purchased goods and services	109 659	85%
3.1 Purchased goods and services – optional	417*	N/A
3.2 Capital goods	-	-
3.3 Fuel- and energy-related activities	564	0,4%
3.4 Upstream transportation and distribution	14 027	11%
3.5 Waste generated in operations	6*	N/A
3.6 Business travel	1 815	1,4%
3.7 Employee commuting	828*	*N/A*
3.8 Upstream leased assets	-	-
3.9 Downstream transportation and distribution	49	0,04%
3.10 Processing of sold products	-	-
3.11 Use of sold products	37*	N/A
3.12 End of life treatment of sold products	656*	N/A
3.13 Downstream leased assets	-	-
3.14 Franchises	-	-
3.15 Investments	-	-

Dividing the emissions into the four mandatory categories of Hardware, Transportation and distribution, Energy and fuel use and Business travel, it can be seen that purchases of hardware contribute to the majority of the emissions, close to 85%. This division is visualized in Figure 3 below, which also presents the respective emissions from 2022.

Figure 3. Emissions divided into hardware, transportation and distribution, energy and fuel use and business travel.



Hardware and Transportation

Below in Table 6, a detailed description of the hardware emissions is visualized. The emissions are divided into product categories, as well as the product categories' respective emissions from transportation activities. The right most column in Table 6 highlights the percentual change from production emissions and transportation emissions combined between 2022 and 2023.

Table 6. Hardware emissions divided into products groups and their respective emissions from transportation.

Product category	Purchased amount 2023	Production emissions 2023, ton CO2e	Transport emissions 2023, ton CO2e	% change in emissions between FY22/FY23
Desktop	25 271	5 228	801	-34%
Laptop	353 953	60 648	4 446	-16%
Monitor	98 103	26 959	5 777	-3%
Printer	10 977	2 337	1 785	-63%
Server	7 961	7 630	530	41%
Smartphone	25 231	1 015	33	-19%
Tablet	40 511	2 371	162	-6%
Computer mouse	108 136	376	142	73%
Router	8 805	1 149	269	122%
Headphones	92 780	397	49	1%
Other hardware	74 457	1 463	66	-49%
Total	**846 185**	**109 572**	**14 076**	**-15%**

Overall, the emission from hardware is 109 572 tons of CO_2e and the emission from transportation is 14 076 tons of CO_2e. The two activities consequently contribute to 85% and 11% of Advania Group's total emissions respectively. 100% of the emissions connected to production of hardware are calculated from actual activity data, whilst all emissions connected to transportation are estimated.

Energy and Fuel Use

The overall emissions from energy and fuel use have increased from 2 777 tons of CO_2e in 2022 to 3 175 tons of CO2e in 2023. Emissions from offices are in line with the previous year but emissions from data centers have increased. These emissions are calculated from consumption of electricity, district heating, district cooling, refrigerants as well as fuel usage from Advania Group's offices and data centers.

Table 7. Overall emissions and share of kWh actively sourced from renewable sources per facility type.

Overall emissions per facility type	Total emissions 2023, ton CO2e	Total emissions 2022, ton CO2e	Share of kWh actively sourced from renewable sources
Offices	1 934	*1 928*	57%
Data centers	1 240	*849*	92%
Total	**3 175**	***2 777***	**78%**

Table 8 (offices) and Table 9 (data centers) depict the distribution of emissions originating from electricity, district heating, district cooling, refrigerants, and fuel use for respective facility type.

Table 8. Detailed emissions and share of kWh actively sourced from renewable sources from offices.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Electricity	1 455	*1 411*	5 717 457	50%
Heating	412	*466*	5 812 872	72%
Cooling	11	*10*	619 785	0%
Fuel use	54	*38*	208 960	0%
Refrigerant leakage	3	*3*	-	-
Total	**1 934**	***1 928***	**12 359 074**	**57%**

Table 9. Detailed emissions and share of kWh actively sourced from renewable sources from data centers.

Detailed emissions from data centers	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Energy use	1 180	*754*	17 985 422	92%
Refrigerant leakage	60	*94*	-	-
Total	**1 240**	**849**	**17 985 422**	**92%**

Overall, 81% of the emissions from energy and fuel use are based on actual activity data, whilst the remaining 19% are based on estimated activity data. For 2022, the share of actual activity data for energy and fuel-based emissions was 65%.

Business Travel

About 2% of Advania Group's emissions come from business travel. Compared to 2022, the emissions from business travel have been reduced from 2 956 tons of CO_2e to 2 523 tons of CO_2e. The emissions are based on activity data connected to company operated cars, rental cars, flight travel, train travel, taxi travel, hotel nights as well as a category called other, which depicts emissions from bus and subway transits. The emissions distribution per category can be seen in Table 10, with business flights being the most significant source of emissions in the category. In terms of data quality, 81% of the emissions from business travel are calculated from actual activity data. The remaining 19% are estimated.

Table 10. Emissions breakdown within the business travel category. The category called "Other" includes emissions from bus and subway transits.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	708	582	22%
Flights	1 517	2 256	-33%
Train travel	25	12	111%
Taxi travel	41	16	151%
Hotel nights	225	90	150%
Other	7	0,3	1975%
Total	**2 523**	**2 956**	**-15%**

Emissions in Scope 2 Using an Alternative Method of Accounting

As previously mentioned, companies must report their Scope 2 impact using both the market-based and location-based method. In Table 11 below, the emissions using both of these methods are outlined. The emission factors for the location-based method are based on the average mixes for energy production in the respective countries.

Table 11. Emissions in Scope 2 calculated using the market-based and location-based methods.

Scope 2 accounting method	Scope 2 emissions, ton CO_2e
Market-based	2 619
Location-based	2 549

CSRD (Corporate Sustainability Reporting Directive)

According to CSRD legislation, it is mandatory for relevant companies to report data points related to climate change (according to ESRS E1) in their annual reports if this issue is material. This report includes portions of the quantitative information that is mandatory to report in the annual report. Mandatory information according to CSRD is indicated in this report with a footnote. It should be noted that certain quantitative information is excluded in this report, namely: E1-7 (Greenhouse gas uptake and storage).

4. Detailed Results and Methodology per Country

This chapter includes detailed results, methodology used, assumptions made and emission sources accounted for, for each country in the Advania Group.

Advania Sweden

For Advania Sweden, the total emissions for the fiscal year 2023 are 92 339 tons of CO_2e. Compared to 2022, the total emissions for Advania Sweden have decreased by 8%. Compared to the base year 2019, emissions have increased by 5%. 89% of the emissions are calculated from actual activity data, and the remaining 19% are based on estimated activity data.

Results and Analysis

Figure 4 below displays the emissions within each Scope for Advania Sweden. As can be seen, the absolute majority of Advania Sweden's emissions occur outside of the direct operations.

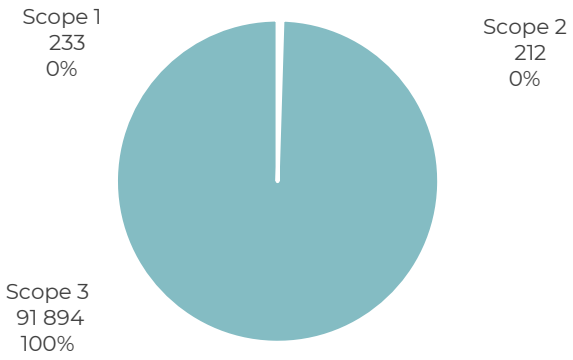


Figure 4. Greenhouse gas emissions [ton CO2e] for Advania Sweden, divided into Scopes.

Figure 5 below displays the emissions split into categories over the years. Almost 90% of the emissions come from purchased hardware, and 10% from the transportation of the same. This explains why the total Scope 3 impact is high as both of these emission sources occur in the indirect value chain for Advania Sweden. Below, each of the four categories are presented more thoroughly.

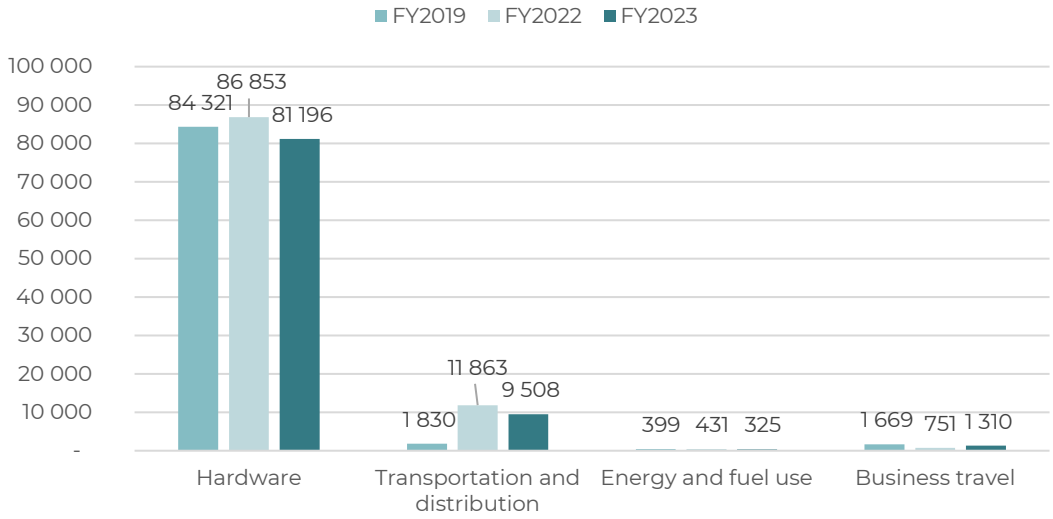


Figure 5. Emissions [ton CO_2e] for Advania Sweden divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware stands for the absolute majority of Advania Sweden's emissions, in line with the results for Advania Group. Advania Sweden is by far the largest entity in Advania emission-wise, and thus the results for Advania Sweden is reflected heavily on the Group's results. In the hardware category, laptops stand for about 49% of the total purchases, and 65% of the emissions.

Compared to 2022, emissions from hardware have decreased by 7%, while the number of purchased products have remained stable (-0,4%). The reason for the decrease lies mainly with the manufacturers' work in decreasing emissions from their production as described in the Common Methodology section. The total number of purchased products remain stable, although there were lower amounts of smaller electronics and higher volumes of larger products. For example, monitors are emissions-intensive and stands for 22% of the emissions while only 11% of the total purchased volume. The purchased quantity of monitors has increased by 35% since last year, but as emissions per product have decreased with about 15% during the same time period, the overall emissions of the monitors have only increased by 15%. The same goes for laptops, where a 19% increase in purchases does not correlate with the 11% reduction in emissions, as emissions per product have decreased with 25%. As for smaller electronics, the fact that purchases within the category "Other hardware" have decreased by about 50% does not impact results as much, as they still only account for less than 1% of production emissions. In Figure 6, Advania Sweden's purchased quantities per product category and their emissions are presented.

Read more on the underlying emissions data in Table 2 under Common Methodology in chapter 2.

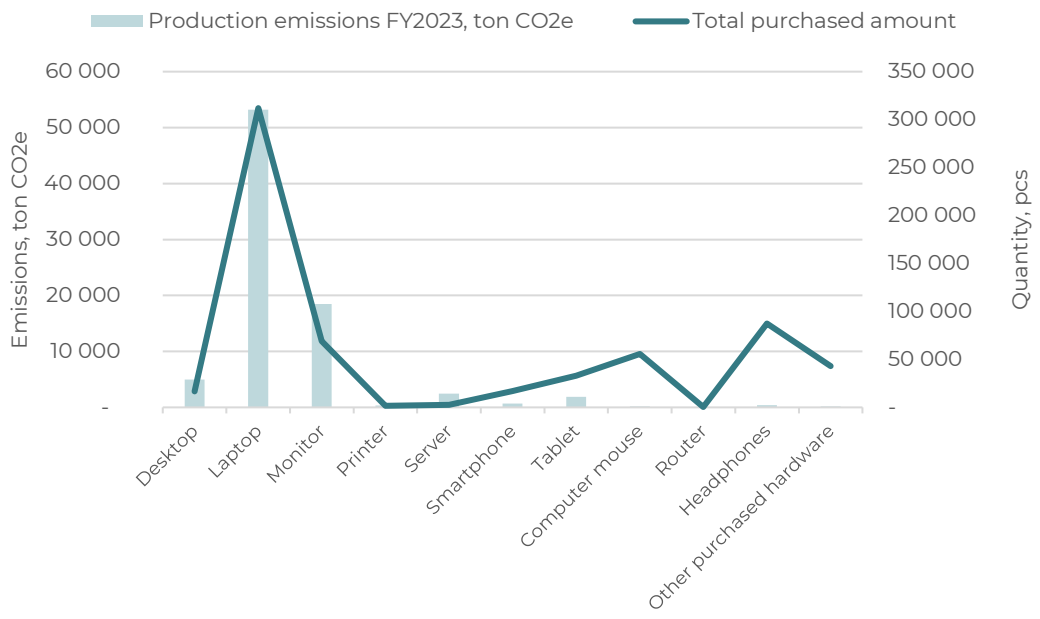


Figure 6. Advania Sweden's emissions per product category and purchased quantity for 2023.

Transportation and Distribution

The emissions from transportation and distribution stand for 10% of Advania Sweden's total emissions. These emissions are however based on estimations, and thus come with a degree of uncertainty. Read more on the underlying emissions data under Common Methodology in chapter 2.

Emissions in this category rely on mainly three things: the transported weight, the distance, and the mode of transportation. As the transported weight depends on the demands from Advania Sweden's customers, and as the production is located in Asia, these two parameters are seen as relatively fixed in the way that these emissions are currently being estimated. This leaves the mode of transportation. According to information available to Advania Sweden, 60% of the goods are transported by air freight from Asia, which is very emissions intensive. Whilst this is a rough estimation based on dialogues between Advania Sweden and their producers, it highlights great capacity to reduce emissions by transporting even more by boat.

For 2022, the share of air freight was 85%, so Advania Sweden are starting to move in the right direction after a few years with logistical challenges due to global events such as the Covid-19 outbreak and hold-ups in the Suez Canal. However, the level of air freight is yet to return to the 2019 levels of 15%. To illustrate the effect of reducing air freight, Advania Sweden transported 1 034 tons of products last year. While this has increased to 1 178 tons this year, emissions from transportation have still decreased by 20%.

In terms of data quality, all emissions connected to transportation are based on estimated activity data.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Sweden have decreased from 431 to 325 tons CO_2e compared to 2022, demonstrating a 25% reduction. The largest decrease can be found from offices, while a smaller reduction is also registered from data centers.

