

N.V. Eneco
Greenhouse Gas
Accounting Manual
2023 version



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Overview of changes compared to the 2022 version

Changes in scope 1

- More information is given on double counting of scope 1 stationary combustion for energy generation.
- Additional information regarding zero-emission vehicles has moved from scope 2 to scope 1.

Changes in scope 2

- Eneco has included a calculation that reflects the emissions that result from owning the district heating grid, where distribution losses occur.
- A clearer distinction is drawn between the GHG protocol and optional information, in line with the other parts of the accounting manual.

Changes in scope 3

- Materiality (both qualitative and quantitative) has been added, in order to justify the exclusion or inclusion of scope 3 categories.
- A description of the calculation method and the emission factors is given, or has been updated, for each applicable scope 3 category.
- It is explicitly stated that Eneco's value chain consists of the applicable scope 3 categories. This is not fleshed out with examples of tier 1 and 2 suppliers.
- Scope 3 category 4 has become applicable. A rough estimate is given, together with an explanation of why this category is immaterial and has been omitted.
- The explanation of the emission factor used for scope 3 category 7 has been improved. This includes a clarification of the emission factor for carpool commuting.
- A rough estimate is made of the investment, and the reason for not including the related emissions in our footprint is explained.
- Pergen, a third party CHP, is removed from the "optional information disclosure" and added to scope 3 category 11, since it has emerged that Eneco also has a natural gas agreement.
- The explanation for double counting between scope 3, category 11 and 3d is adjusted. It is based on CoOs on portfolio level in the power label that are generated by Pergen and CHPs from greenhouse entrepreneurs. In addition, a cap is added to this double counting adjustment. This cap is set to not correct more than the emissions from the grey power supplied to our customers.

1. Introduction

1.1. Aim of the accounting manual

Eneco is determined to live within the natural boundaries of our planet. That is why Eneco decided to become a sustainable energy provider and why it started to report its sustainability goals and progress in its One-Planet Plan (OPP) in 2015. In 2021, Eneco revised its strategy to include the ambition of becoming climate neutral by 2035. This ambition goes beyond Eneco's own operations and extends to its value chain. We are working together to achieve this ambition. Eneco, businesses and customers are all working to build a system in which energy can be generated within our planetary boundaries.

The climate mitigation targets set in the OPP are based on the most recent climate science, and have been validated by the Science Based Target Initiative (SBTi). This enables organisations to set the most ambitious targets in their sector in line with the Paris Climate Agreement goals with the aim of limiting global warming to 1.5°C.

The N.V. Eneco Greenhouse Gas Accounting Manual has been developed in order to track the aforementioned targets. This manual encompasses the organisational footprint as well as Eneco's value chain carbon footprint (VCCF). It explains how N.V. Eneco and its group companies ('Eneco') account for their greenhouse gas (GHG) emissions. Eneco reports these emissions in accordance with the GHG Protocol Corporate Accounting and Reporting Standard, an international standard for corporate accounting and the reporting of emissions, which categorises GHGs by scope (scope 1, 2 or 3) based on their source. With respect to scope 3, Eneco reports its emissions in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, which is a supplement to the GHG Protocol Corporate Accounting and Reporting Standard. This standard sets requirements and provides companies and other organisations with guidance on how to prepare and publicly report on a GHG emissions inventory that includes indirect emissions resulting from value chain activities (i.e. scope 3 emissions). Eneco calculates its emissions in accordance with the GHG Protocol Technical Guidance for Calculating Scope 3 Emissions, which is a supplement to the GHG Protocol Corporate Value Chain (Scope 3) Accounting & Reporting Standard. This document serves as a companion to the Scope 3 Standard and offers organisations practical guidance on calculating their scope 3 emissions. It provides information that is not contained in the Scope 3 Accounting and Reporting Standard, such as methods for calculating GHG emissions for all 15 scope 3 categories, data sources and worked examples. Eneco's decisions and interpretations are explained in detail in this Accounting Manual.

The N.V. Eneco GHG Accounting Manual aims to provide guidelines and information on Eneco's accounting policies, processing methods and disclosures, and it clarifies how emissions are to be measured, processed and disclosed for external reporting purposes.

Please contact the Sustainability Team if there are any other subjects you would like to be included in this Accounting Manual. The Sustainability Team is responsible for managing and updating the N.V. Eneco GHG Accounting Manual.

As this manual is derived from the documents published by GHG Protocol, Eneco distinguishes between information derived from the manual and how Eneco deals with it as follows:

Information taken from the GHG Protocol Standards and Guidelines is shown in these green boxes.

Specific requirements and additional information from the aforementioned documents are shown in blue boxes.

Eneco's interpretation of these documents, standards and guidelines, and its implementation of specific requirements, are described in running text in this document and are not shown in coloured boxes.

