

Viasat FY2023 greenhouse gas inventory report

Chapter 1: General description of the organization's goals and inventory objectives

Viasat Inc. (Nasdaq: VSAT) is a global communications company that believes everyone and everything in the world can be connected. To accomplish our mission to connect the world, we are developing the ultimate communications network to power high-quality, secure, affordable, and fast connections to enhance the lives of people everywhere. Founded in 1986 and based in Carlsbad, California, Viasat's approximately 5,800 global employees are dedicated to bringing the potential of the internet to all. We are an innovator in communications technologies and services, focused on making connectivity accessible, available, and secure. We power millions of connections on land, in the air, and at sea through three business segments:

Satellite Services

We use our proprietary, high-capacity satellite platform to provide high-speed broadband services with multiple applications to consumers, enterprises, and mobile broadband customers, including commercial airlines and maritime vessels.

Commercial Networks

We develop advanced satellite and wireless products, systems, and solutions that enable high-speed fixed and mobile broadband services.

Government Systems

We provide global fixed and mobile broadband products and services, satellite communications systems, and tactical data links to military and government users around the world. We also develop secure networking, cybersecurity, and information assurance products and services.

EHS policy

Viasat strives to connect people and businesses worldwide and recognizes the impacts our products and operations have across the globe and within the communities where we work. We are committed to environmental protection and sustainability, pollution prevention, risk reduction, compliance, and to fostering a positive environmental, health and safety culture that promotes the wellbeing of individuals, their working conditions, and our planet.

Our environmental objectives are to:

1. Reduce greenhouse gas emissions through tracking and strategic implementation of efficient infrastructure and renewable energy.
2. Promote recycling of applicable and significant waste streams across Viasat's many locations.
3. Exercise product stewardship through the design, procurement, and manufacturing aspects of our business.

As we continue to expand upon our annual GHG inventory, in breadth and depth, we seek to deepen our understanding of our largest environmental impacts and where we can make the most significant improvements, with respect to the needs of our planet and business priorities.

This FY23 (April 1, 2022 – March 31, 2023) Greenhouse Gas report (GHG) has been prepared in accordance with ISO 14064-1:2018. This report is being audited to a limited level of assurance by BSI and is being published with the following considerations:

- › It includes business activities from legacy RigNet (Viasat Energy Services), as well as newly established ground infrastructure that supports the ViaSat-3 constellation.
- › Only CO₂, CH₄, and N₂O GHGs were evaluated for inclusion in this report.
- › This is the first year Viasat is publishing a scope 3 inventory.
- › Our base year will be changed from FY22 to FY23 to account for all the above.

Members of the core inventory preparation team are aware of all principles and requirements within the GHG protocol and ISO 14064-1:2018 standard, respectively. The inventory preparation team worked with contributors to request data that was input into Viasat's GHG calculation templates.

Viasat's Sustainability Management, within the Social Impact and ESG team, and the People and Culture organization, is responsible for the content shared within this report.

Overall responsibility lies with Tory See, Director, Social Impact & ESG.

Responsibility for the preparation of the inventory and report:

Sustainability Manager – Ashton Shaw

Support and preparation of the inventory:

Lead Materials Science Engineer – Jordan Dobson

Chapter 2: Organizational boundaries

The consolidation of Viasat's GHG emissions is managed using the operational control approach. This approach considers all emission sources over which Viasat and its entities control the operating procedures and decisions.

Chapter 3: Reporting boundaries

Base year: Inventory base year and protocol for adjustments

Base year designation

Selected base year

Fiscal Year (FY) 2023: April 1, 2022 – March 31, 2023

Base year recalculation policy

Per ISO 14064-1 Section 5.3.2, a baseline recalculation policy should account for the following:

- › Changes in operational boundaries,
- › Ownership and control of GHG sources transferred into or out of organizational boundaries, or
- › Changes to GHG quantification that results in significant changes

The [Greenhouse Gas Protocol Corporate Standard](#) covers everything in the ISO standard but with more detail, and therefore Viasat will use it to guide its recalculation policy. The GHG Protocol Corporate Standard says that base year recalculations will be triggered when the following events occur and have a significant impact on base year emissions:

- › Structural changes (mergers, acquisitions, and divestments as well as outsourcing/insourcing of emitting activities)
- › Changes in calculation methodology or improvements in the accuracy of emission factors or activity data
- › Discovery of significant errors, or a number of cumulative errors, that are collectively significant.