Table 12. Overall emissions and share of kWh actively sourced from renewable sources.

Emissions and share of renewable sourced kWh per facility type	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Share of kWh actively sourced from renewable sources
Offices	265	*358*	42%
Data centers	60	*72*	100%
Total	**325**	***431***	**74%**

The emissions from offices have been reduced by 94 tons of CO_2e compared to 2022 figures. As seen in Table 13, electricity stands for about 50% of the total energy use in offices, and the share of actively chosen renewable electricity sourcing increased to 82% this year from 67% last year. Additionally, the facilities have combined reported a 7% decrease in overall electricity consumption compared to 2022. The emissions decrease in the offices stemming from a transition to a higher degree of sourced renewable electricity is partly offset by an increase of the emission factor for the Nordic residual mix, which increased 24% from the previous year.

The sole office that utilizes natural gas reported a greater consumption in 2023, resulting in a slight increase in emissions from fuel usage. The remaining offices has reported district heating consumption or electricity-based heating, whose respective emissions are categorized as heating- or electricity-based emissions. This is further visualized in Table 13.

Table 13. Detailed emissions and share of kWh actively sourced from renewable sources from offices.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Electricity	173	*273*	1 804 005	82%
Heating	56	*53*	1 099 419	5%
Cooling	9,8	*9,3*	579 333	0%
Fuel use	25	*21*	101 923	-
Refrigerant leakage	0,4	*0,8*	-	-
Total	**265**	***358***	**3 584 680**	**42%**

The emissions from data centers have decreased from 72 tons of CO_2e to 60 tons of CO_2e between 2022 and 2023. This development is connected to a decrease in emissions from refrigerant leakage. Predominantly, this development can be traced to a decrease in calculated refills of refrigerants from the data centers. While refrigerant leakages were estimated for 14 of the 15 data centers in 2022, 5 of 11 have provided reports for 2023. As these reports often display zero refill, the estimations made are often conservative. Also, refrigerant leakages fluctuate over the years, resulting in potentially large changes yearly. Therefore, the decrease is vast in this area. The reported share of electricity that originates from renewable sources is for both years 100%, and the energy consumption reported is similar between the two reporting periods.

Table 14. Detailed emissions and share of kWh actively sourced from renewable sources from data centers.

Detailed emissions from data centers	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Energy use	47	*41*	4 494 026	100%
Refrigerant leakage	13	*31*	-	-
Total	**60**	**72**	**4 494 026**	**100%**

Comparing the overall energy consumption from the year 2022 and 2023, the share of renewable energy has increased from 73% to 74%. Whilst the renewable share of combined consumption from electricity, heating and cooling has increased, an increase in fuel use of natural gas has been reported for 2023 partly offsetting this. As seen in Table 15, there is potential to increase the share of renewable energy sourcing in the Swedish offices.

Table 15. Overall energy consumption per facility type and share of kWh sourced from renewable sources.

Facility type	Energy use 2023, kWh	Energy use 2022, kWh	Share of kWh actively sourced from renewable sources 2023	Share of kWh actively sourced from renewable sources 2022
Offices	3 584 680	*3 694 725*	42%	38%
Data centres	4 494 026	*4 873 326*	100%	100%
Total	**8 078 706**	***8 568 051***	**74%**	**73%**

Overall, 95,3% of the calculated emissions from energy and fuel use originate from primary activity data, while the remaining 4,7% of emissions are based on estimated activity data. This high share of data quality is an increase from last year, where 87,4% of the emission was based on primary activity data. This is a step in the right direction, but it should be noted that going from estimated data to actual data can impact the results which should be kept in mind when comparing results over time.

Business Travel

1,4% of Advania Sweden's emissions come from business travel. However, emissions have increased with almost 75% compared to 2022. The increase comes mainly from flights and hotel stays. The increase can partly be an effect of the pandemic, but there are also uncertainties in the data. For 2022, 38% of the activity data on which the emissions calculations were based on were measured; for 2023, this number is 26%. Advania Sweden can draw more conclusions by collecting more actual data within this category. That being said, the emissions from regional flights (<1000 km) have also increased and stands for 31% of the business travel emissions for 2023. Advania Sweden can reduce their impact by finding other ways to travel regionally.

Table 16. Advania Sweden's emissions from business travels.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	280	220	27%
Flights	891	486	83%
Train travel	1,2	1	17%
Taxi travel	15	13	21%
Hotel nights	120	31	283%
Other	1,8	-	-
Total	**1 310**	**751**	**74%**

Progression towards Advania Sweden's Science Based Targets

Advania Sweden has set two Science Based Targets (SBTs): one absolute target for Scopes 1 and 2, and one intensity target for Scope 3. The absolute target means that emissions should reach a fixed amount for the target year. The intensity target, meanwhile, means that the

intention is to decrease emissions in relation to a denominator, in Advania Sweden's case kSEK value added[2]. For background information on SBT, please refer to their website[3].

The graph below shows Advania Sweden's progression towards their Scopes 1 and 2 target. The target is to reduce their emissions in Scopes 1 and 2 to 230 tons of CO_2e in 2030. In their base year 2019, these emissions were 460 tons of CO_2e, and for 2023 they are 445 tons of CO_2e. As can be seen in the graph, Advania Sweden must increase their pace to reach their target. To reach the target, a linear reduction of about 7% annually is required which is significantly steeper than the projected decrease of about 1%. The largest sources of emissions are company operated cars and the offices where renewable electricity has still not been purchased.

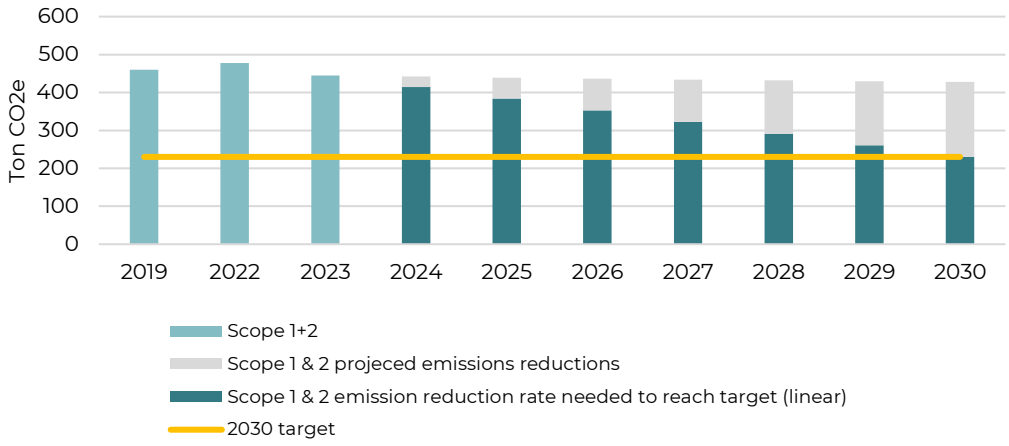


Figure 7. Advania Sweden's progression towards their Scopes 1 & 2 Science Based Target. The light blue bars represent the actual emissions in Scopes 1 and 2 for 2019, 2022 and 2023, the petroleum-coloured bars represent the linear reductions required to reach the target of -50% until 2030, the grey bars represent the projected change in emissions based on the emissions trend between 2019 and 2023 and the horizontal yellow line highlights the target level of -50%.

The Scope 3 target, related to emissions from category 1, 3, 4 and 6, is an economic intensity target, which means that the intention is to decrease emissions in relation to kSEK value added, which in Advania Sweden's case is defined as EBITDA plus personnel cost. While emissions per kSEK value added have decreased from the base year's 58,4 kg CO2e/kSEK to 47,9 kg CO2e/kSEK in 2023, the linear projection of about a 4-5% annually is not enough to reach the target which requires a 9% annual reduction. Advania Sweden must therefore continue to work with decreasing the emissions from their indirect value chain.

[2] Greenhouse Gas Emissions per Value Added (GEVA) is a method for setting economic intensity targets using the contraction of economic intensity. Targets set using the GEVA method are formulated by an intensity reduction of tCO2e/$ value added. Under the GEVA method, companies are required to reduce their GEVA by 7% per year (compounded). The 7% year-on-year reduction rate is based on an absolute emissions reduction of about 75% by 2050 from 2010 levels. Read more in the SBTi Target Setting Manual on page 21.
[3] https://sciencebasedtargets.org/how-it-works

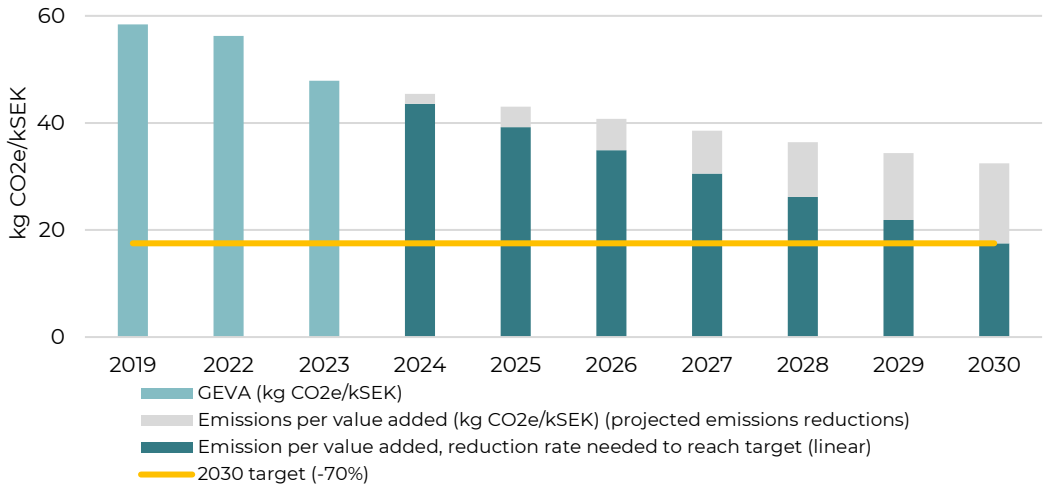


Figure 8. Advania Sweden's progression towards their Scope 3 Science Based Target. Value added includes EBITDA and personnel cost. The light blue bars represent the actual Scope 3 emissions from category 1, 3, 4 and 6 for 2019, 2022 and 2023, the petroleum-coloured bars represent the linear reductions required to reach the target of -70% (rounded, the SBTi webpage states 68,6%) until 2030, the grey bars represent the projected change in emissions based on the emissions trend between 2019 and 2023 and the horizontal yellow line highlights the target level of -50%.

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Sweden.

Business Travel

Company operated cars

- Activity data used: Driven kilometres (km) and spent amount on rental cars (SEK).
- Emission factors: The Swedish Energy Agency (2021), The Swedish Environmental Protection Agency (2022), DEFRA (2022), The Swedish Transport Administration (2022), Hertz (2020).
- Assumptions: For rental cars reported with spend data, it is assumed that turnover for Hertz is the same as rental income and that the distribution of emissions in Scope 1 & Scope 3 is the same as the average car in Sweden.

Flights

- Activity data used: Reported emissions from travel agency, spend data from travels booked outside of the travel agency.
- Emission factors: Provided by travel agency.
- Assumptions: For flights booked outside of the travel agency, travelled person-kilometers were estimated based on last year's figures.

Hotel nights

- Activity data used: Spend data from travel agency and bookings outside of the agency.
- Emission factors: Larsson & Kamb (2019), DEFRA.
- Assumptions: Locations for hotel stays in 2023 are unknown to Advania Sweden. It is assumed 50% of the stays were in Sweden, 25% in Europe, and 25% outside of Europe. Further, 1300 SEK/night has been assumed.

Train travel

- Activity data used: Travelled person-kilometers by train (pkm).
- Emission factors: NTM (2020), DEFRA, WRI, IPCC.
- Assumptions: -

Taxi travels

- Activity data used: Spend data from travel agency and bookings outside of the agency.
- Emission factors: Taxiförbundet (2021), Taxi Stockholm.
- Assumptions: -

Other business travel

- Activity data used: Spend data on local travels by bus and subway from travel agency and bookings outside of the agency.
- Emission factors: NTM (2022 & 2019), Vattenfall Bra miljöval (2020).
- Assumptions: For bus, it is assumed that one ticket costs 120 SEK and one trip is 20 km. For subway, it is assumed that one ticket costs 50 SEK and one trip is 8 km.

Energy and Fuel Use

Electricity in facilities

- Activity data used: Operational electricity consumption for Advania in kWh, Advania's allocated share of facility electricity in kWh.
- Emission factors: Energimarknadsinspektionen (2022), Vattenfall (2022 & 2021), AIB (2018).

- Assumptions: For facilities which did not report any common electricity or did not know Advania's share of the common electricity consumption, the average kWh/m² of those reported within Advania Group has been applied.

Heating in facilities

- Activity data used: Advania's share of the district heating consumption in kWh.
- Emission factors: Energiföretagen VMK (2022).
- Assumptions: For facilities that did not report any district heating consumption, and neither did report any fuel use for heat generation, reference values stating heating consumption per area for offices [kWh/m²] obtained from The Swedish Energy Agency has been applied.

Cooling in facilities

- Activity data used: Reported district cooling consumption in kWh.
- Emission factors: Swedenergy (2014), AIB (2020).
- Assumptions: -

Fuel use in facilities

- Activity data used: Consumption of natural gas in kWh.
- Emission factors: Energiföretagen (2019).
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: Reported refrigerant refill, kg, allocated to Advania's share of the facility.
- Emission factors: Average figures provided by 2050 Consulting.
- Assumptions: For those facilities that had no information regarding refill of refrigerants, and wanted it to be estimated, a reference value provided by 2050 Consulting declaring emissions based on the facility's area was applied.

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania Sweden in kWh and PUE number where available.
- Emission factors: Vattenfall (2022 & 2021), AIB (2018).
- Assumptions: For those data centers without information on PUE number, the average of those reported within Advania Group has been applied.

Refrigerant leakage in data centers

- Activity data used: Reported emissions from data centers where available, operational electricity consumption for Advania Sweden in kWh.
- Emission factors: Provided by data centers, The Swedish Environmental Protection Agency (2022).
- Assumptions: See section Average value for refrigerant leakage in chapter 2.

Transportation and distribution

Please refer to the Common Methodology in chapter 2.

Purchased Hardware

Please refer to the Common Methodology in chapter 2.

Other Purchases (Optional Categories)

Advania Sweden has not collected any activity data for optional categories.