1.2. Revision of the N.V. Eneco GHG Accounting Manual

The Sustainability Team updates the N.V. Eneco GHG Accounting Manual regularly (at least once a year) to incorporate amendments to regulations and make improvements. Specific issues that arise during the year and not yet covered by the manual must be discussed with the Sustainability Team. Changes from previous versions are disclosed in a transparent manner. Where necessary, agreement is reached with the auditors (for 2023 and 2024 this is Deloitte) and position papers are drawn up by the Sustainability Team and, where appropriate, incorporated in the following year's GHG Accounting Manual.

2. GHG reporting

2.1. Purpose of GHG reporting

The interpretation of the GHG Protocol Corporate Accounting and Reporting Standard is based on the consolidated GHG emissions inventory of N.V. Eneco. The aim of GHG reporting is to provide relevant information on Eneco's value chain carbon footprint (VCCF). The information in the VCCF is helpful to many users when taking decisions. Users of Eneco's VCCF are stakeholders such as shareholders, employees, lenders, suppliers, customers, governments and their agencies, environmental organisations, NGOs and the general public. GHG reporting is also a way in which the Management Board renders account to shareholders when asking them to endorse its actions.

2.2. GHG reporting principles

The following principles, which are primarily qualitative in nature, are used to guide the implementation of the GHG Protocol Corporate Accounting and Reporting Standard:

- **Relevance:** Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.
- **Completeness:** Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.
- **Consistency:** Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods or any other relevant factors in the time series.
- **Transparency:** Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
- **Accuracy:** Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.

In the considerations and decisions made in this accounting manual, Eneco has endeavoured to incorporate all of the above principles for proper GHG reporting. Eneco tries to include as much information as possible in this manual. In some cases is referred to other documents to ensure this manual remains clear and comprehensible.

Chapter 3 and **chapter 4** aim to ensure that Eneco's GHG inventory reflects the organisation's GHG emissions, in terms of both relevance and completeness. Moreover, decisions and exclusions are justified throughout the entire manual. By producing this manual and identifying the proper methodologies, Eneco seeks to be consistent and accurate while remaining transparent on this topic.

3. Organisational boundary

3.1. Consolidation approach

For corporate reporting, two distinct approaches can be used to consolidate GHG emissions: the equity share approach and the control approach. Companies shall account for and report their consolidated GHG data according to either the equity share approach or the control approach.

The equity share approach is based on economic interest, which is the extent of the rights that a company has to the risks and rewards flowing from an operation. Typically, the share of risks and rewards is aligned with the ownership percentage. Whenever the equity share is used as consolidation approach, the share of GHG emissions in an operation is based on the share of equity.

When a company choosing the control approach for consolidating GHG emissions, the company accounts for 100% of the GHG emissions from operations over which it has control. This control can be either financial or operational. A company financially controls an operation if the company has the right to the majority of benefits of the operation, or retains the majority of the risks and rewards of ownership of the operation's assets. Operational control refers to the authority to introduce and implement operating policies at the operation.

Eneco has opted for the control approach over the equity share approach, primarily because this is in line with the financial reporting consolidation.¹ N.V. Eneco fully consolidates entities in its financial statements whenever it has control, even if the entity is not wholly owned (e.g. if it owns 50% of the shares). Control for consolidation purposes is defined as follows:

"An investor controls an investee if and only if the investor has all of the following elements: [IFRS 10:7]

- *power over the investee, i.e. the investor has existing rights that give it the ability to direct the relevant activities (the activities that significantly affect the investee's returns);*
- *exposure, or rights, to variable returns from its involvement with the investee;*
- *the ability to use its power over the investee to affect the amount of the investor's returns.*

Furthermore, all non-controlled entities are consolidated under "profit attributable to minority shareholders."

Moreover, the control definition used for the consolidation of the financial statements is quite similar to the definition of operational control in the GHG Protocol. In addition, the control approach best reflects Eneco's actual power, and therefore Eneco can take full ownership of all GHG emissions that it can directly influence and reduce. This control only applies to subsidiaries (i.e. entities that are controlled by the parent entity).

¹ Page 15 and 137 in the Eneco Accounting Manual 2022 (Financial)

Even though the financial control and operational control methods often result in similar GHG reporting, Eneco has chosen to focus on the operational control method. Consequently, Eneco accounts for 100% of the GHG emissions from operations over which it has control. This is in line with the first criterion of the definition of control in the financial Accounting Manual. Since all three criteria need to be met for a subsidiary to exist, all subsidiaries are subject to operational control by Eneco.