For the purpose of this recalculation policy, Viasat defines **significant** in the same way that the Science Based Target Initiative (SBTi) and The Climate Registry define significant: “Significant change is defined as a cumulative change of **five percent** or larger in an organization’s total base year emissions (CO₂e).” ([SBTi Criteria](#)).

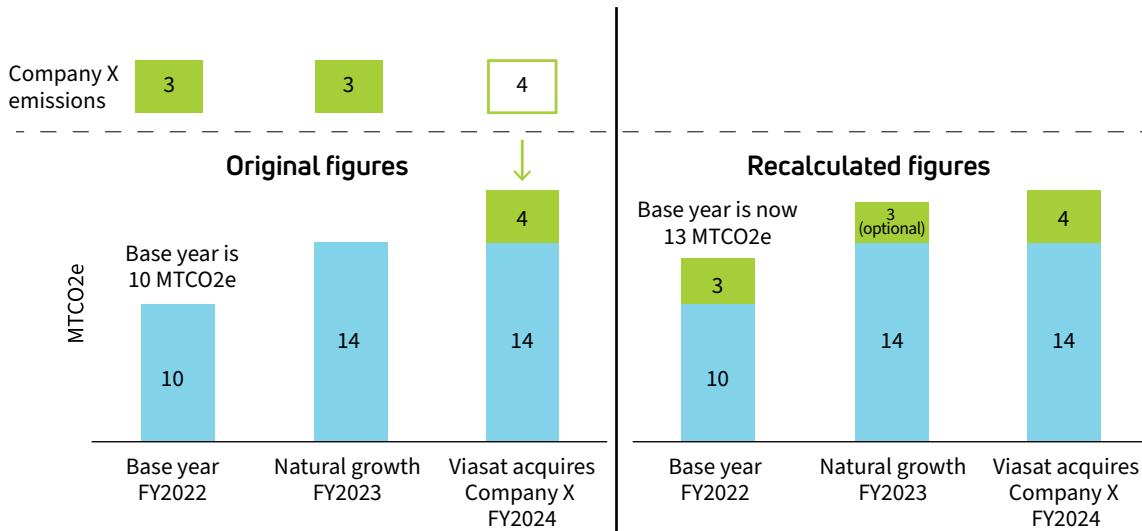
Per the GHG Protocol Corporate Standard and ISO 14064-1, the following situations will NOT result in a base year recalculation for Viasat (p. 38-39 of Corporate Standard):

- › Organic growth or decline (increases or decreases in production output, changes in product mix, and closures and openings of operating units owned/controlled by Viasat)
- › The acquisition or divestment of entities that did not exist in the base year
- › Outsourcing or insourcing of activities already reported in an inventory but now included in a different scope

Additionally, per the GHG Protocol, if an acquisition or divestiture takes place **in the middle of the reporting year**, Viasat will recalculate base year emissions for the entire year, rather than only for the remainder of the reporting period after the structural change occurred.

See figure 2 below for a simplified example of how Viasat intends to recalculate its base year emissions for a future illustrative acquisition in FY2024 (reporting year in this example).

Figure 2. Illustrative example of base year recalculation following acquisition



In the example above, Viasat has recalculated emissions for its base year (FY2022) and the year in between its base year and reporting year (FY2023). Per the GHG Protocol, recalculating emissions for years between the base year and the reporting year is optional, so in real circumstances, Viasat will assess whether to recalculate on a case-by-case basis. Recalculations for the base year, however, were required since the acquisition resulted in a change to base year emissions that were greater than 5%.