Updates in previous year's calculations

For Advania Sweden, some updates have been made in the 2022 calculations due to changes in data and insights.

- The heating of the facility "Sisjön" has been changed from district heating to heating by natural gas. This results in an increase in emission in Scope 1 (+17,5 tons of CO2e) and Scope 3 (+3,4 tons of CO2e) and a decrease in Scope 2 (-3,9 tons of CO2e).
- An error was discovered in the number of sold hardware products reported by Advana Sweden. This, together with the update of the average values of hardware as described in chapter 2, results in emission reported here to be 37 678 tons of CO2e lower than last year's report.

The updates made for 2022 concerning refrigerant leakages and transportation, as presented in chapter 2 under Methodological Changes and Updates, have also been made for the base year 2019 to keep the years comparable.

Advania Denmark

For Advania Denmark, the total emissions for the fiscal year 2023 are 11 414 tons of CO_2e. Compared to 2022, the total emissions for Advania Denmark have decreased by 10%.

Results and Analysis

Figure 9 below displays the emissions within each Scope for Advania Denmark. As can be seen, the absolute majority of Advania Denmark's emissions occur outside of the direct operations. Overall, 88% of Advania Denmark's emissions are calculated from actual activity data, 12% are based on estimated data.

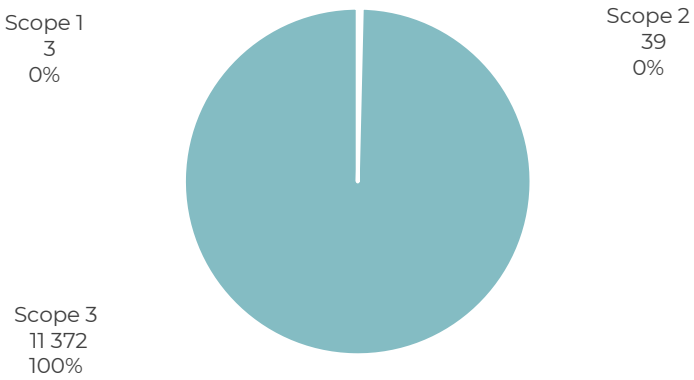


Figure 9. Greenhouse gas emissions [ton CO2e] for Advania Denmark, divided into Scopes.

Figure 10 below displays the emissions split into categories over the years. Just above 81% of the emissions come from purchased hardware, and close to 18% from the transportation of the same. Below, each of the four categories are presented more thoroughly.

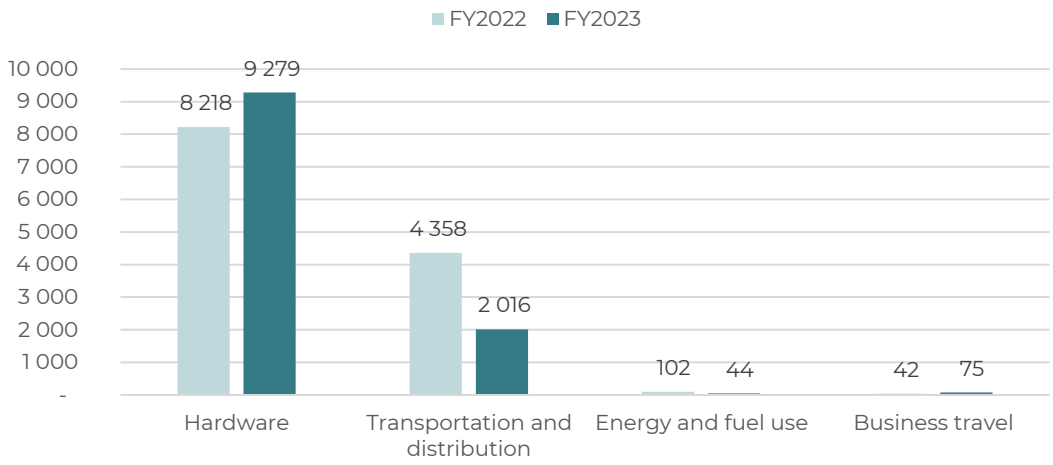


Figure 10. Emissions [ton CO_2e] for Advania Denmark divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware stands for the majority of Advania Denmark's emissions, in alignment with the overall results for Advania Group. Within this category, purchases of servers stand for about 11% of the total purchases volume, while being responsible for close to 43% of the emissions. Furthermore, the purchases of printers and monitor are responsible for 16% and 14% of the emissions within this category respectively. All emissions from production of hardware are categorized as actual emissions, as they are calculated based on primary sales data.

Compared to 2022, the production emissions from purchased hardware have increased with close to 13%, while the number of purchased items have decreased with just over 7%. This development is explained by big changes in purchasing volume in connection to specific product groups. The purchased amount of emission heavy product groups such as desktops, servers and printers have increased by 108%, 77% and 60% respectively compared to 2022, this while all remaining product categories have been purchased in lower amounts.

Below, in Figure 11, the purchased quantities of each product category and their respective emissions are presented. More can information about the underlying emissions data connected to hardware can be found in Table 2 under Common Methodology in Chapter 2.

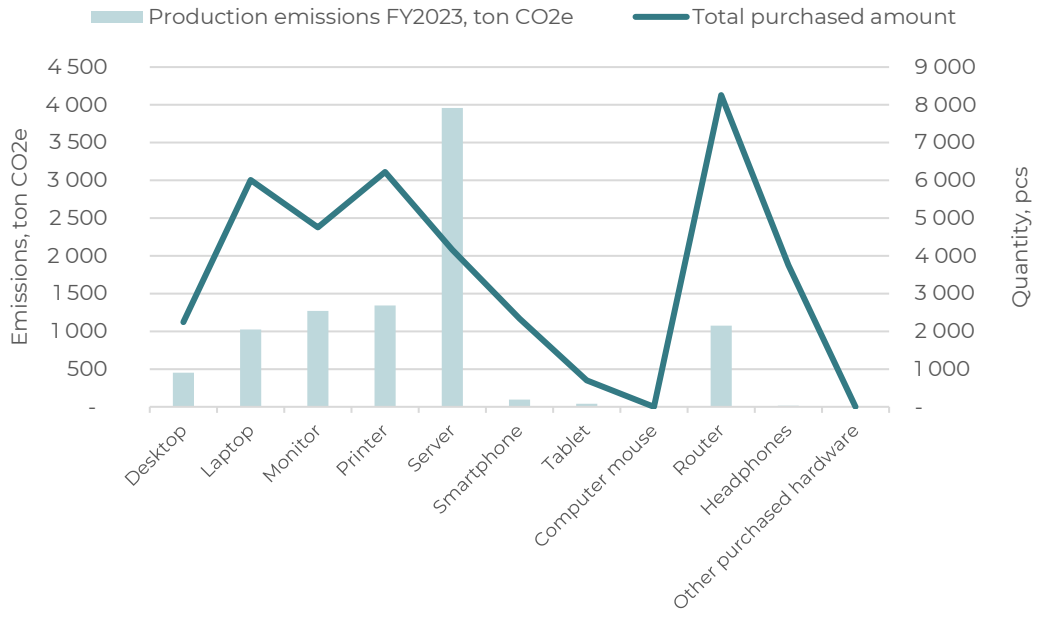


Figure 11. Advania Denmark's emissions per product category and purchased quantity for 2023.

Transportation and distribution

The emissions from transportation and distribution stand for close to 18% of Advania Denmark's total emissions. These emissions are however based on estimations, and thus come with a degree of uncertainty.

Emissions in this category rely on mainly three things: the transported weight, the distance, and the mode of transportation. As the transported weight depends on the demands from Advania Denmark's customers, and as the production is located in Asia, these two

parameters are seen as relatively fixed in the way that these emissions are currently being estimated. This leaves the mode of transportation. According to information available to Advania Sweden, 60% of the goods are transported by air freight from Asia, which also has been used to estimate the transportation emissions for Advania Denmark.

Advania Denmark's emissions from transportation and distribution for 2023 is estimated to be 2 016 tons of CO_2e, portraying a 54% decrease compared to previous year. This is a development greatly impacted by the assumed reduced air freight, from 85% to 60% since 2022. Additionally, updated weights connected to hardware product groups impacts the results heavily. Read more on the underlying emissions data for transportation under Common Methodology in Chapter 2.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Denmark have decreased from 102 to 44 tons CO_2e compared to 2022, demonstrating a 56% reduction. The largest decrease can be found from offices, where reduced emissions from both electricity and heating consumption is reported, whilst increased emissions can be registered from data centers. This is visualized in Table 17 below. The emissions decrease from energy use stemming from a transition to a higher degree of sourced renewable electricity is partly offset by an increase of the emission factor for the Nordic residual mix, which increased 24% from the previous year.

Table 17. Overall emissions and share of kWh actively sourced from renewable sources.

Emissions and share of renewable sourced kWh per facility type	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Share of kWh actively sourced from renewable sources
Offices	39	*100*	0%
Data centers	6	*2*	98%
Total	**44**	***102***	**65%**

The emissions from offices have been reduced by 63 tons of CO_2e compared to 2022 figures. As no share of reported energy consumption from offices is recognized to be actively sources from renewable sources, this development is a consequence of decreased energy consumption. For 2022, the electricity and heating consumption for the two offices in Denmark was estimated. This year, only one office was reported, and primary data regarding both electricity and heating consumption was provided. Therefore, the reduction in emissions cannot be traced to any specific abatement activities, rather improved data quality. Below, in Table 18, a detailed description of emissions connected to offices is provided, along with respective values from 2022.

Table 18. Detailed emissions from offices.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Energy 2022, kWh
Electricity	31,4	*59*	62 860	146 521
Heating	7,4	*41*	14 761	100 861
Cooling	-	-	-	-
Fuel use	-	-	-	-
Refrigerant leakage	-	-	-	-
Total	**39**	***100***	**77 621**	**247 382**

The emissions from data centers have increased from 2 tons to 6 tons of CO_2e. This development is predominantly caused by increased emissions connected to consumed electricity. An 8% increase in consumed electricity from data centers have been reported for 2023 compared to 2022. Additionally, a reduced share of electricity is identified as actively

sourced from renewable sources compared to 2022, resulting in a greater share of the reported electricity being calculated with emission factors for Nordic residual mix. This further visualized in Table 19 below.

Table 19. Detailed emissions and share of kWh actively sourced from renewable sources from data centers.

Detailed emissions from data centers	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Energy use	5	*1*	150 938	97,7%
Refrigerant leakage	1	*0,95*	-	-
Total	**6**	***2***	**150 938**	**97,7%**

Comparing the overall energy consumption between the year 2022 and 2023, the share of renewable energy has increased from 36% to 65%. Whilst this development looks great, it is mainly connected to the change of data quality connected to offices. Consequently, this development is linked to an absolute reduction in reported electricity and heating consumption, rather than actively sourcing energy from renewable sources. This is shown in Table 20 below.

Table 20. Overall energy consumption per facility type and share of kWh sourced from renewable sources.

Energy consumption	kWh 2023	kWh 2022	Share of kWh actively sourced from renewable sources 2023	Share of kWh actively sourced from renewable sources 2022
Offices	77 621	*247 382*	0%	0%
Data centres	150 938	*139 384*	97,7%	100%
Total	228 559	*386 766*	65%	36%

Overall, close to 98% of the calculated emissions from energy and fuel use originates from primary activity data, with the remaining 2% of emissions are based on estimated activity data. This highlights an increase in data quality compared to previous year, as the share of emissions based on primary activity data for 2022 was 45%.

Business travel

0,4% of Advania Denmark's emissions come from business travel, which accounts to 75 tons of CO_2e. Compared to 2022, the reported emissions from business travel have increased by 79%. The increase is predominantly connected to increased emissions from business flights, caused by increased travel distances compared to 2022. Additionally, directly reported emissions from taxi travel and train travel has increased significantly compared to 2022. Due to the low amounts, though, all changes seem very big despite not consisting of many travels. In 2022, Advania Denmark did not report any train travel at all. A detailed overview of Advania Denmark's emissions from business travel is presented in Table 21 below. 88% of the emissions from business travel are calculated from actual activity data, 12% are based on estimated activity data.

Table 21. Advania Denmark's emissions from business travel.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	4	15	-71%
Flights	42	25	67%
Train travel	7,3	-	-
Taxi travel	19	0,0	225 256%
Hotel nights	2	1,6	22%
Other	-	-	-
Total	**75**	**42**	**79%**

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Denmark.

Business travel

Company operated cars

- Activity data used: Litres of Miles diesel and Miles Plus 95 consumed, kWh consumed for electric cars.
- Emission factors: Circle K Produktblad (2018), IVL (2020)
- Assumptions: For electric cars, it is assumed that 0,2kWh is consumed per km driven. The emissions are later calculated by applying the emission factor for Nordic average mix presented above.

Flights

- Activity data used: Reported passenger kilometers.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: Total number of guest nights divided into geographical location (Sweden, Europe and outside of Europe).
- Emission factors: DEFRA, Larsson & Kamb (2019).
- Assumptions: -

Train travel

- Activity data used: Travelled person-kilometers by train (pkm).
- Emission factors: DEFRA, WRI, IPCC and NTM (2020).
- Assumptions: -

Taxi travels

- Activity data used: Emissions reported by travel agency.
- Emission factors: Provided by travel agency.
- Assumptions: -

Other business travel

- Activity data used: -
- Emission factors: -
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption for Advania Denmark in kWh, in kWh. Electricity in common parts allocated to Advania Denmark's share of the facility, in kWh.
- Emission factors: Energimarknadsinspektionen (2022).
- Assumptions: -

Heating in facilties

- Activity data used: Advania's share of the heating consumption in kWh.
- Emission factors: Energimarknadsinspektionen (2022)
- Assumptions: -

Cooling in facilities

- Activity data used: Reported that cooling consumption was included in the reported electricity consumption.
- Emission factors: -
- Assumptions: -

Fuel use in facilities

- Activity data used: -
- Emission factors: -
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: Reported no leakages.
- Emission factors: -
- Assumptions: -

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania Denmark in kWh.
- Emission factors: AIB (2018), Energimarknadsinspektionen (2022).
- Assumptions: For those data centers without information on electricity use, this has been estimated based on those reporting. For all data centers, the average of those PUE numbers reported within Advania Group has been applied.

Refrigerant leakage in data centers

- Activity data used: Reported emissions from data centers where available, operational electricity consumption for Advania Denmark in kWh.
- Emission factors: Provided by data centers, The Swedish Environmental Protection Agency (2022).
- Assumptions: See section Average value for refrigerant leakage in chapter 2.