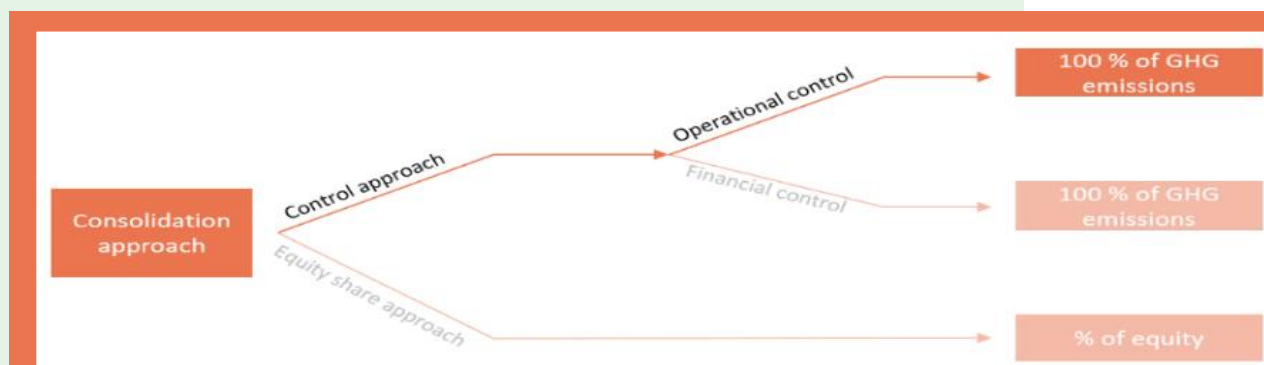


Figure 1. Chosen consolidation approach

This also means that Eneco does not account for scope 1 and scope 2 GHG emissions from operations in which it owns an interest (e.g. an equity interest) within its organisational boundaries. A schematic overview of these decisions is provided in figure 1.

In addition, both the EU Emission Trading System (ETS) and the Corporate Sustainability Reporting Directive (CSRD) require reporting on the basis of operational control. Moreover, the control approach seems to be the most appropriate for the purpose of management information and performance tracking, because managers can only be held accountable for activities under their control.

3.2. Consolidation at multiple levels

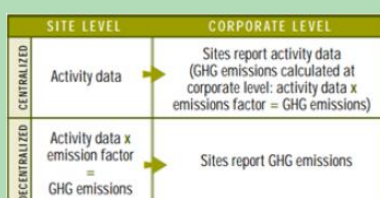
The consolidation of GHG emissions data will only result in consistent data if all levels of the organisation follow the same consolidation policy. In the first step, the management of the parent company has to decide on a consolidation approach (i.e. either the equity share or the financial or operational control approach). Once a corporate consolidation policy has been selected, it shall be applied to all levels of the organisation.

Eneco implements the consolidation approach (i.e. the operational control approach) to all levels of its organisation.

3.3. Approaches for rolling up GHG emissions data to corporate level

There are two basic approaches for gathering data on GHG emissions from a corporation's facilities :

- Centralised: individual facilities report activity/fuel use data (such as the quantity of fuel used) to the corporate level, where GHG emissions are calculated.
- Decentralised: individual facilities collect activity/fuel use data, directly calculate their GHG emissions using approved methods, and report this data to the corporate level.



Eneco uses the centralised approach to calculate emissions. Under this approach, individual facilities report activity/fuel use data. This approach is preferred to the decentralised approach, in which the individual facilities calculate their own emissions. This centralised approach is preferred because the sustainability team can calculate emissions data in a straightforward manner on the basis of activity data, and because emissions calculations are standard across all entities under operational control.

3.3.1 Setting the organisational boundaries

Eneco uses the operational control approach to set the organisational boundaries, in line with the financial consolidation. Eneco therefore includes all subsidiaries within its organisational boundaries. In the context of financial consolidation, Eneco places entities into four different categories. Table 1 below provides a brief overview of the categories and how they are consolidated for financial and GHG accounting purposes.

Category	Consolidated in financial statements	Full/proportional consolidation or no consolidation - financial	Consolidated in GHG report	Full/proportional consolidation or no consolidation -GHG emissions	Additional information on GHG consolidation
Subsidiary	Yes	Yes – 100%	Yes	Yes -100%	
Joint operations	Yes	Yes – proportional (% of operational control)	Yes	Yes – proportional (% of operational control)	See section 3.3.1.1
Joint ventures	No	No - proportional (% of equity)	No	No - proportional, scope 3 cat. 15	See section 4.5.5
Affiliates / associates	No	No - proportional (% of equity)	No	No - proportional, scope 3 cat. 15	See section 4.5.5

Table 1. Consolidation of different categories by Eneco for financial and GHG accounting purposes

For financial statements, Eneco uses a list of entities which is updated on a quarterly basis. Making a link to this and using the same consolidation approach for GHG accounting ensures the organisational boundaries are complete and up-to-date. Please note that joint ventures (JVs) and affiliates/associates are not consolidated in the financial statements, but are listed – on a proportional basis - as profits from associates and joint ventures. Joint operations (JOs – see below) are consolidated in the financial statements on a proportional basis. According to the GHG Protocol, contracts may be used to clarify the ownership or allocation of emissions, or responsibilities for emissions, of a company's joint operations.