Note, if in the future, acquisitions and/or divestments become a regular part of Viasat’s core operations, Viasat may explore using a multi-year average base year, if this helps smooth out unusual fluctuations in GHG emissions. This is allowed by both the GHG Protocol and SBTi.

Factors for consideration in assessing significance and materiality include:

- › Estimated amount of CO2e emissions
- › Ability to influence the emission source
- › Ability to obtain data

Scope	Category	Emission sources considered
Scope 1	Fugitive emissions	Estimated refrigerant leakage from cooling systems at offices and ground network
Scope 1	Mobile combustion	Fuel usage from fleet vehicles
Scope 1	Stationary combustion	Fuel usage from heating systems and generators
Scope 2	Purchased electricity	Purchased electricity at offices and ground network
Scope 2	Purchased electricity	Purchased electricity for data centers and ground network infrastructure
Scope 3 (other indirect GHG)	C1: Purchased goods and services	Annual spend on purchases from ERP systems, in addition to purchased cloud and satellite capacity
Scope 3 (other indirect GHG)	C2: Capital goods	Annual spend on fixed assets from ERP systems
Scope 3 (other indirect GHG)	C3: Fuel and energy-related activities	Well to tank emissions from the extraction, refining, transportation, and distribution loss of fuel for mobile and stationary combustion, and purchased electricity
Scope 3 (other indirect GHG)	C4: Upstream transportation & distribution	Fuel consumption from road, air and ocean transport, service installations and product returns, in addition to warehouse energy estimates
Scope 3 (other indirect GHG)	C5: Waste generated in operations	Waste and recycling spend and tonnage data by material type as available. Viasat UK was not assessed due to lack of available data
Scope 3 (other indirect GHG)	C6: Business travel	Fuel estimates from commercial and company air, rail and rental car travel, in addition to hotel room energy use
Scope 3 (other indirect GHG)	C7: Employee commuting	Fuel and energy estimates from employee commuting and telework
Scope 3 (other indirect GHG)	C8: Upstream leased assets	Energy use from leased antenna capacity
Scope 3 (other indirect GHG)	C9: Downstream transportation and distribution	This was not applicable to Viasat's operations and no emission sources were identified in this category
Scope 3 (other indirect GHG)	C10: Processing of sold products	This was not applicable to Viasat's operations and no emission sources were identified in this category

Scope	Category	Emission sources considered
Scope 3 (other indirect GHG)	C11: Use of sold products	Energy use from residential equipment, commercial antenna systems and estimated fuel consumption from airborne systems
Scope 3 (other indirect GHG)	C12: End-of-life treatment of sold products	This was considered and was not assessed due to lack of available data
Scope 3 (other indirect GHG)	C13: Downstream leased assets	This was not applicable to Viasat's operations and no emission sources were identified in this category
Scope 3 (other indirect GHG)	C14: Franchises	This was not applicable to Viasat's operations and no emission sources were identified in this category
Scope 3 (other indirect GHG)	C15: Investments	Estimated emissions from major corporate holdings

Chapter 4: Quantified GHG inventory of emissions and removals

IPCC AR4 GWPs were used for the development of this report and our FY23 GHG inventory. This assessment report was used to align with the emissions factors presented in the EPA's April 2023 GHG Emission Factor Hub.