Transportation and distribution

Please refer to the Common Methodology in chapter 2.

Purchased hardware

Please refer to the Common Methodology in chapter 2.

Other purchases (optional categories)

Advania Denmark has collected additional data connected to purchased goods and services. Purchases of data & IT-services, coffee and tea as well as food purchases has been included.

- Activity data used: Amount of TB of IT-services purchased, weight (kg) of purchased coffee and tea, number of food portions purchased.
- Emission factors: Energimarknadsinspektionen, Andrae A. (2020), SLU (2020), FAO (2010).
- Assumptions: -

Advania Finland

For Advania Finland, the total emissions for the fiscal year 2023 are 2 416 tons of CO_2e. Compared to 2022, the total emissions for Advania Finland have decreased by 27%.

Results and Analysis

Figure 12 below displays the emissions within each Scope for Advania Finland. The majority of Advania Finland's emissions occur outside of the direct operations. 84% of the overall emissions are calculated from actual activity data. The remaining 16% are based on estimated data.

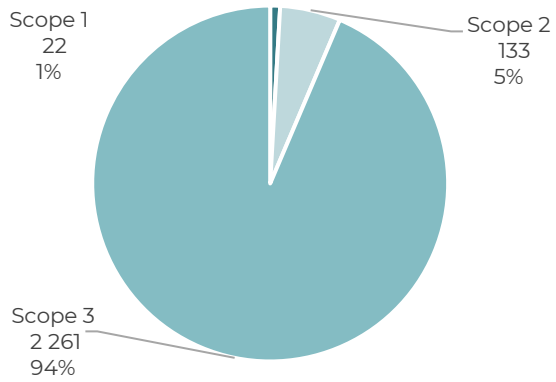


Figure 12. Greenhouse gas emissions for Advania Finland, divided into Scopes.

Figure 13 below displays the emissions split into categories over the years. Just above 73% of the emissions originates from purchased hardware, and close to 13% from the transportation of the same. Below, each of the four categories are presented more thoroughly.

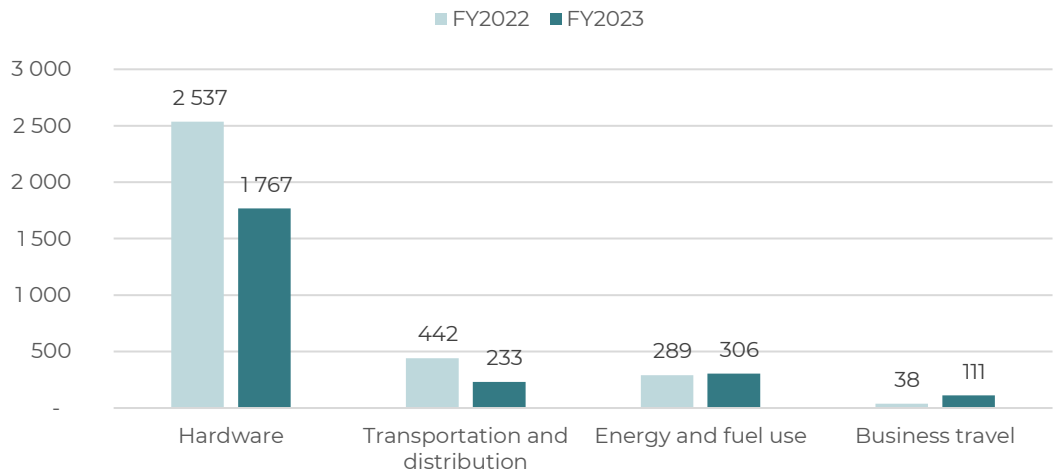


Figure 13. Emissions [ton CO_2e] for Advania Finland divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware stands for the majority of Advania Finland's emissions, in alignment with the majority of Advania's divisions as well as the overall result for Advania Group. Within this category, purchases of servers contribute with approximately 35% of emissions. Other product groups of great impact are monitors and laptops, responsible for 27% and 25% of the emissions respectively.

Compared to 2022, the emissions from production of purchased hardware have decreased by 30%, this while the amount of hardware purchased has increased by 23,5%. This development is a result from emission intense categories being purchased in less volume, while simultaneously increasing the purchasing volume of product categories that relatively emits much less during its production stage. The amount of purchased routers, laptops and servers have decreased by 92%,50% and 14% respectively compared to 2022, whilst the number of tablets and computer mouses have increased. Figure 14 below presents the relationship between the purchased quantities and emissions related to each product category. All emissions from production of hardware is categorized as actual, as they are based on primary sales data. More can information about the underlying emissions data connected to hardware can be found in Table 2 under Common Methodology in Chapter 2.

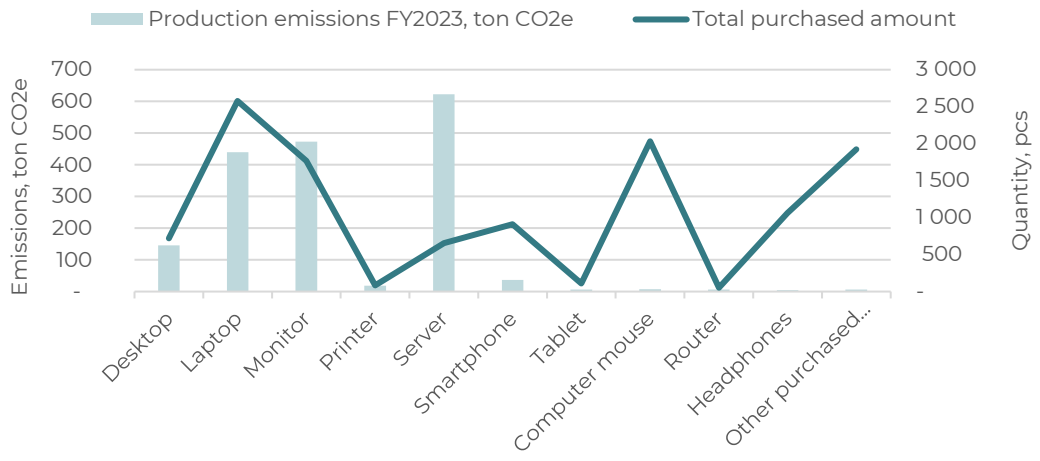


Figure 14. Advania Finland's emissions per product category and purchased quantity for 2023.

Transportation and distribution

The emissions from transportation and distribution stand for 233 tons of CO2e, contributing to about 10% of Advania Finland's total emissions. However, these emissions are estimated, and does thereby includes degrees of uncertainty.

The emissions from transportation and distribution are mostly impacted by three parameters: transported weight, distance and mode of transportation. While some of these factors are more difficult for Advania to impact, such as the weight of the product along with the transportation distance, other actions can be taken to reduce the emissions within this category. Less packaging to optimize efficient loading could potentially be discussed with manufacturers. However, Advania's greatest possibility to reduce emissions within this category lies in mode of transportation. According to information available to Advania

Sweden, 60% of the goods are transported by air freight from Asia, which also has been used to estimate the transportation emissions for Advania Finland.

Advania Finland have, compared to 2022, reduced their emissions from transportation and distribution with approximately 47%. One contributing factor is that a decreasing share of inbound transport is conducted with air freight (see chapter 2). Consequently, the amount of goods assumed to be transported by air has reduced from 85% to 60% whilst the share of sea freight as risen, thereby reducing the emissions. Additionally, the estimated weight of transported products has reduced by close to 25% because of updated average values for product categories, together with changed purchasing volume of certain product groups. More information on the underlying emissions data can be found in Common Methodology in Chapter 2.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Finland have slightly increased from 289 to 306 tons CO_2e compared to 2022, portraying a 6% increase. While emissions from offices have decreased, data centers have reported an increase of emissions from both electricity consumption and refrigerant leakage as can be seen in Table 22 below. The emissions increase is further highlighted as the emission factor for the Nordic residual mix increased 24% from the previous year.

Table 22. Overall emissions and share of kWh actively sourced from renewable sources.

Emissions and share of renewable sourced kWh per facility type	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Share of kWh actively sourced from renewable sources
Offices	142	*198*	40%
Data centers	164	*91*	100%
Total	**306**	***289***	**95%**

The emissions from offices have been reduced by 56 tons of CO_2e compared to 2022 figures. Whilst a slight decrease in emission is noted from heating, the greatest abatement is connected to electricity, where emissions have reduced by approximately 50 tons of CO_2e. This development is connected to a decrease in electricity consumption, as the offices in total decreased 34% in kWh compared to 2022. Additionally, a greater share of actively sourced renewable electricity was reported in 2023, with 77% of the consumed electricity originating from renewable sources. This is an increase compared to the reported share in 2022, that was closer to 45%. More specifically, 7 out of 11 offices reported consumption of electricity actively sourced from renewable sources, compared to 4 out of 9 offices in 2022.

The district heating consumption has also decreased compared to 2022. However, as the emission factor used to calculate these emissions has risen compared to the factor in 2022, the decrease in heating consumption is somewhat offset. Table 23 below presents a detailed description of the offices' emissions and its respective values from 2022.

Table 23. Detailed emissions from offices.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Electricity	30	*80*	240 464	77%
Heating	110	*117*	220 638	0,3%
Cooling	0	*0,5*	975	0%
Fuel use	-	-	-	-
Refrigerant leakage	1,4	*0,2*	-	-
Total	**142**	***198***	**462 076**	**40%**

The emissions from data centers have, compared to 2022, increased from 91 to 164 tons of CO_2e. This is primarily due to an increase of emissions from electricity consumption, which has risen by approximately 90%. Additionally, emissions caused by refrigerant leakage has risen compared to the 2022 report. The increase in emissions from electricity is largely connected to a greater consumption, as all data centers during 2022 and 2023 have reported that all consumption is actively being sourced from renewable sources. The refrigerant leakage has for 2023 been estimated for two out of the four data centers, as the other two data centers reported no refill of refrigerants for the reporting period. The increase in emissions is caused by refrigerant leakage is connected to some uncertainty as it stems from estimates. More about the estimated refrigerant leakage for data centers can be found in chapter 2. The emissions from electricity and refrigerant leakage are further presented in Table 24 below.

Table 24. Detailed emissions and share of kWh actively sourced from renewable sources from data centers.

Detailed emissions from data centers	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Energy use	130	*68*	5 260 074	100,0%
Refrigerant leakage	34	*23*	-	
Total	**164**	***91***	**5 260 074**	**100,0%**

Comparing the overall energy consumption from facilities between the year 2022 and 2023, an increase of 36% is reported, which is caused by greater electricity consumption from data centers. The overall share of actively sourced energy from renewable sources is for this reporting period 95%. This share for 2022 report was 88%. This development is greatly impacted by an increase of reported electricity consumption from data centers, for which all facilities have reported usage of renewable electricity. This development is furthered highlighted in Table 25 below.

Table 25. Overall energy consumption per facility type and share of kWh sourced from renewable sources.

Energy consumption	kWh 2023	kWh 2022	Share of kWh actively sourced from renewable sources 2023	Share of kWh actively sourced from renewable sources 2022
Offices	462 076	*698 221*	40%	26%
Data centres	5 260 074	*3 506 632*	100%	100%
Total	**5 722 151**	***4 204 853***	**95%**	**88%**

Overall, 76% of the calculated emissions from energy and fuel use originates from primary activity data, with the remaining 24% of emissions are based on estimated activity data. This highlights a slight decrease in data quality compared to previous year, as the share of emissions based on primary activity data for 2022 was 82%.

Business travel

111 tons CO_2e of Advania Finland's total emissions comes from business travel, which represent 4,6% of their overall emissions. Compared to 2022, the emissions from this category have increased by 189%, which is the greatest percentual increase when assessing all covered categories. Most of these emissions can be traced to flight travel, which are responsible for 73 tons of CO_2e. The reported activity data of person-km connected to flight travel has increased significantly between 2022 and 2023, from 50 000 pkm to 188 000 pkm, which has a significant impact on the increase of emissions. A similar development is reported for company operated cars, where emissions also have risen between 2022 and 2023. However, as the company Valtti was incorporated into Advania in June, 2022 emissions were only reported for this period. This overall emissions from business travel and

a comparison to 2022 is presented in Table 26 below. 23% of the emissions from business travel is based on actual data, whilst the remaining 77% are estimated.

Table 26. Advania Finland's emissions from business travels.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	27	12,2	118%
Flights	73	21	250%
Train travel	1,7	1,5	14%
Taxi travel	1	1,0	39%
Hotel nights	8	2,5	213%
Other	0,3	0,2	11%
Total	**111**	**38**	**189%**

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Finland.

Business travel

Company operated cars

- Activity data used: Driven kilometers (km) and spent amount on rental cars (SEK).
- Emission factors: The Swedish Energy Agency (2021), The Swedish Environmental Protection Agency (2022), DEFRA (2022), The Swedish Transport Administration (2022), Hertz (2020).
- Assumptions: For cars reported with spend data, it is assumed that turnover for Hertz is the same as rental income and that the distribution of emissions in Scope 1 & Scope 3 is the same as the average car in Sweden.

Flights

- Activity data used: Estimated passenger kilometers (pkm) provided by Advania Finland.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: Estimated amount of guestnights categorised into geographical location (Sweden, Europe and outside of Europe).
- Emission factors: Larsson & Kamb (2019), DEFRA.
- Assumptions: -

Train travel

- Activity data used: Travelled person-kilometers by train (pkm).
- Emission factors: NTM (2020), DEFRA, WRI, IPCC.
- Assumptions: -

Taxi travels

- Activity data used: Spend data provided by Advania Finland.
- Emission factors: Taxiförbundet (2021).
- Assumptions: -

Other business travel

- Activity data used: Passenger kilometers (pkm) travelled by bus, subway and ferry.
- Emission factors: NTM (2022, 2019 & 2010), Vattenfall Bra miljöval (2020).
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption allocated to Advania's share of the facility, in kWh. Advania's allocated share of facility electricity in kWh.
- Emission factors: Energimarknadsinspektionen (2022), Vattenfall (2022), AIB (2018).
- Assumptions: For facilities that did not report any operational electricity consumption, or if the consumption was greatly different to reference values, its consumption was estimated based on area. For facilities which did not report any common electricity or did not know Advania's share of the common electricity consumption, the average kWh/m² of those reported within Advania Group has been applied.