Even though the entity list is complete and up to date, making a link to the assets that comprise the entity ensures the completeness of every GHG emission source. The assets therefore are linked to the entity code. A control has been put in place to make sure that all assets (fossil fuel and renewable) are included within the organisational boundaries.

3.3.1.1 Joint operations and Enecogen

As defined by the GHG Protocol (see text box below), Eneco identifies the ownership of emissions for JOs and consolidates emissions on a proportional basis, following principles similar to those used in financial accounting. Eneco consolidates the GHG emissions in a similar way, according to the share specified in the contracts.

To clarify ownership (rights) and responsibility (obligations) issues, companies involved in joint operations may draw up contracts that specify how the ownership of emissions or the responsibility for managing emissions and associated risk is distributed between the parties. Where such arrangements exist, companies may optionally provide a description of the contractual arrangement and include information on allocation of CO₂ related risks and obligations.

Joint operations

Name	Seat	Share
Blauwwind Management II B.V.	Rotterdam	10%
CrossWind Beheer B.V.	The Hague	20.1%
Enecogen V.O.F.	Rotterdam	50%
Ecowende Beheer B.V.	The Hague	40%
Q10 Offshore Wind B.V.	Rotterdam	50%
SeaMade NV	Ostend (B)	12.5%
Zonnepark Ameland B.V.	Ballum	33.3%

The most material contribution from JOs comes from Enecogen V.O.F., which is a JO that is consolidated for 50% in the financial statements. The management of emissions is described in more detail in the Enecogen contract (article 8.1(d)). As Enecogen operates under the EU ETS, Eneco must transfer its emission rights corresponding to the actual emissions from operations based on the energy generated. Given this, under the contract the EU ETS emission rights must correspond to the actual gas consumption of each toller. In practice, this differs from the 50% share of the joint operations used for financial accounting purposes. The VCCF model accounts for the actual emissions related to the Enecogen JO, based on actual gas consumption, as defined in the contract.

3.3.2 Emission factors

Once the assets under operational control have been identified, the next step is to delineate the operational boundaries. This involves identifying - and forming an overview of - activities of Eneco's assets that result in direct emissions of GHG (scopes 1 and 2) and indirect emissions of GHG (scope 3) into the atmosphere. The choices made when setting operational boundaries are explained in chapter 4.

In order to quantify the GHG emissions with the appropriate activity data, emission factors (EF) need to be used. The GHG Protocol defines an emission factor as "a factor allowing GHG emissions to be estimated from a unit of available activity data (e.g. tonnes of fuel consumed, tonnes of product produced) and absolute GHG emissions."

In principle, a total of seven greenhouse gases are referred to in the GHG Protocol when describing GHG emissions. These were originally covered by the Kyoto Protocol and were identified on the basis of their relevant contribution to climate change:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF₆)
- Nitrogen trifluoride (NF₃)*²

Each of these GHGs has different characteristics (atmospheric lifetime or global warming potential). In practice, carbon dioxide (CO₂) is usually the dominant GHG emission when calculating the impacts on climate change. Eneco therefore reports its carbon footprint in terms of "CO₂ equivalents" (CO₂-eq or CO₂e).

This metric converts the other GHGs "into" CO₂ by calculating the same amount of CO₂ that is required to achieve a similar global warming potential (GWP) over a specific number of years. The most common method is to express the GWP over 100 years (GWP₁₀₀).

The emission factors Eneco uses may come from various sources. To make our carbon footprint consistent, Eneco tries to use as few sources as possible. Our main source for emission factor (EF) data in the Netherlands is www.co2emissiefactoren.nl. This website, which is an initiative of the Dutch government and several other parties, makes it possible for different organisations to create comparable carbon footprint reports.³ Moreover, the EFs are expressed as the CO₂-eq GWP₁₀₀, in line with the IPCC AR5⁴.

This database expresses their EFs as CO₂ equivalents and makes a distinction between the upstream (well-to-tank (WTT)) emissions and the direct (tank-to-wheel (TTW)) emissions. Combining them both results into well-to-wheel (WTW) emissions. As this database is transparent, the research that calculated and supplied the EFs is also published. Being able to check the sources of the EFs allows us to use these EFs accurately in the footprint calculation.