GHG	GWP (AR4)
CO2	1
CH4	25
N2O	298

Year-over-year GHG comparison

Inventory scope	FY22 (tCO2e)	FY23 (tCO2e)
Scope 1	2,431	2,868
Scope 2 (location)	25,718	30,816
Scope 3	-	2,109,197
Total scope 1 + scope 2 (location)	28,149	33,684

*Change in methodology, VS3, RigNet, Bloom fuel cell

Consolidated FY23 GHG report

Reporting company		Viasat, Inc.						
Person or entity responsible for the report		Ashton Shaw	ashton.shaw@viasat.com					
Reporting period, frequency, and contact point		From 4/1/2022 to 3/31/2023						
Emissions		Notes	2023 CO2e total (tons)	Carbon dioxide (CO2)	Methane (CH4) in CO2e	Nitrous Oxide (N2O) in CO2e	Qualitative uncertainty	Notes
1	Category 1: Direct GHG emissions and removals in tons CO2e (1)		2,868					
1.1	Direct emissions from stationary combustion		2,267	2,265	1.1	1.4	Good	
1.2	Direct emissions from mobile combustion		287	286	0.3	0.73	Good	
1.3	Direct process emissions and removals arise from industrial processes		-					
1.4	Direct fugitive emissions arise from the release of greenhouse gases in anthropogenic systems		314				Good	
1.5	Direct emissions and removals from land use, land use change, and forestry		-					
Emissions		Notes	2023 CO2e Total (tons)	Carbon dioxide (CO2)	Methane (CH4) in CO2e	Nitrous oxide (N2O) in CO2e	Qualitative uncertainty	Notes
	Indirect emissions in tons CO2e (2)	S/NS[*]	2,140,014					
2	Category 2: Indirect GHG emissions from imported energy (3)	S	36,891					

Consolidated FY23 GHG report (cont.)

Emissions		Notes	2023 CO2e Total (tons)	Carbon dioxide (CO2)	Methane (CH4) in CO2e	Nitrous oxide (N2O) in CO2e	Qualitative uncertainty	Notes
2.1	Indirect emissions from imported electricity	S	30,816				Good	Scope 2
2.2	Indirect emissions from imported energy	S	6,075				Poor	Category 3
3	Category 3: Indirect GHG emissions from transportation	S	101,315					
3.1	Emissions from upstream transport and distribution for goods	S	83,096				Fair	Category 4
3.2	Emissions from downstream transport and distribution for goods	NS	-					Category 9
3.3	Emissions from employee commuting includes emissions related to telework	S	8,820				Fair	Category 7
3.4	Emissions from client and visitor transport	NS	-					
3.5	Emissions from business travel	S	9,399				Good	Category 6
4	Category 4: Indirect GHG emissions from products used by organization	S	197,211					
4.1	Emissions from purchased goods	S	183,195				Fair	Category 1
4.2	Emissions from capital goods	S	3,910				Fair	Category 2
4.3	Emissions from the disposal of solid and liquid waste	S	10,017				Poor	Category 5
4.4	Emissions from the use of assets	S	89				Good	Category 8
4.5	Emissions from the use of services that are not described in the above subcategories (consulting, cleaning, maintenance, mail delivery, bank, etc.)	NS	-					

Consolidated FY23 GHG report (cont.)

Emissions		Notes	2023 CO2e Total (tons)	Carbon dioxide (CO2)	Methane (CH4) in CO2e	Nitrous oxide (N2O) in CO2e	Qualitative uncertainty	Notes
5	Category 5: Indirect GHG emissions associated with the use of products from the organization	S	1,804,597					
5.1	Emissions or removals from the use stage of the product	S	1,790,830				Fair	Category 11
5.2	Emissions from downstream leased assets	NS	-					Category 13
5.3	Emissions from end-of-life stage of the product	NS	-					Category 12
5.4	Emissions from investments	S	13,767				Fair	Category 15
6	Category 6: Indirect GHG emissions from other sources	NS	-					
Other related information								
	Performance tracking (emissions and removals by metric, e.g. tons CO2e per annual revenue)		13.18 tons / million \$USD revenue					
	Base year GHG emissions, removals, and stocks; and adjustments to base year		FY23 is the base year					
	Disclosure of most significant sources, sinks, and reservoirs		Scope 3: Category 11 is the most significant emission source					

*Data quality is estimated as: Good if data quality indicators (Precision, Completeness, and Temporal, Geographical, and Technological representativeness) are estimated as Good to Very Good quality. Fair is used if any indicator is rated fair. Indirect emissions from imported energy are estimated as poor quality given the limited inclusion of lifecycle (or well to tank WTT) estimates across scope 3 categories.