Heating in facilties

- Activity data used: Advania's share of the heating consumption in kWh.
- Emission factors: AIB (2018).
- Assumptions: For facilities that did not report any district heating consumption, and neither did report any fuel use for heat generation, reference values stating heating consumption per area for offices [kWh/m²] obtained from The Swedish Energy Agency has been applied.

Cooling in facilities

- Activity data used: Reported district cooling consumption in kWh.
- Emission factors: AIB (2018). Swedenergy (2014), AIB (2020).
- Assumptions: -

Fuel use in facilities

- Activity data used: -
- Emission factors: -
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: Reported refrigerant refill (R290 & R410A), kg, allocated to Advania's share of the facility.
- Emission factors: Average figures provided by 2050 Consulting.
- Assumptions: For those facilities that had no information regarding refill of refrigerants, and wanted it to be estimated, a reference value provided by 2050 Consulting declaring emissions based on the facility's area was applied.

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania Finland in kWh and PUE number where available.
- Emission factors: Vattenfall (2022), AIB (2018).
- Assumptions: For those data centers without information on PUE number, the average of those reported within Advania Group has been applied.

Refrigerant leakage in data centers

- Activity data used: Reported emissions from data centers where available, operational electricity consumption for Advania Finland in kWh.
- Emission factors: Provided by data centers, The Swedish Environmental Protection Agency (2022).
- Assumptions: See section Average value for refrigerant leakage in chapter 2.

Transportation and distribution
Please refer to the Common Methodology in chapter 2.

Purchased hardware
Please refer to the Common Methodology in chapter 2.

Advania Norway

Advania Norway's total emissions for the fiscal year 2023 are 16 312 tons of CO_2e within the system boundary for Advania Group's reporting, and 16 876 tons of CO_2e when including employee commuting. Compared to 2022, the total emissions for Advania Norway have decreased by 39%, including the voluntary categories.

Results and Analysis

Figure 15 below displays the emissions within each Scope for Advania Norway. The majority of Advania Norway's emissions occur outside of the direct operations. Overall, 86% of the mandaroty emissions are based on actual activity data, 14% are based on estimated activity data.

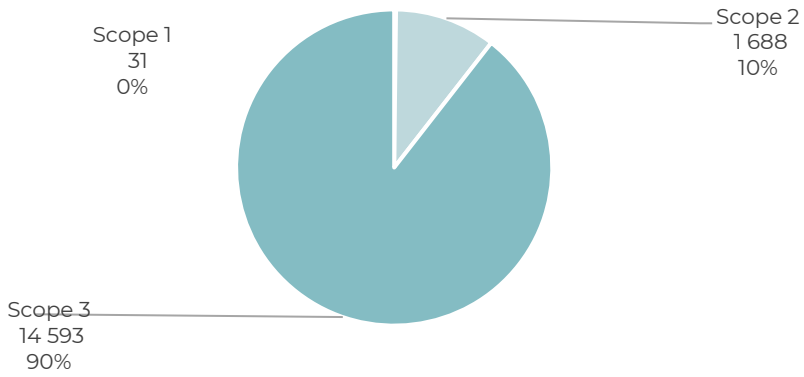


Figure 15. Greenhouse gas emissions for Advania Norway, divided into Scopes.

Figure 16 below displays the emissions split into categories over the years. Just above 74% of the emissions originates from purchased hardware, and around 13% from the transportation of the same. Below, each of the four categories are presented more thoroughly.

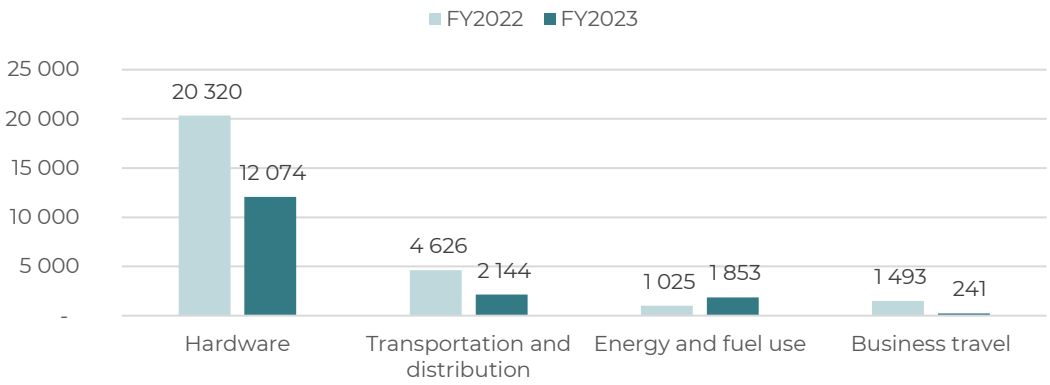


Figure 16. Emissions [ton CO_2e] for Advania Norway divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware stands for the majority of Advania Norway's emissions, in line with the majority of Advania's divisions as well as the overall result for Advania Group. Within this category, purchases of laptops and monitors contribute with approximately 80% of emissions, 42% and 38% respectively. As emissions connected to hardware is calculated based on actual sales data, these emissions are categorized as actual emissions.

Compared to 2022, the emissions from production of purchased hardware have decreased by 43%, this while the amount of hardware purchased has increased by close to 37%. This discrepancy is the result of a large increase in the number of purchased computer mice, from 256 to 50 233. The largest reductions in emissions come from the largest categories, namely laptops and monitors, where the amount of products have decreased with 24% and 32% respectively.

Figure 17 below presents the relationship between the purchased quantities and emissions related to each product category. More can information about the underlying emissions data connected to hardware can be found in Table 2 under Common Methodology in Chapter 2.

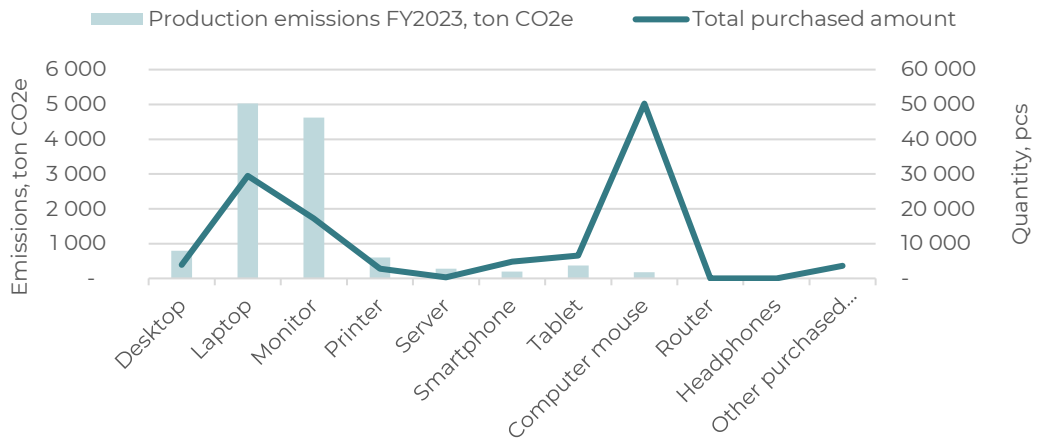


Figure 17. Advania Norway's emissions per product category and purchased quantity for 2023.

Transportation and distribution

The emissions from transportation and distribution stand for 2 144 tons of CO_2e, contributing to about 13% of Advania Norway's total emissions. However, these emissions are estimated, and include degrees of uncertainty.

The emissions from transportation and distribution are mostly impacted by three parameters: transported weight, distance and mode of transportation. While some of these factors are more difficult for Advania to impact, such as the weight of the product along with the transportation distance, other actions can be taken to reduce the emissions within this category. Less packaging to optimize efficient loading could potentially be discussed with manufacturers. However, Advania's greatest possibility to reduce emissions within this category lies in mode of transportation. According to information available to Advania Sweden, 60% of the goods are transported by air freight from Asia, which also has been used to estimate the transportation emissions for Advania Norway. More information on the underlying emissions data can be found in Common Methodology in Chapter 2.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Norway have increased with approximately 80% compared to 2022. Both emissions from offices and data centers have reported an increase of emissions from electricity consumption. An overall visualization can be seen in Table 27 below. The emissions increase is further highlighted as the emission factor for the Nordic residual mix increased 24% from the previous year.

Table 27. Overall emissions and share of kWh actively sourced from renewable sources.

Emissions and share of renewable sourced kWh per facility type	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Share of kWh actively sourced from renewable sources
Offices	1 145	*880*	0%
Data centers	708	*145*	83%
Total	**1853**	***1025***	**60%**

The emissions from offices have increased by 256 tons of CO_2e compared to 2022 figures. Whilst a slight decrease in emission is noted from heating, electricity emissions have increased with 42%. Meanwhile, electricity use has increased with 4%. The increase in emissions per used kWh comes from a lower share of renewable energy – none of Advania Norway's 17 facilities have reported any renewable electricity for 2023, while 3 of 15 did so for 2022.

Table 28. Detailed emissions from offices.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Electricity	958	*672*	1 914 554	0%
Heating	186	*205*	371 557	0%
Cooling	0,3	*0,2*	15 634	0%
Refrigerant leakage	1,2	*1,6*	-	
Total	**1 145**	***1 025***	**2 301 745**	**0%**

The emissions from data centers have compared to 2022 increased from 145 to 708 tons of CO_2e. This is due to an increase of emissions from electricity consumption. Emissions caused by refrigerant leakage has decreased by 82%. Electricity consumption has increased with 17%, but the main reason for the increase in emissions is the sourcing of energy. While 98% came from renewable sources in 2022, that figure is approximately 83% this year. The country mix in Norway has a large share of renewable sources but following the Greenhouse Gas Protocol's market-based method, this can only be accounted for if the choice to source from renewable sources is active.

The emissions from electricity and refrigerant leakage are further presented in Table 29 below.

Table 29. Detailed emissions and share of kWh actively sourced from renewable sources from data centers.

Detailed emissions from data centers	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Share of kWh actively sourced from renewable sources
Energy use	702	*112*	5 616 731	83%
Refrigerant leakage	6	*33*	-	
Total	**708**	***145***	**5 616 731**	**83%**

Overall, close to 90% of the emissions from energy and fuel use are based on actual activity data provided by Advania Norway. The remaining emissions are based on estimated activity data.

Business travel

263 tons CO_2e of Advania Norway's total emissions comes from business travel, which represent 1,5% of their overall emissions. Compared to 2022, the emissions from this category have decreased by 84%. The decrease comes solely from reduced flight travel, where emissions have been reduced by 1 296 tons of Co_2e. Train travel has increased instead, resulting in overall lower emissions. The emissions from business travel and a comparison to 2022 is presented in Table 30 below.

Table 30. Advania Norway's emissions from business travels.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	39	31	26%
Flights	130	1 427	-91%
Train travel	4	0,1	2 842%
Taxi travel	0,2	-	-
Hotel nights	63	35	80%
Other	5	-	-
Total	**241**	**1 493**	**-84%**

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Norway.

Business travel

Company operated cars

- Activity data used: Driven kilometers (km) and spent amount on rental cars (SEK).
- Emission factors: The Swedish Energy Agency (2021), The Swedish Environmental Protection Agency (2022), DEFRA (2022), The Swedish Transport Administration (2022), Hertz (2020).
- Assumptions: For cars reported with spend data, it is assumed that turnover for Hertz is the same as rental income and that the distribution of emissions in Scope 1 & Scope 3 is the same as the average car in Sweden.

Flights

- Activity data used: Actual passenger kilometres (pkm) provided by Advania Norway.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: Amount of guest nights categorised into geographical location (Sweden, Europe and outside of Europe).
- Emission factors: Larsson & Kamb (2019), DEFRA.
- Assumptions: -

Train travel

- Activity data used: Travelled person-kilometres by train (pkm).
- Emission factors: DEFRA, WRI, IPCC.
- Assumptions: -

Taxi travels

- Activity data used: Spend data provided by Advania Norway.
- Emission factors: Taxiförbundet (2021).
- Assumptions: -

Other business travel

- Activity data used: Estimated passenger kilometres (pkm) travelled by bus and ferry.
- Emission factors: NTM (2022 & 2010)
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption allocated to Advania's share of the facility, in kWh. Advania's allocated share of facility electricity in kWh.
- Emission factors: Energimarknadsinspektionen (2022)
- Assumptions: For facilities that did not report any operational electricity consumption, its consumption was estimated based on area. For facilities which did not report any common electricity or did not know Advania's share of the common electricity consumption, the average kWh/m² of those reported within Advania Group has been applied.

Heating in facilties

- Activity data used: Advania's share of the heating consumption in kWh.
- Emission factors: Energimarknadsinspektionen (2022).
- Assumptions: For facilities that did not report any district heating consumption, and neither did report any fuel use for heat generation, reference values stating heating consumption per area for offices [kWh/m²] obtained from The Swedish Energy Agency has been applied.

Cooling in facilities

- Activity data used: Reported district cooling consumption in kWh.
- Emission factors: AIB (2018). Swedenergy (2014), AIB (2020).
- Assumptions: -

Fuel use in facilities

- Activity data used: -
- Emission factors: -
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: Refrigerant refill in, kg, if reported allocated to Advania's share of the facility.
- Emission factors: Average figures provided by 2050 Consulting.
- Assumptions: For those facilities that had no information regarding refill of refrigerants, and wanted it to be estimated, a reference value provided by 2050 Consulting declaring emissions based on the facility's area was applied.

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania Norway in kWh and PUE number where available.
- Emission factors: Vattenfall (2021), AIB (2018).
- Assumptions: For those data centers without information on PUE number, the average of those reported within Advania Group has been applied.

Refrigerant leakage in data centers

- Activity data used: Reported emissions from data centers where available, operational electricity consumption for Advania Norway in kWh.
- Emission factors: Provided by data centers, The Swedish Environmental Protection Agency (2022).
- Assumptions: See section Average value for refrigerant leakage in chapter 2.

Transportation and distribution
Please refer to the Common Methodology in chapter 2.

Purchased hardware
Please refer to the Common Methodology in chapter 2.

Advania Iceland

Advania Iceland's total emissions for the fiscal year 2023 are 4 873 tons of CO_2e within the system boundary for Advania Group's reporting, and 6 194 tons of CO_2e when including purchased IT-services and foods, waste, employee commuting, use of sold products, and end of life treatment of sold products. Compared to 2022, the total emissions for Advania Iceland have decreased by approximately 20%, including the voluntary categories.

Results and Analysis

Figure 18 below displays the emissions within each Scope for Advania Iceland. As can be seen, the absolute majority of the emissions occur outside of the direct operations. Scope 1 includes emissions from rental cars, in accordance with the methodology used by Advania Group. In Advania Iceland's SBT, these emissions are put in scope 3 category 6 Business travel.