Besides the Dutch entities and assets, Eneco also has foreign entities and assets within its organisational boundaries. Data is purchased from third parties in order to calculate the carbon footprint of those assets. Eneco uses renowned databases with international EFs, which are preferably specified separately for each country. Finally, Eneco is legally obliged to use specific methodologies for some activities within its operational boundaries. In such cases, the specified emission factors are used.

The EFs are updated once a year, and a brief explanation of the methodology and EF used to calculate the carbon footprint is provided for each activity within the operational boundaries.

² Nitrogen trifluoride was added in the 2015 Scope 2 Guidance amendment and must be included in GHG reporting. It is not included in the GHG Protocol Corporate Accounting and Reporting Standard (the basis for this document), which was released previously and still refers to six greenhouse gases.

³ <https://www.co2emissiefactoren.nl/over-co2emissiefactoren/>

⁴ IPCC Fifth Assessment Report (AR5) - https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf (p.87)

For a detailed description and a list of the emission factors used per category, please see our emission factors overview. The third parties Eneco uses EFs alongside co2emissiefactoren.nl to obtain specific EFs are shown in the table below.

Third party	Type of emission factor	Used for
Defra	Spend-based	Scope 3, categories 1 and 2
IINAS (GEMIS)	Location-based	Scope 3, category 11 (Germany and Belgium)
International Energy Agency	Location-based	Scope 3, category 3c
Association of Issuing Bodies	Location-based	Scope 3, categories 3b and 3d

4. Operational boundaries

4.1. Setting operational boundaries

For effective and innovative GHG management, setting operational boundaries that are comprehensive with respect to direct and indirect emissions will help a company better manage the full spectrum of GHG risks and opportunities that exist along its value chain.

Direct GHG emissions are emissions from sources that are owned or controlled by the company. Indirect GHG emissions are emissions that are a consequence of the activities of the company but occur at sources owned or controlled by another company.

To help delineate direct and indirect emission sources, improve consistency and transparency, and provide utility for different types of organisations and different types of climate policies and business goals, three “scopes” (scope 1, scope 2, and scope 3) are defined for GHG accounting and reporting purposes. The GHG Protocol requires that companies separately account for and report on scopes 1 and 2 as a minimum. Figure 2 below provides a graphic overview of the different scopes and potential activities.

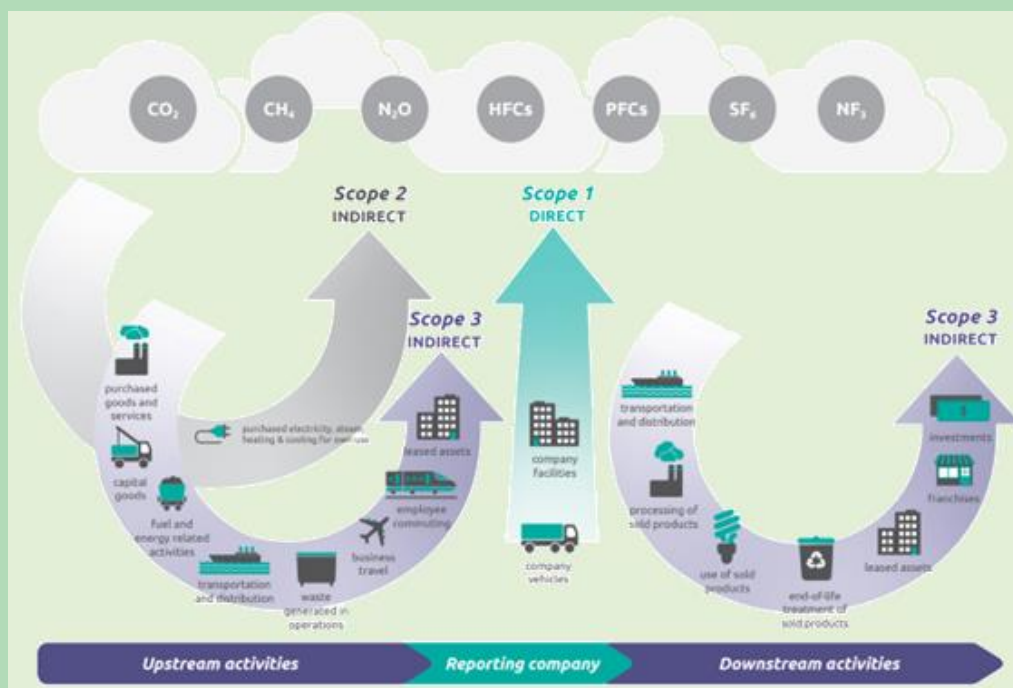


Figure 1. Overview of different scopes from the GHG Protocol

As the GHG Protocol states, GHG reporting must cover scopes 1 and 2 as a minimum. Since Eneco takes responsibility, is committed to SBTi and intends to comply with the EU CSRD, it also includes scope 3. Incorporating scope 3 emissions is necessary to achieve the OPP goals set by Eneco.⁵ In order for us to become climate neutral, together with our business and consumer customers, Eneco needs to understand where emissions occur within our organisational boundaries and value chain. Eneco discusses which scope 3 emissions are included, and why, in [section 4.5.5](#).