(1) Category 1 (direct emission) is subdivided in accordance with the recommendations of Annex B of the ISO14064-1: 2018 standard.

(2) Indirect emissions are subdivided in accordance with the recommendations of Annex B and are fully compatible with standards requirements.

(3) This category may include transmission and distribution emissions.

GHG accounting methodologies

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
1	1		<p>Quantities of natural gas and electricity consumed on site in the reporting year were obtained from Viasat utility bills, estimated using average EIA energy intensity/sq. ft. by region, or based on energy spend and average costs of energy by month in the reporting year. Average gallons of diesel and gasoline consumed by fleet vehicles and generators were obtained from supplier reports, estimated by spend and average monthly fuel prices during the reporting period, or estimated based observed fuel consumption rates.</p> <p>Refrigerant consumption was obtained from supplier reports.</p>	<p>Emissions factors (secondary data): Emissions factors for electricity, natural gas, gasoline, and diesel consumption from the EPA's Greenhouse Gas Emissions Factors Hub (2022) were used. Refrigerant emissions factors in 100-year GWP were also used from EPA Hub (2022), as well as IPCC Emission Factor database.</p>	<p>Average gallons of diesel and gasoline consumed by fleet vehicles and generators were obtained from supplier reports, estimated by spend and average monthly fuel prices during the reporting period, or estimated based observed fuel consumption rates.</p> <p>Refrigerant consumption was estimated based on system charge capacity and average DEFRA refrigerant loss rates for medium commercial AC equipment (6% annually).</p> <p>These estimations are based on methods consistent with the GHG Protocol, though direct measurement of fuel consumption could be a more accurate method.</p>	<p>Viasat is planning to utilize the Persefoni tool for FY24 GHG emissions calculations to improve accuracy.</p>	Good
2.1	2		<p>Data on grid electricity consumed (kWh) in the reporting year at each Viasat site were obtained from utility bills, estimated using average EIA energy intensity/sq. ft. by region, or based on energy spend and average costs of electricity by month in the reporting year. Activity data was estimated using average EIA energy intensity / sq. ft. by region, or based on energy spend and average costs of electricity by month in the reporting year.</p>	<p>Site-specific EPA eGRID subregions and their associated 2022 total output emissions factors were used for location-based emissions, 2022 Green-e residual emission rates were used for market-based emission factors and carbonfootprint.com country-specific electricity grid emission factors from March 2022 were used for international locations.</p>	<p>Amounts of grid electricity consumed by site were collected from utility invoices and multiplied by the appropriate location- and market-based emissions factors to arrive at associated tons CO2e emissions.</p> <p>Amounts of grid electricity consumed by site were estimated based on average electricity consumption, square footage, or estimated based on utility spend, averaging the cost of electricity by geography and month during the reporting period, divided by the total electricity spend during the reporting period and multiplied by the appropriate location- and market-based emissions factors to arrive at associated tons CO2e emissions.</p> <p>These methodologies and allocation methods were selected due to the availability of source data.</p>	<p>Viasat is planning to utilize the Persefoni tool for FY24 GHG emissions calculations to improve accuracy.</p>	Good

GHG accounting methodologies (cont.)