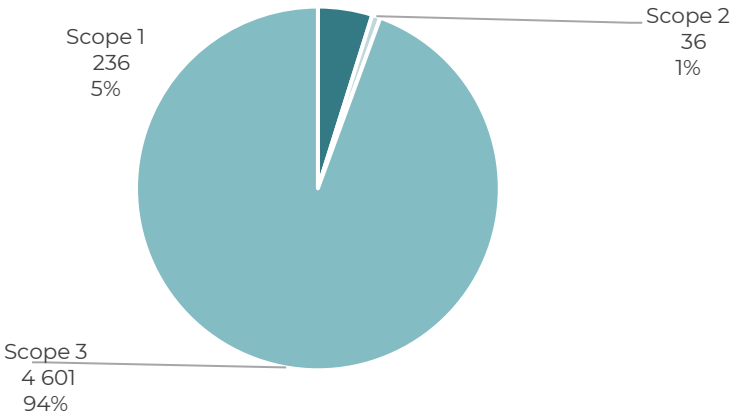


Figure 18. Greenhouse gas emissions for Advania Iceland, divided into Scopes.

Figure 19 below displays the emissions split into categories over the years showing decreases in emissions from purchased hardware, transportation, and energy and fuel use, but increases from business travel. Below, the categories are presented more thoroughly.

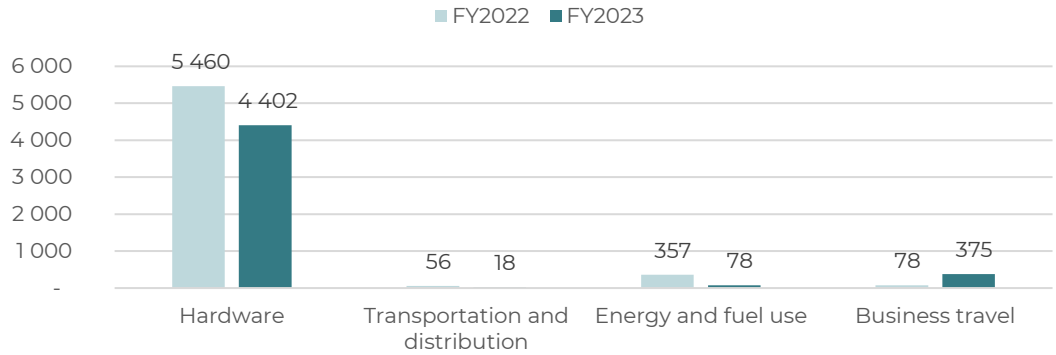
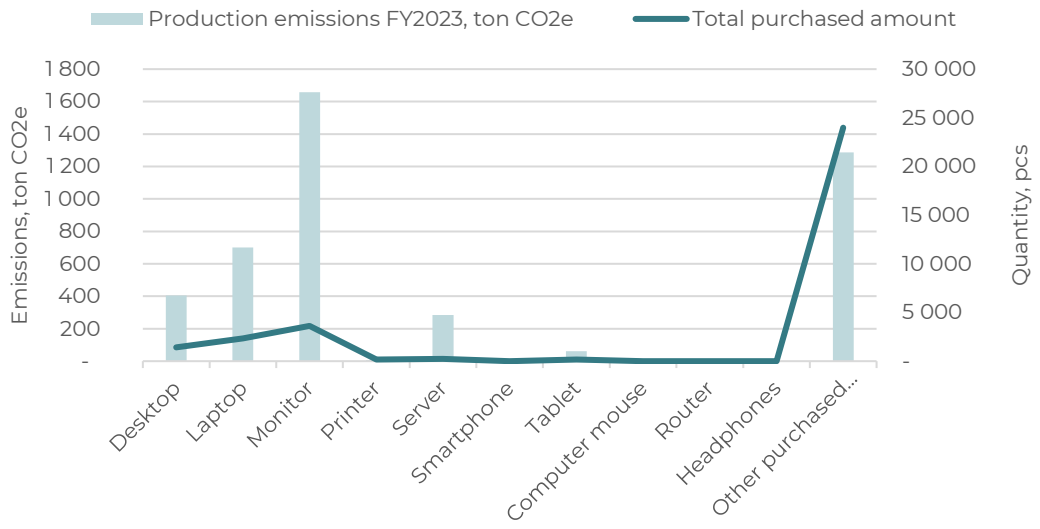


Figure 19. Emissions [ton CO_2e] for Advania Iceland divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware is the largest emissions category for Advania Iceland at over 4 400 tons of CO_2e. Almost 40% of the emissions come from the production of the purchased monitors and another third comes from the production of the other hardware. Emissions from other hardware comes mainly from Automatic teller machines, something that differentiates Advania Iceland from the rest of Advania Group, and computer accessories. The total purchased volume of IT equipment is down by 55%, or 45% when excluding other hardware. Meanwhile, emissions have decreased by 11%, or 3% excluding other hardware. Sales of laptops and tablets have increased, compensating for the decrease in the more emissions intensive monitors.

Read more on the underlying emissions data in Table 2 under Common Methodology in chapter 2.



Transportation and Distribution

Transportation only stands for 0,4% of Advania Iceland's emissions, which makes them stand out compared to the other countries in Advania Group. Advania Iceland have collected specific transport emissions from suppliers. 75% of the emissions come from air freight, and 23% from sea freight.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Advania Iceland have decreased from 83 to 78 tons CO_2e compared to 2022, demonstrating a 5% reduction. Emissions from heating in offices have increased slightly, while emissions from electricity in data centers have decreased.

Advania Iceland has zero emissions from their electricity use in offices. Table 31 below shows emissions from offices and data centers.

Table 31. Detailed emissions from offices.

Energy and fuel use	Total emissions FY2023, ton CO2e	*Share of emissions*	Total emissions FY2022, ton CO2e
Electricity	0	*0%*	0
Heating	52	*67%*	49
Electricity in data centers	26	*33%*	34
Total	**78**		**83**

Business Travel

8% of Advania Iceland's emissions come from business travel, accounting for 375 tons of CO_2e. Compared to 2022, the reported emissions from business travel have increased by 6%. The major driver behind the increase is emissions coming from flights, as seen in Table 32 below.

Table 32. Advania Icelands's emissions from business travels.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	275	274	0%
Flights	95	76	26%
Taxi travel	0,3	0,5	-32%
Hotel nights	5	2	111%
Total	375	263	6%

Data Quality

The data quality for Advania Iceland is very high. Only some of the energy use in facilities has been estimated.

Progression towards Advania Iceland's Science Based Targets

Advania Iceland has set two Science Based Targets: one absolute target for Scopes 1 and 2, and one intensity target for Scope 3. The absolute target means that emissions should reach a fixed amount for the target year. The intensity target, meanwhile, means that the intention is to decrease emissions in relation to a denominator, in Advania Iceland's case ISK value added[4]. For background information on SBT, please refer to their website[5].

The graph below shows Advania Iceland's progression towards their Scopes 1 and 2 target. The target is to reduce their emissions in Scopes 1 and 2 to 100 tons of CO2e. In their base year in 2021, these emissions were 230 tons of CO2e, and for 2023 the emissions are 199 tons of CO2e. As can be seen in the graph, Advania Iceland must increase their pace to reach their target. The largest source of emissions are company operated cars.

[4] Greenhouse Gas Emissions per Value Added (GEVA) is a method for setting economic intensity targets using the contraction of economic intensity. Targets set using the GEVA method are formulated by an intensity reduction of tCO2e/$ value added. Under the GEVA method, companies are required to reduce their GEVA by 7% per year (compounded). The 7% year-on-year reduction rate is based on an absolute emissions reduction of about 75% by 2050 from 2010 levels. Read more in the SBTi Target Setting Manual on page 21.
[5] https://sciencebasedtargets.org/how-it-works

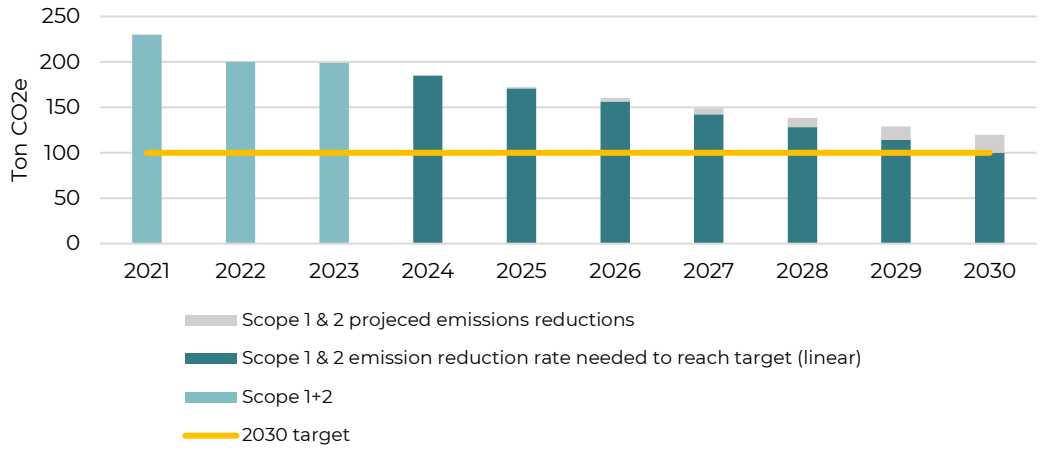


Figure 10. Advania Iceland's progression towards their Scopes 1 & 2 Science Based Target. The light blue bars represent the actual emissions in Scopes 1 and 2 for 2021 to 2023, the petrol-coloured bars represent the linear reductions required to reach the target of -50% until 2030, the grey bars represent the projected change in emissions based on the emissions trend between 2021 and 2023 and the horizontal yellow line highlights the target level of -50%.

The Scope 3 target is an intensity target, which means that the intention is to decrease their emissions in relation to their ISK value added (EBITDA + personnel cost). Emissions per ISK value added have decreased from the base year's 0,00095 kg CO2e/ISK to 0,00053 kg CO2e/ISK in 2023, suggesting Advania Iceland are well on their way to reach their target at 0,00046 kg CO_2e/ISK well ahead of the target year.

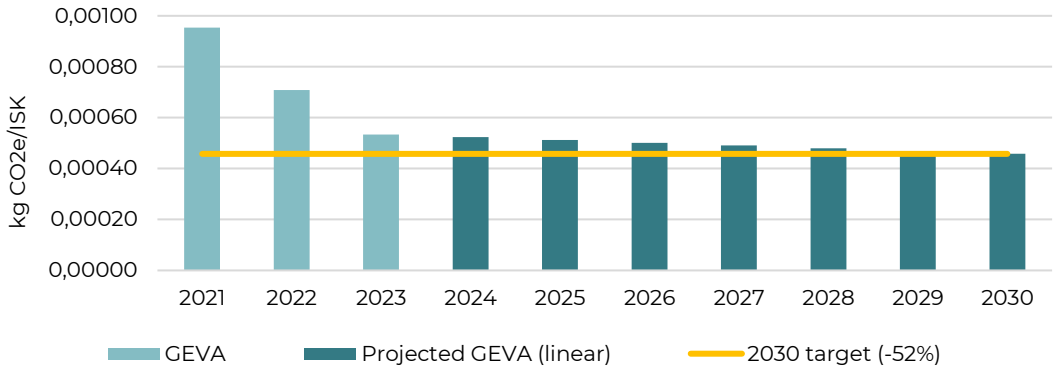


Figure 21. Advania Iceland's progression towards their Scope 3 Science Based Target. Value added includes EBITDA and personnel cost. The light blue bars represent the Scope 3 GEVA for 2021 to 2023, the petrol-coloured bars represent the linear reductions required to reach the target of -52% until 2030 and the horizontal yellow line highlights the target level of -52%.

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Iceland.

Business travel

Company operated cars and rental cars

- Activity data used: Volume of fuel and kilometers driven.
- Emission factors: DEFRA (2021), The Environment Agency of Iceland (2021).
- Assumptions: -

Flights

- Activity data used: Reported passenger kilometers.
- Emission factors: DEFRA (2021).
- Assumptions: -

Hotel nights

- Activity data used: Number of hotel nights.
- Emission factors: Greenview.
- Assumptions: -

Taxi travels

- Activity data used: Reported passenger kilometers.
- Emission factors: DEFRA (2021).
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption for Advania Iceland in kWh where available.
- Emission factors: The Environment Agency of Iceland (2021).
- Assumptions: For facilities that did not report any operational electricity consumption, its consumption was estimated based on area.

Heating in facilties

- Activity data used: Heating consumption for Advania Iceland in kWh, where available.
- Emission factors: The Environment Agency of Iceland (2021).
- Assumptions: For facilities that did not report any heating consumption, its consumption was estimated based on area.

Refrigerant leakage in facilities

- Activity data used: Reported no leakages.
- Emission factors: -
- Assumptions: -

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania Iceland in kWh, multiplied by a PUE-number of 1.2. where available.
- Emission factors: The Environment Agency of Iceland (2021), EEA (2022), DEFRA (2021).
- Assumptions: -

Transportation and distribution

- Activity data used: Amount of weight transported and places of departure and arrival to calculate the tonne-kilometers.
- Emission factors: DEFRA (2021).
- Assumptions: -

Purchased hardware

- Activity data used: Stem data on each product purchased.
- Emission factors: Supplier-specific LCA's, where available.
- Assumptions: In cases where an LCA was not available for products in this sub-category, an Advania average was applied. For the remaining items, which come in a wide range of variations, a weight factor is employed to calculate emissions.

Other purchases (optional categories)

Food and beverages

- Activity data used: Weight of purchased food and beverages.
- Emission factors: Concito (2021), DEFRA (2021), Marviney et al. (2015).
- Assumptions: -

IT services

- Activity data used: Advania Iceland's share of Microsoft 365 cloud computing resource usage.
- Emission factors: Microsoft.
- Assumptions: -

Employee commuting

- Activity data used: Employee commuting survey.
- Emission factors: DEFRA (2021), The Environment Agency of Iceland (2020).
- Assumptions: For the fraction of employees which do not answer the commute survey, emissions are estimated based on the average commute pattern of responding employees.