In order to delineate the operational boundaries, a business context based on seven general questions is produced for each of the consolidated entities. Whenever the entity list is updated, potential operational boundaries are identified by asking these seven questions.

The business context is written on the basis of an interview with someone from the entity or business unit that is conducted by a member of the sustainability team. This method was chosen because it is unrealistic to expect people from the business to understand the GHG accounting methodology, whereas the sustainability team members are not expected to have detailed knowledge of what happens within an entity.

The seven questions reflect the extent to which it is reasonable to deduct any potential emission sources. Although each interviewee may give different answers, the questions are able to identify the following:

1. What is the main activity within / carried on by the entity and its assets?

This is a general question that can identify any emission source. It is also a control-question used to check whether the following questions provide a similar answer as to what the main activity is.

2. Is energy (heat/power/electricity) generated on sites you own or lease? If so, what energy is generated?

This question could refer to scope 1 emissions, mainly from stationary combustion. Moreover, the answer to this question indicates whether there are any purchased capital goods (scope 3, category 2).

3. Is anything purchased by the entity (capital goods, equipment, machinery, buildings, energy, facilities, products for resale, etc.)? If so, what is purchased?

This question is asked because the answer should support the answers to the previous two questions. Moreover, it might apply to the corresponding categories in scope 3 (e.g. category 3, category 11) or to less obvious categories (e.g. upstream distribution).

4. Is anything sold (same groups as above) by the entity? If so, what is sold?

If something is purchased, but not sold, it most-likely is consumed during the operations by the entity. It might therefore be a scope 1 emission source. If purchased products are sold, there are several scope 3 options (e.g. category 3(d), category 11 or category 12, depending on the product sold).

5. What is the entity's main source of income?

This question is asked to obtain a sense of the materiality of each of the categories, and to determine whether an entity is a lessor of specific products.

6. Is there an office or building at/for the entity?

The answer to this question indicates whether any people commute to the entity and whether there are any direct or indirect energy purchases (scope 1 or 2).

7. Are company vehicles present? If so, what are they used for?

The answer to this question reveals whether there is any mobile combustion from scope 1. Moreover, it also allows the organisation to see whether there is any upstream/downstream transport or distribution of purchased or sold goods.

⁵ <https://www.eneco.com/what-we-do/climate/>

These questions are answered in the entity list, and the deducted scopes and categories are then ticked where applicable based on reasoning that is understandable from the answers. All scope 1 and scope 2 emissions are included. The Scope 3 emission categories are included or excluded on the basis of the criteria set out in the section on scope 3.

4.2. Double counting

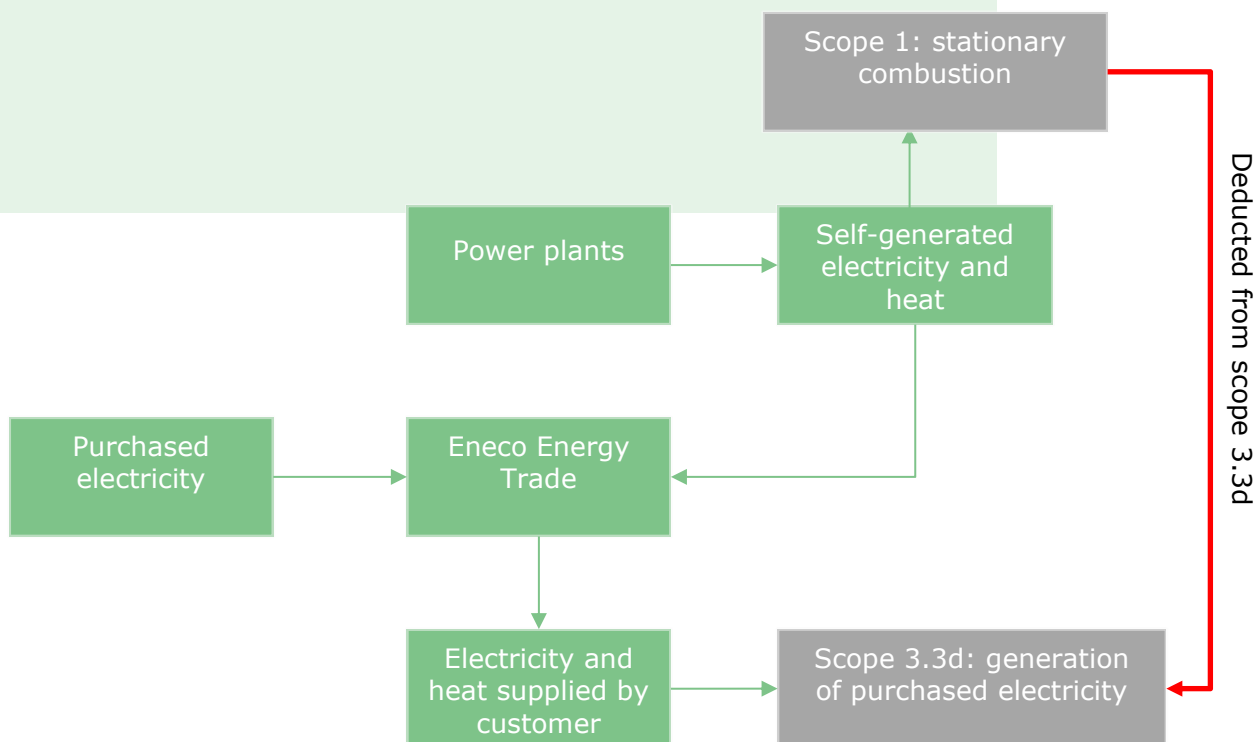
When two or more companies hold interests in the same joint operation and use different consolidation approaches (e.g. Company A follows the equity share approach while Company B uses the financial control approach), emissions from that joint operation could be double counted. This may not matter for voluntary corporate public reporting as long as there is adequate disclosure from the company on its consolidation approach. However, double counting of emissions needs to be avoided in trading schemes and certain mandatory government reporting programmes.