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
4.1	3	1	<p>Purchasing data was collected for all Viasat business and aggregated by related NAICS code. In some cases where NAICS code was not already available, POs were mapped to NAICS codes based on supplier or commodity type. This data was uploaded to the Persefoni tool, which uses built-in emission factors.</p> <p>FY23 emissions related to use of Azure systems were not available at the time of review. FY22 emissions were used as a placeholder, as use of the Azure systems has not changed significantly.</p> <p>Electricity utilization related to Avanti satellite usage were provided by Avanti Communications, on a country-by-country basis.</p>	Persefoni utilizes inflation-adjusted U.S. EPA EEIO emission factors. Emission factors for each country were collected from relevant sources like the IGES Grid Emission Factors or U.K. Greenhouse Gas Reporting Conversion Factors 2022.	<p>NAICS codes were assigned based on supplier info, commodity code, or line item description. Some accuracy was lost in assigning NAICS codes, as NAICS codes may not exactly reflect goods and services across all mapped purchases. Emission factors of selected NAICS codes did not vary significantly and should not result in substantial changes in reported emissions.</p> <p>RigNet and Viasat UK data could not be classified on the PO level and had to be reviewed based on the total expenditure and company NAICS code.</p> <p>Azure data was based on previous year data because FY23 data was not available. Using FY22 Azure emissions data does result in some inaccuracy in our inability to account for FY23 emissions directly, but FY22 and FY23 Azure use did not vary significantly, thus FY22 and FY23 emissions should not vary significantly.</p>	The GHG emissions team is working with other Viasat organizations to increase the amount of information available for emission factor/NAICS code assignment. Updates are ongoing for the Azure dashboard to be able to stay up-to-date with related yearly emissions.	Fair
4.2	3	2	Capital goods purchasing data was collected and items were aggregated by related NAICS code. In some cases where NAICS code was not already available, POs were mapped to NAICS codes based on supplier or commodity type. For RigNet and Viasat UK, capital goods purchasing information by line item was unavailable, and total capital goods spend was used, mapped to the organization's primary NAICS code. This data was uploaded to the Persefoni tool, which uses built-in emission factors.	Persefoni utilizes inflation adjusted U.S. EPA EEIO Emission Factors.	<p>NAICS codes were assigned based on supplier info, commodity code, or line item description. RigNet and Viasat UK data could not be classified on the PO level and had to be reviewed based on the total expenditure and company NAICS code.</p> <p>Some accuracy was lost in assigning NAICS codes, as NAICS codes may not exactly reflect goods and services across all mapped purchases. Emission factors of selected NAICS codes did not vary significantly and should not result in substantial changes in reported emissions.</p>	The GHG emissions team is working with other Viasat organizations to increase the amount of information available for emission factor assignment.	Fair

GHG accounting methodologies (cont.)

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
2.2	3	3	Scope 1 and 2 energy consumption was multiplied by transmission and distribution emission factors as available from U.K. DEFRA / IEA2022. ~57% of total scope 2 energy was included due to the use of a new system to calculating these figures and its present state of maturity.	The U.K. DEFRA WTT Fuel Emission Factors were used, in addition to IEA 2022 for T&D and purchased electricity by country. Calculations were conducted within the Persefoni application.	<p>This is an incomplete category estimate for scope 1 and 2 energy use. In addition, the indirect emissions from imported energy that resulted from other scope 3 categories has not yet been accounted for.</p> <p>Only 57% of scope 2 data was available for processing in the new system responsible for managing calculations in line with the IEA 2022 framework.</p> <p>Indirect mobile and stationary indirect fuel impacts were not calculated by country at the time of this report but are expected to be improved upon for FY24.</p>	The GHG emissions team is working with other Viasat organizations to increase the amount of information available for emission factor/NAICS code assignments. Updates are ongoing for the Azure dashboard to be able to stay up-to-date with related yearly emissions.	Poor
3.1	3	4	<p>Viasat received raw data of shipments from the Freight Audit and Payment Vendor Strategic IQ (SIQ). Upon downloading, Viasat associated each line item with road transport, air transport, water transport, or lease returns.</p> <p>Viasat receives data from vendor, Perfectvision, which estimates miles traveled based on number of service calls and an average distance per service call.</p> <p>Viasat UK provides transportation spend for GHG reporting as “Carriage In & Carriage Out”.</p> <p>Viasat reached out to FedEx Fort Worth logistics to determine the total amount of electricity and natural gas usage for Viasat products at that facility. Viasat used this data to estimate electricity and natural gas used across other logistics warehouses using shipment volume to allocate approximate kWh and therms.</p>	Emission factors from the EPA GHG Emission Factor Hub 2023[1] were used including eGrid emission factors (Table 6); steam and heat (Table 7); aircraft, light-duty truck, medium- and heavy-duty truck, and waterborne craft (Table 8). Persefoni emission factor based on U.S. EPA EEIO emission factors and inflation factors were used when data on spend was available instead of data on shipment volume.	<p>Warehouse electricity and natural gas consumption had to be estimated based on shipment volume. Smaller shipping organizations did not provide the related data. Warehouse utilization efficiency may not be equivalent for all warehouse providers. It was determined to be a low risk based on low variation in emissions and utilization volume.</p> <p>Emissions due to road travel for service requests were estimated using round trip distance estimations instead of direct mileage recording. Estimating service call mileage could be resulting in a reduction in accuracy. To counteract this, the estimates used were conservative, intended to be an accurate but slight overestimation.</p> <p>RigNet and Viasat UK Upstream Transport data could not be obtained with similar granularity to the primary Viasat emissions source. RigNet and Viasat UK transport data were not available across all types of upstream transport. Where possible, emission estimations were conducted on available data.</p>	Warehouse consumption is managed by Viasat's logistics providers. Viasat is working with the providers to obtain this data for future years. Viasat is working to standardize data collection across all business segments to increase data granularity.	Fair