Waste

- Activity data used: Weight data.
- Emission factors: DEFRA (2021).
- Assumptions: -

Use of sold products

- Activity data used: Stem data on each product purchased in the categories computer server, computer display, notebook computer and tablet computer exclusively. Yearly energy demand.
- Emission factors: calculated by multiplying the product lifetime (in years) by the yearly energy demand, both provided in the PCF documents, multiplied by the emission factor for electricity generation in Iceland. The Environment Agency of Iceland (2021).
- Assumptions: The use-phase emissions of products in other categories were not accounted for.

End-of-life treatment of sold products

- Activity data used: Stem data on each product purchased.
- Emission factors: Environment Agency of Iceland (2021).
- Assumptions: The estimated recycling ratio of batteries is 23% and the estimated recycling ratio of other categories is 33%.

Updates in Previous Year's Calculations

Advania Iceland identified an error in last year's calculations of the hardware emissions. This has been adjusted. Also, emissions from rental cars have been corrected.

Advania UK

The total emissions for Advania UK for the fiscal year 2023 are 1 875 tons of CO_2e. Compared to 2022, the total emissions for Advania UK have increased by 22%.

Results and Analysis

Figure 22 below displays the emissions within each Scope for Advania UK. As can be seen, the majority of Advania UK's emissions occur outside of the direct operations. Scope 2 make up about a fourth of the emissions, which stands out compared to the overall Group results. Overall, 75% of Advania UK's emission are calculated from actual activity data, with the remaining 25% being based upon estimated data.

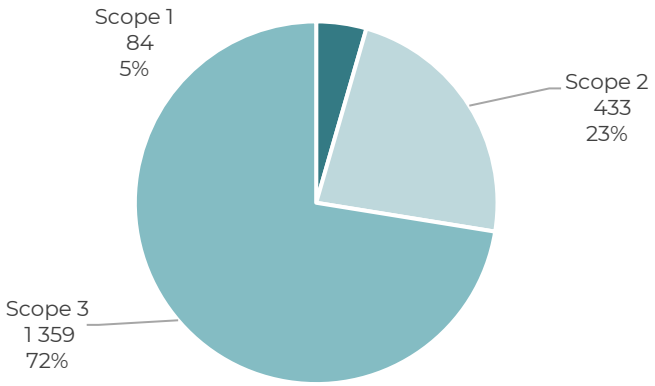


Figure 22. Greenhouse gas emissions [ton CO_2e] for Advania UK, divided into Scopes.

Figure 23 below displays the emissions split into categories for 2022 and 2023. UK did not report any activity data in the optional categories (e.g. employee commuting). Purchased hardware stands for over 40% of the emissions for Advania UK in 2023, overtaking energy and fuel use as the largest emissions category due to higher purchasing volumes of monitors and laptops.

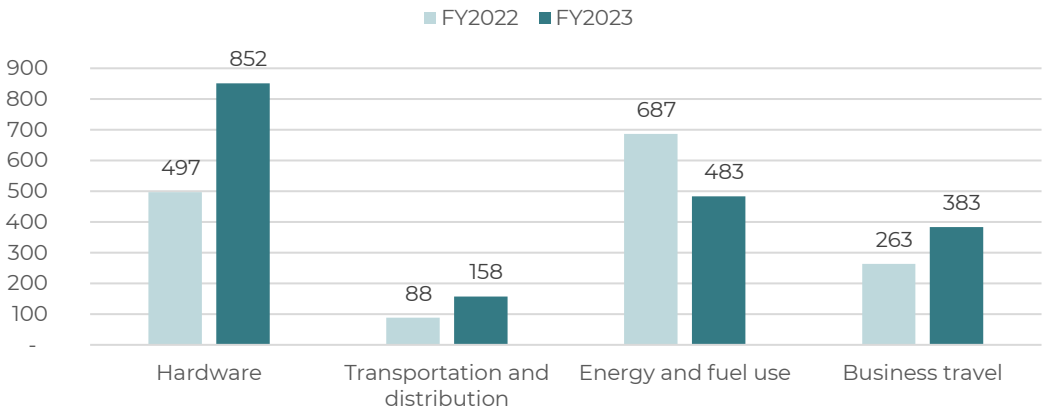


Figure 23. Emissions [ton CO_2e] for Advania UK divided into hardware, transportation and distribution, energy and fuel use, and business travel.

Hardware

The production of hardware is the largest emissions category for Advania UK at just over 850 tons of CO_2e. About half of this (431 tons of CO2e) comes from the production of the purchased monitors and another third of these emissions (277 tons of CO_2e) comes from the production of the purchased laptops. However, the total purchased volume of IT equipment is actually slightly lower in 2023 than in 2022, as there has been a significant reduction in purchases of cables and other smaller electronics.

The increase in emissions primarily comes from the increased volume of purchased monitors, which is up by around 400% this year. Volume-wise, the monitors increased from 6% in 2022 to 24% in 2023. Being emissions-intensive products, the monitors make up about 50% of the emissions although only representing 24% of the purchase volume. The absolute increase at about 300 tons of CO_2e constitutes the single most important driver behind the increased emissions.

Another emissions increase comes from purchased desktops of which no purchases were made during 2022. Although the purchased volume of desktops is at relatively low levels during 2023, the increase stands out among the categories as the second largest (+ 70 tons of CO_2e).

Looking at the laptop data, the purchased volume increased slightly (12%) but as the emissions per produced laptop on average decreased by about 28% there is a net reduction of emissions from the purchased laptops of about 20% (69 tons of CO_2e), offsetting the increase in emissions from desktops almost completely.

As the emissions from hardware is based on actual sales data, these emissions are categorized as actual emissions. Read more on the underlying emissions data in Table 2 under Common Methodology in chapter 2.

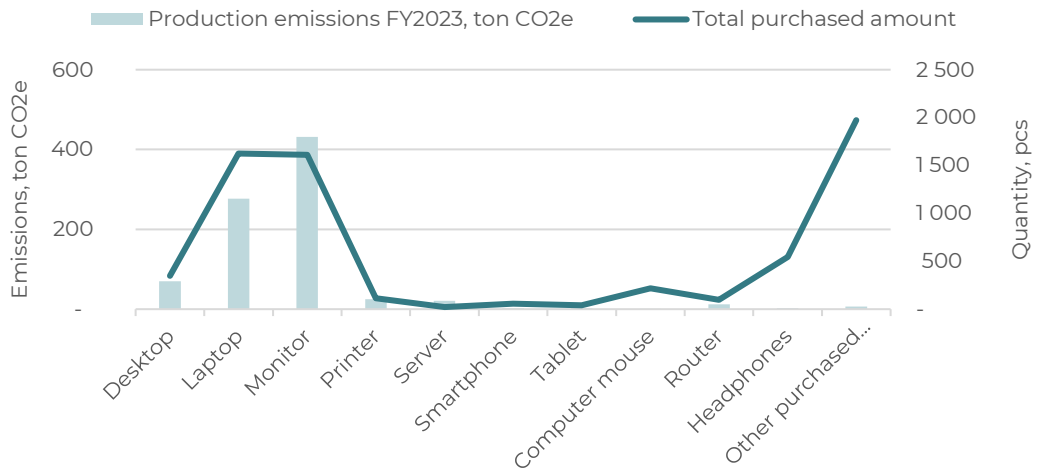


Figure 24. Advania UK's emissions per product category and purchased quantity for 2023.

Transportation and Distribution

The emissions increase from transportation and distribution have seen a similar increase as the emissions from the production of the purchased hardware (+ 80%) compared to 2022. Transportation and distribution emissions are however based on estimations, and thus come with a degree of uncertainty. Read more on the underlying emissions data under Common Methodology in chapter 2. In total, these emissions make about 8% of the total impact for Advania UK.

Emissions in this category rely mainly on three factors: the transported weight, the distance, and the mode of transportation. The transported weight depends on the demands from Advania UK's customers and the specific product weights. The production occurs in Asia, leaving the transport distances relatively constant over time. This leaves the mode of transportation and according to information available to Advania Sweden, 60% of the goods are transported by air freight from Asia, which is very emissions intensive. There is great capacity to reduce emissions by transporting even more by boat. Note that the estimates for Advania UK have been made using the same assumptions as for Advania Sweden, leaving space for improvement going forward.

Energy and Fuel Use

The emissions from energy and fuel use in the facilities in Advania UK have decreased from 687 to 483 tons CO_2e compared to 2022, demonstrating a 30% reduction. The decrease can be traced to electricity use in data centers, where more renewable energy has been reported. 78% of the electricity use in data centers are, however, estimated. Overall, 43% of the emissions connected to energy and fuel use are calculated from actual activity data. The remaining 57% are based on estimated activity data.

While UK's total emissions from energy and fuel use have decreased, emissions from offices have increased with 13% compared to 2022. There have been increases in both electricity and fuel use. For fuel use, usage have doubled, meaning that emissions have doubled as well. For electricity, energy use is stable, but a larger share of non-renewable electricity means emissions have increased with 7%. Table 33 below shows emissions from offices and data centers.

Table 33. Detailed emissions from offices and data centers.

Energy and fuel use	Total emissions FY2023, ton CO2e	*Share of emissions*	Total emissions FY2022, ton CO2e
Electricity	184	*38%*	172
Fuel use	22	*5%*	10
Electricity in data centers	270	*56%*	497
Refrigerant leakage in data centers	7	*1%*	7
Total	**483**		**687**

Business Travel

19% of Advania UK's emissions come from business travel, accounting for 383 tons of CO_2e. Compared to 2022, the reported emissions from business travel have increased by 45%. The major drivers behind the increase is emissions coming from company operated cars and flights, as seen in Table 34 below. 90% of the emissions from business travel is calculated from actual activity data provided by Advania UK.

Table 34. Advania UK's emissions from business travels.

Business travel	Emissions FY2023, ton CO2e	Emissions FY2022, ton CO2e	Change, %
Company operated cars and rental cars	84	29	190%
Flights	257	206	25%
Train travel	11	9	19%
Taxi travel	4	2	106%
Hotel nights	26	17	53%
Other	0,2	0,1	85%
Total	**383**	**263**	**45%**

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania UK.

Business travel

Company operated cars

- Activity data used: Driven kilometers.
- Emission factors: The Swedish Energy Agency (2021), The Swedish Environmental Protection Agency (2022), DEFRA (2022), The Swedish Transport Administration (2022).
- Assumptions: -

Flights

- Activity data used: Reported passenger kilometers.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: Spend data.
- Emission factors: DEFRA.
- Assumptions: -

Train travel

- Activity data used: Travelled person-kilometers by train (pkm).
- Emission factors: DEFRA, WRI, IPCC.
- Assumptions: Assuming Heathrow to Paddington, £25 per ticket and ~30 km.

Taxi travels

- Activity data used: Spend data.
- Emission factors: Taxiförbundet (2021).
- Assumptions: -

Other business travel

- Activity data used: Spend data on local travels by bus and subway..
- Emission factors: NTM (2022 & 2019), Vattenfall Bra miljöval (2020).
- Assumptions: For both bus and subway, it is assumed that one ticket costs £2.80 and one trip is 20 km.

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption for Advania UK in kWh, allocated share of facility electricity in kWh.

- Emission factors: IEA (2020), AIb (2021 & 2018).
- Assumptions: -

Fuel use in facilities

- Activity data used: Consumption of natural gas and diesel in kWh.
- Emission factors: Energiföretagen (2021), The Swedish Environmental Protection Agency (2023), The Swedish Energy Agency (2023).
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: Reported no leakages.
- Emission factors: -
- Assumptions: -

Electricity in data centers

- Activity data used: Operational electricity consumption for Advania UK in kWh where available.
- Emission factors: IEA (2023 & 2019), AIB (2021 & 2018), Singapore Energy Market Authority (2022).
- Assumptions: For those data centers without information on electricity use, this has been estimated based on those reporting. For all data centers, the average of those PUE numbers reported within Advania Group has been applied.

Refrigerant leakage in data centers

- Activity data used: Estimated operational electricity consumption for Advania UK in kWh.
- Emission factors: The Swedish Environmental Protection Agency (2022).
- Assumptions: See section Average value for refrigerant leakage in chapter 2.

Transportation and distribution
Please refer to the Common Methodology in chapter 2.

Purchased hardware
Please refer to the Common Methodology in chapter 2.

Other purchases (optional categories)
Advania UK has not collected any activity data for optional categories.

Advania Serbia

For Advania Serbia, the total emissions for the fiscal year 2023 are 62 tons of CO_2e excluding employee commuting and 83 tons of CO_2e including the commuting. Compared to 2022, the total emissions for Advania Serbia have decreased by 15% excluding the commuting.

Results and Analysis

Figure 25 below displays the emissions within each Scope for Advania Serbia. The emissions distribution differs from the group with the largest share of emissions in Scope 2 and only about a third of the emissions in Scope 3, including the employee commuting which is not a required category to report on. All in all, the results for Advania Serbia come with a high degree of uncertainty due to lack of actual data and estimates used to cover data gaps. Only about 15% of the emissions were calculated using actual data, the rest were based on estimates.

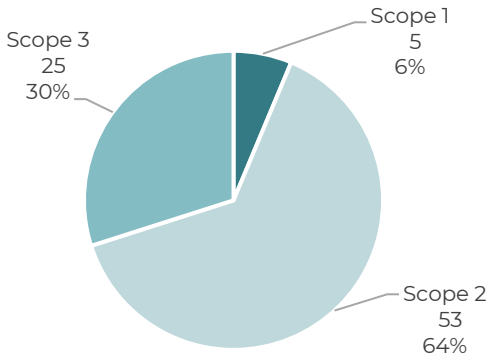


Figure 25. Greenhouse gas emissions [ton CO_2e] for Advania Serbia, divided into Scopes.

Figure 26 below displays the emissions split into categories over the years showing the reduction in emissions from purchased hardware and transportation, which are closely interlinked, and increase in emissions from energy and fuel use. The “voluntary categories” bar includes employee commuting and shows that emissions from employee commuting was not reported last year. Comparing the results between 2022 and 2023 should therefore be done bearing the difference in Scope in mind. Below, the categories are presented more thoroughly.