For emissions occurring in joint operations, please see [section 3.3.1.1](#).

Companies should take care to identify and exclude from reporting any scope 2 or scope 3 emissions that are also reported as scope 1 emissions by other facilities, business units, or companies included in the emissions inventory consolidation (see chapter 6).

Wherever double counting might occur, this is explicitly mentioned. Furthermore, in that specific scenario Eneco also explains how Eneco mitigates double counting to avoid overestimating Eneco’s carbon footprint. For example, Eneco supplies both self-generated and purchased energy to end users (see the flow chart below). To calculate the scope 3.3d emissions, the total supplied amount of electricity is used and that information makes no distinction between self-generated and purchased electricity.

If no intervention were to take place, the emissions from stationary combustion would be included in scope 1 as well as in scope 3.3d. These emissions are therefore deducted from scope 3.3d to mitigate double counting.



4.3. Scope 1: Direct GHG emissions

Direct GHG emissions arise from sources that are owned or controlled by a reporting company and are principally the result of the following types of activities undertaken by the company:

- Generation of electricity, heat, or steam. These emissions result from the combustion of fuels in stationary sources, e.g. boilers and turbines.
- Physical or chemical processing. Most of these emissions result from the manufacture or processing of chemicals and materials. This also applies to waste processing.
- Transportation of materials, products, waste, and employees. These emissions result from the combustion of fuels in mobile combustion sources controlled/owned by a reporting company (e.g. trucks and cars).
- Fugitive emissions. These emissions result from intentional or unintentional releases, e.g. equipment leaks from joints, seals, packing and gaskets; hydrofluorocarbon (HFC) emissions during the use of refrigeration and air conditioning equipment; and methane leakages from gas transport.

In addition, only emissions covered by the Kyoto Protocol are to be included in scope 1. The Kyoto Protocol applied to six greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

For many larger companies, scope 1 GHG emissions are calculated on the basis of the purchased quantities of commercial fuels (such as natural gas and heating oil) using published emission factors.

4.3.1 Emissions from stationary combustion

For Eneco, scope 1 emissions mainly originate from the combustion of natural gas associated with the production of electricity and heat in our gas-fired CHP (combined heat and power) and CCGT (combined cycle gas turbine) plants.

Activity	Unit	
Power generation within Eneco's organisational boundaries	Electricity generation	m ³ / MWh electricity generated
	CHP-derived heat	m ³ / MWh heat generated or GJ heat sold
	Other heat	m ³ / MWh heat generated or GJ heat sold

In order to calculate the carbon footprint, the TTW EF is used from co2emissiefactoren.nl. This is expressed in kg CO₂/m³. Starting from 2022, the activity data from stationary combustion has been expressed in MWh, rather than m³, in keeping with the input data retrieved from the digital meters. A conversion of the EF is therefore proposed. For a detailed calculation for the conversion of the EF, see [Annexe I](#).

Eneco consumes some of the electricity generated by its gas-fired power plants. This electricity consumption is accounted for under scope 1. The volumes of electricity generated by our gas-fired power plants that are consumed by Eneco are, however, not measured. Statistics Netherlands (CBS) assumes that electricity companies consume 2% of the total electricity produced using natural gas⁶. These emissions are incorporated in the scope 1 calculation.