GHG accounting methodologies (cont.)

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
4.3	3	5	Viasat collected waste distribution data from vendors including Biffa, Transpere, Shred-it, Technology Conservation Group, and other mixed solid waste vendors. Waste data was grouped based on available information including data type (\$/lb.), waste type, and waste handling method.	Emission factors include those from the EPA's Supply Chain Greenhouse Gas Emission Factors for U.S. Industries and Commodities and GHG Emission Factor Hub 2023[1] and U.K.'s DEFRA Emission Factor set. Waste types include hazardous waste, MSW, aluminum, batteries, copper, plastics, paper and board, and WEEE.	RigNet and Viasat UK waste data could not be obtained with similar granularity to the primary Viasat emissions source. RigNet and Viasat UK waste data were not available across all types of waste. Where possible, emission estimations were conducted on available data.	Viasat is working to standardize data collection across all business segments to increase data granularity.	Poor
3.5	3	6	Viasat collected travel data from Corporate Travel Management (CTM), which includes travel type, mileage, # of nights, service date, and other travel information. Data was provided by AVIS/Budget to support fuel use estimates. For executive travel, Viasat aggregated flight data from FlexJet, the service provider, to estimate fuel usage using aircraft fuel efficiency data and flight time. For helicopter usage, fuel usage was estimated using helicopter fuel use rates and flight time, using some assumptions about travel speed and altitude.	Emission factors used include those from the EPA's GHG Emission Factor Hub 2023[1] including Mobile Combustion (Table 2) and Business Travel (Table 10). Additional emission factors from the U.K. Government Greenhouse gas reporting: conversion factors from 2022 were used for European rail estimates and the radiative forcing multiplier used for air travel. DEFRA 2023 emissions factors by country/night stayed were used for hotel activity.	Emission factors should represent average use but may not be a perfect representative of the vehicles utilized. Emission factors used may be lower than actual vehicle emissions based on vehicle types utilized. As an example, road emissions are characterized for all vehicles, but pickup trucks may be more commonly used for service calls.	Viasat is planning to utilize the Persefoni tool for FY24 GHG emissions calculations to improve accuracy.	Good
3.3	3	7	Viasat calculated a weighted average distance traveled for each office using zip code-to-zip code distance after removing extraneous data related to remote employees. An average round-trip commute distance was calculated and applied for all international locations. Using Viasat's Power BI Dashboard, which pulls in data from Workday, Viasat gathered average percentage of days employees were on site vs. teleworking at each office to determine the breakdown between in office and telework.	Emission factors from the EPA's GHG Emission Hub 2023[1] were used, including eGrid emission factors (Table 6) and passenger car (Table 10).	Employee commuting data is based on average distances and attendance data. This can result in some shift, likely toward overestimation (assuming closer employees are more likely to work in office more frequently).	Viasat is working on refining commuting data, including efforts to quantify electric car use for commuting.	Fair

GHG accounting methodologies (cont.)