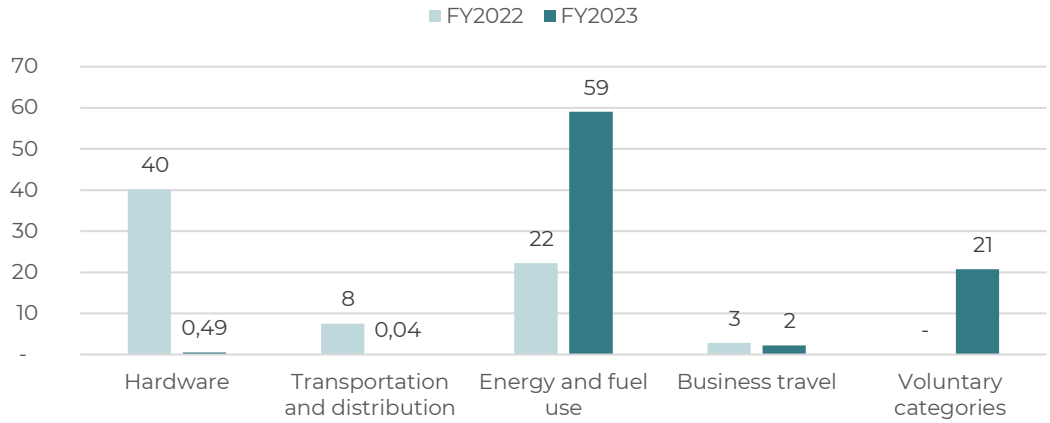


Figure 26. Emissions [ton CO_2e] for Advania Serbia divided into hardware, transportation and distribution, energy and fuel use, business travel and voluntary categories which in this case represents employee commuting.

Hardware & Transportation and Distribution

The emissions from the purchased hardware is not a representative case for the group. Serbia's emissions from hardware make up less than half a ton of CO_2e, that is less than 1%, of Advania Serbia's total impact. This year, Advania Serbia only purchased 10 products in total, mostly smartphones, while they last year purchased about a hundred monitors which are more emissions intensive in production and holds a higher weight. This is the main driver behind the reduction of these emissions.

As the transports emissions are closely linked to the weight of the purchase hardware, these emissions are also small in comparison to the rest of the group and have decreased compared to 2022 for Serbia.

Energy and Fuel Use

Advania Serbia only have one office and do not have any data centers under their operational control. No data was reported for this office during the 2023 disclosure which makes it difficult to compare against 2022. The electricity consumption has been estimated using reference values from the Swedish Energy Agency this year, while the consumption was reported last year. Natural gas consumption was estimated both year is a similar fashion and is therefore unchanged in this year's results, see Table 35 below. The emissions increase from the electricity consumption due to the choice of estimate used and should be considered when comparing the results between the years.

Table 35. Breakdown of the emissions and energy use in the office in Serbia.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Energy 2022, kWh
Electricity	52,7	*15,8*	68 937	20 753
Heating	-	-	-	-
Cooling	-	-	-	-
Fuel use	6,4	6,4	25 406	25 406
Refrigerant leakage	-	-	-	-
Total	**59,0**	***22,2***	**94 343**	**46 159**

Business travel & Employee Commuting

Emissions from business travel are slightly reduced from last year. The emissions are insignificant compared to the overall results for the Group, and both years only two trips by flight were made, which are the only emissions reported in the business travel category.

Emissions from employee commuting were estimated this year but were not accounted for last year.

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Serbia.

Business travel

Company operated cars

- Activity data used: -
- Emission factors: -
- Assumptions: -

Flights

- Activity data used: Passenger kilometers (pkm) provided by Advania Serbia.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: -
- Emission factors: -
- Assumptions: -

Train travel

- Activity data used: -
- Emission factors: -
- Assumptions: -

Taxi travels

- Activity data used: -
- Emission factors: -
- Assumptions: -

Other business travel

- Activity data used: -
- Emission factors: -
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Advania Serbia's operational electricity consumption, in kWh. Advania's allocated share of common electricity in kWh based on the facility's area.
- Emission factors: AIB (2018).
- Assumptions: As the common electricity consumption was unknown, the average kWh/m² of those reported within Advania Group has been applied.

Heating in facilties

- Activity data used: -

- Emission factors: -
- Assumptions: -

Cooling in facilities

- Activity data used: The district cooling consumption (kWh) is already included in the reported electricity consumption.
- Emission factors: -
- Assumptions: -

Fuel use in facilities

- Activity data used: Natural gas consumption in kWh.
- Emission factors: Energiföretagen (2021)
- Assumptions: As the natural gas consumption for 2023 was unknown, the consumption reported in 2022 was used.

Refrigerant leakage in facilities

- Activity data used: Reported no refrigerant refill (R290 & R410A)-
- Emission factors: -
- Assumptions: -

Electricity in data centers

- Activity data used: -
- Emission factors: -
- Assumptions: -

Refrigerant leakage in data centers

- Activity data used: -
- Emission factors: -
- Assumptions: -

Transportation and distribution

Please refer to the Common Methodology in chapter 2.

Purchased hardware

Please refer to the Common Methodology in chapter 2.

Advania Sri Lanka

For Advania Sri Lanka, the total emissions for the fiscal year 2023 are 54 tons of CO_2e. Compared to 2022, the total emissions for Advania Sri Lanka have decreased by 67%.

Results and Analysis

Figure 27 below shows the emissions per Scope for Advania Sri Lanka. As can be seen, the emissions in the Sri Lankan operations end up in Scopes 2 and 3. Overall, 79% of the emissions are calculated based on actual activity data, with the remaining emissions being based on estimated activity data.

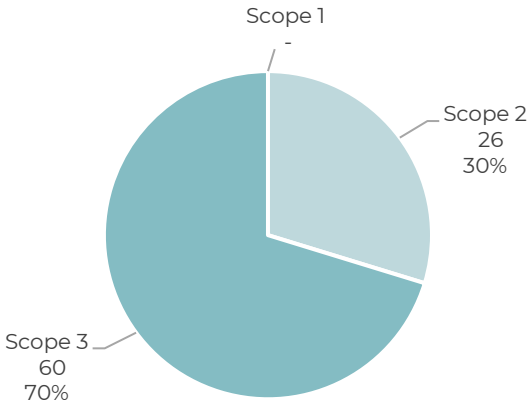


Figure 27. Greenhouse gas emissions [ton CO_2e] for Advania Sri Lanka, divided into Scopes including voluntary Scope 3 categories.

The largest share of the Scope 3 emissions come from employee commuting followed by business travel. Employee commuting was not reported in 2022 but this year stands for just over half of Sri Lanka's Scope 3 impact. Without the voluntarily reported employee commuting, business flights stand for roughly 90% of Advania Sri Lanka's Scope 3 impact.

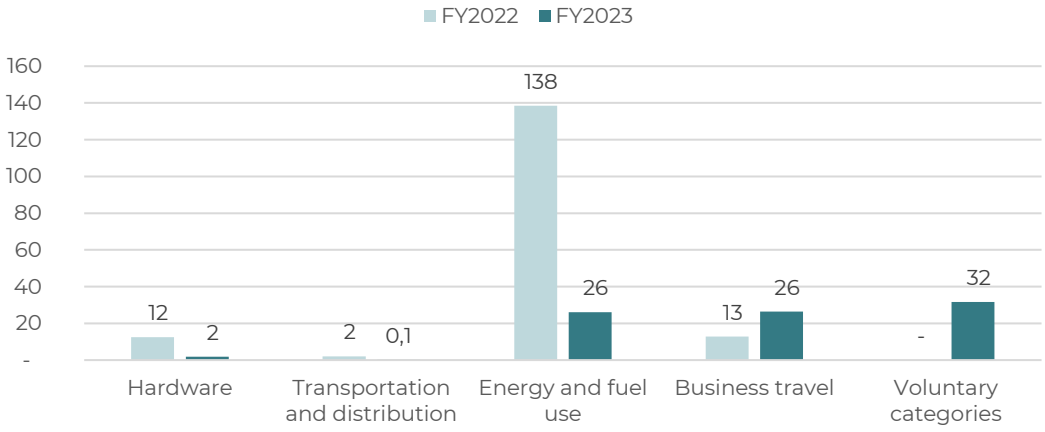


Figure 28. Emissions [ton CO_2e] for Advania Sri Lanka divided into hardware, transportation and distribution, energy and fuel use, business travel and voluntary categories which in this case represents employee commuting.

Hardware & Transportation and Distribution

The climate impact from the hardware purchased by Advania Sri Lanka is insignificant in comparison to the total purchases of the group. Less than hundred products in total, with the larger part being computer mice, smartphones and headphones, making up less than a hundredth of a percent of the total hardware purchases of the group. The emissions decrease since last year in this category comes from a change in which products were purchased, with the more emissions intensive monitors being the most purchased product type last year.

Fewer and lighter products purchased this year also lead to a decrease in the estimated emissions from transportation and distribution. Although the emissions from transportation and distribution stand for a small share of the total impact, the estimates behind these calculations could be reviewed going forward as Sri Lanka stands out from the other Advania companies geographically.

Energy and Fuel Use

The energy use in the facility in Sri Lanka have decreased by over 80% compared to 2022, leading to a similar reduction in emissions. Sri Lanka only reported energy use in one facility, an office, both in 2022 and in 2023 and this facility uses a slightly higher share of renewable sources this year than previously, but the main driver behind the decrease is the reduced energy consumption.

Table 36. Breakdown of emissions and energy use in the office in Sri Lanka.

Detailed emissions from offices	Total emissions 2023, ton CO2e	*Total emissions 2022, ton CO2e*	Energy 2023, kWh	Energy 2022, kWh
Electricity	25,6	*138*	61 072	449 000
Heating	-	-	-	-
Cooling	0,4	*0,3*	23 843	16 434
Fuel use	-	-	-	-
Refrigerant leakage	-	-	-	-
Total	**26,0**	***138***	**84 915**	**465 434**

Business Travel

The emissions from Advania Sri Lanka's business travel come from business flights and hotel stays. Compared to 2022, the business flight mileage has doubled leading double the emissions over the years. However, it should be noted that the mileage is very low in comparison to other Advania countries, and the merely 60 000 km traveled this year refers to four roundtrips between Oslo and Colombo. As Sri Lanka is geographically far away from all of Advania's other countries, a couple of extra roundtrips leads to big swings in the emissions results.

Specific Methodology and Assumptions

Below, a walkthrough is presented of the activity data, emission factors, and assumptions used by Advania Sri Lanka.

Business travel

Company operated cars

- Activity data used: -
- Emission factors: -
- Assumptions: -

Flights

- Activity data used: Reported kilometers (km) travelled.
- Emission factors: NTM (2022).
- Assumptions: -

Hotel nights

- Activity data used: Amount of guestnights in Europe.
- Emission factors: DEFRA.
- Assumptions: -

Train travel

- Activity data used: -
- Emission factors: -
- Assumptions: -

Taxi travels

- Activity data used: -
- Emission factors: -
- Assumptions: -

Other business travel

- Activity data used: -
- Emission factors: -
- Assumptions: -

Energy and fuel use

Electricity in facilities

- Activity data used: Operational electricity consumption from grid and renewable sources, allocated to Advania's share of the facility, in kWh. Common electricity consumption allocated to Advania's share in kWh.
- Emission factors: IEA (2017), Vattenfall (2021).
- Assumptions: -

Heating in facilities

- Activity data used: -
- Emission factors: -
- Assumptions: As the facility is located in a tropical geographical location and have not reported any heating consumption, it is assumed that there is no heating of the facility. The same assumption was applied in 2022 calculation.

Cooling in facilities

- Activity data used: Reported district cooling consumption in kWh.
- Emission factors: AIB (2018). Swedenergy (2014), AIB (2020).
- Assumptions: -

Fuel use in facilities

- Activity data used: -
- Emission factors: -
- Assumptions: -

Refrigerant leakage in facilities

- Activity data used: No refill of refrigerant was reported.
- Emission factors: -
- Assumptions: -

Electricity in data centers

- Activity data used: No data centers are used.
- Emission factors: -
- Assumptions: -

Refrigerant leakage in data centers

- Activity data used: No data centers are used.
- Emission factors: -
- Assumptions: -

Transportation and distribution

Please refer to the Common Methodology in chapter 2.

Purchased hardware

Please refer to the Common Methodology in chapter 2.

5.Energy Mapping

According to the Global Reporting Initiative (GRI) standard for energy mapping, a company should, in addition to the emission report, inform on the energy consumption both within and outside of its own business. Here, the methodology is presented along with the results from the energy mapping completed for the reported emission categories.

Methodology

The energy mapping includes the total use of energy used for business travel, electricity use, heating, and cooling. For the use of electricity, heating, and cooling, the energy mapping is based on the reported energy use from each office and data center.

The energy mapping for Advania's business travels comes from the reported data, either in the form of kilometres travelled (km), the amount of fuel used (litres), money spent (SEK), or the number of nights at hotels. An energy factor (kWh/km), as offered by the Network of Transport Measures (NTM), has been used for train travel and flights. Travel by car (both company-operated cars and taxis) has an energy factor (J/litres) from the Swedish Energy Agency (The Swedish Energy Agency). Relevant conversion factors were used to change units to cover all data points.

Results for Energy Mapping

The overall energy use for Advania Group in 2023 sums up to about 33,7 GWh in own operations, divided by 30,4 GWh in facilities and 3,3 GWh in cars.

Table 37. The energy and fuel use in Advania's operations in 2023.

Energy and fuel use	Energy consumption, kWh
Offices	12 384 493
Data centers	17 985 422
Cars	3 335 661
Total	**33 705 576**

In the facilities, 78% of the energy use is actively purchased from renewable sources. On top of the 78% of active renewable sourcing, there are renewable shares in the residual electricity grid and district heat mixes. Adding these indirect renewable purchases, the total share of renewable energy increases to 85%. Table 38 shows that Advania Sweden and Advania Norway are the biggest users of energy in their facilities.

Table 38. The energy use in Advania Group's facilities divided per country. The two columns on the far right show the energy use in data centers specifically and are subsets of the total facility energy use in columns 2 and 3.

Energy in facilities, country	Actively sourced renewable energy, kWh	Residual energy*, kWh	*Actively sourced renewables in data centers, kWh*	*Residual energy in data centers, kWh*
Denmark	147 458	81 101	*147 458*	*3 480*
Finland	5 445 760	276 391	*5 260 074*	-
Iceland	6 670 542	17 739	*1 469 130*	*17 739*
Norway	4 689 827	3 228 649	*4 689 827*	*926 904*
Serbia	-	94 343	-	-
Sri Lanka	11 332	73 583	-	-
Sweden	6 042 789	2 061 336	*4 494 026*	-
UK	621 149	907 916	*540 089*	*436 695*
Total	**23 628 857**	**6 741 058**	***16 600 604***	***1 384 818***

* Residual energy refers to all energy not actively sourced from renewable sources, for example the Nordic residual mix is included here. Although parts of the Nordic residual mix and the Swedish average district heat come from renewable sources, it is not an active choice to use renewable energy.

Contact 2050

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