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
4.4	3	8	Viasat worked with product teams to collect data on number of products sold, product lifetime, type of energy required to power the product, amount of energy required/use (either provided per day or per month), and leased antenna utilization.	EPA eGRID Emission Factors from the EPA's GHG Emission Factor Hub 2023[1] and appropriate non-U.S. country emission factors, primarily from IGES Emission Factors 2022, were used.	Electricity consumption of upstream leased assets was based on antenna consumption rates and estimated utilization rate. This could result in decreased accuracy, particularly when accounting for utilization time.	Viasat is working with lease holders to update lease information and obtain more specific utilization data.	Good
	3	9	Not assessed.				
	3	10	Not assessed.				
5.1	3	11	<p>Viasat worked with the product management team to collect data on number of products sold, product lifetime, type of energy required to power the product, and amount of energy required/use (either provided per day or per month) for large antennas.</p> <p>Fixed connection points were measured by the gross adds of these products, which represents how many new product leases were initiated.</p> <p>For airborne products, sales data was extracted from Oracle for FY23. Weight data was collected from specifications for the representative products chosen. These products were selected based on data availability and sales volume. For the products selected (those where enough data was available for emissions estimation), total ton-miles shipped was estimated using product weight and estimated total miles shipped using information from MIT and Delta.</p>	eGRID Emission Factors and the aircraft, ton-miles emission factor from the EPA's GHG Emission Factor Hub 2023[1] and appropriate non-U.S. country emission factors, primarily from IGES Emission Factors 2022, were used.	<p>Viasat's estimation of the emissions impact of airborne products utilized commercial aircraft industry estimations and may not accurately reflect total distance transported. Additionally, Viasat was unable to estimate emissions for all airborne products, limiting the analysis to high volume products.</p> <p>Viasat's estimation of airborne products does not include all products and does not account for variation in aircraft use and type. Each of these is expected to have significant impact on accuracy, but this emission source was still included in the GHG emission reporting because the available data suggests highly impactful methods of reducing carbon emissions.</p>	Viasat is working with airborne product teams (internal) and seeking partnership with airline customers to assist with increasing the accuracy of emissions calculations.	Fair

GHG accounting methodologies (cont.)

Reference to consolidated report	Scope	Category	Description of methodologies and activity data used	References and/or explanation and/or documentation of emission and removal factors	Uncertainties and accuracy impacts on results	Description of planned actions for reducing uncertainty for the future inventory	Data quality
	3	12	Not assessed.				
	3	13	Not assessed.				
	3	14	Not assessed.				
5.4	3	15	Data on Viasat investments and their revenue was collected in coordination with accounting personnel. Scope 1 and 2 data was not available for Trellisware, the assessed investment.	Supply chain greenhouse gas emission factors v1.2 by NAICS-6, provided by the U.S. EPA, was used.	Viasat was unable to obtain Trellisware's scope 1 and 2 emissions for calculation. This required using the NAICS code and revenue for emission estimation instead of the recommended method. The method used likely results in overestimation and would include some of Trellisware's scope 3 emissions, which is not recommended by the GHG Protocol.	Viasat is working with Trellisware to make scope 1 and 2 data available in the future.	Fair

[1] The EPA Emission Factor Hub primarily contains combustion emission factors. ISO 14064-1:2018 states, "Emissions should be calculated in a 'cradle to supplier output gate' approach." Supplementary well-to-tank emission factors were not considered in the FY23 GHG reporting for these cases. Use of the Persefoni platform for FY24 GHG reporting will support use of cradle-to-gate emission factors.