⁶ Seger & Van Wezel (2023) - Emissiefactoren van elektriciteit uit steenkool en aardgas, 2000-2021

The energy generated in the gas-fired power plants are sold to related entities and then supplied to our customers. Because no distinction between purchased (grey) energy and self-generated energy is drawn in the supplied volumes, the total "indirect" emissions of these supplied volumes include scope 1 emissions. Consequently, in order to avoid double counting, Eneco deducts 98% of the scope 3, category 3d emissions.

In addition, Eneco only deducts the total amount of these scope 1 emissions up to the level of the supplied energy emissions in scope 3, category 3d. If these scope 3.3d emissions are lower than the gas-fired power plant emissions, the maximum that can be deducted in the context of double counting is the scope 3.3d emissions.

By way of a more detailed explanation, Eneco adds the upstream emissions of natural gas for our gas-fired power plants in scope 3a. The emission factor for supplied electricity incorporates the upstream emissions of the energy sources. By deducting all of the scope 3d emissions wherever possible, Eneco also prevents double counting in that category.

4.3.2 Emissions from physical or chemical processing

Emissions from physical or chemical processing are usually a result of the manufacturing or processing of materials. Examples include the calcination step in cement manufacturing and emissions from catalytic cracking in petrochemical processes. These emissions are not included because no physical or chemical processes take place within the Eneco organisational boundaries.

4.3.3 Emissions from mobile combustion

Even though Eneco discourages the usage of vehicles for commuting, and has adjusted its policies accordingly (i.e. vehicles (with stationary combustion) are provided by Eneco in specific exceptional cases only), emissions from this source still occur and are therefore included. Combustion takes place in the service and passenger vehicles that are used by Eneco's employees.

Data is being gathered through an external portal, which makes a distinction between fuel types and indicates the amount of purchased fuel type for both passenger and service vehicles. In order to compute the annual data, we use data from January to November. The data for December is extrapolated by the system because the leasing companies cannot provide a full report on December until the start of February. This primarily concerns the electric vehicles.

The EFs used for this calculation are obtained from co2emissiefactoren.nl, and the TTW emissions are used within scope 1.

Eneco has a strong preference for the use of zero-emission vehicles, which do not produce direct emissions when being driven. The indirect emissions for the generated energy (i.e. electricity or hydrogen) should therefore be included in scope 2. Because all other vehicles are reported under scope 1, however, the energy usage for zero-emission vehicles is also included in scope 1. If the sources of the energy used for these vehicles are grey or unknown, Eneco buys GoOs for the energy used.

4.3.4 Fugitive emissions

Fugitive emissions are intentional and unintentional releases of gasses, such as equipment leaks from joints, seals or packing, or methane leakages from gas transport, or gasses released during the use of refrigeration and air conditioning equipment.

Eneco is certain that the transport of natural gas results in methane leakages. Such leakages are therefore incorporated within the emission factor for natural gas transport and distribution in scope 3a as fuel for the power plants, and in category 11 in the case of natural gas sold to business and consumer customers as Eneco does not own the pipelines the gas flows through (i.e. they are not direct emissions).

The remaining relevant fugitive emissions are leakages from air conditioning refrigerants, and an estimate has to be made in order to incorporate them in the VCCF. This is primarily due to multi-tenant issues, because the maintenance of building maintenance systems (BMS) is not in our control, which makes it difficult to obtain the specific data. An estimate is therefore used that is based on available information from Eneco's current installation and maintenance service provider. This service provider shares the following information concerning a climate control system of an average office:

- Estimated amount of refrigerants in kg
- Main refrigerant, used to select the correct emission factor (in this case R410A)
- Leakage rate (annual)
- Lifetime of a climate control system

Fugitive emissions can be calculated for each office by multiplying the emission factor of R410A by the annual amount of leakages. This will be applied to every Eneco office, which means fugitive emissions will be overestimated for some offices and underestimated for others, since offices vary in size. The assumption is that these overestimates and underestimates will balance each other out.

4.3.5 Additional scope 1 considerations

Direct CO₂ emissions from the combustion of biomass are to be reported separately and not included in scope 1. Eneco uses biomass to produce steam and electricity for industry and warm water for our heating grids. Eneco applies the rule of thumb that biomass is only used if there are insufficient other sustainable alternatives available. The biomass Eneco processes, trade and/or use meets international sustainability criteria and chain management requirements. It is guaranteed by certificates approved by the EU and the Dutch government. One such a certificate is Better Biomass. Eneco reports on biogenic emissions separately.

4.4. Scope 2: Indirect GHG emissions of purchased electricity

Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the equipment or operations owned or controlled by a reporting company. These emissions physically occur at the facility where electricity is generated, which is why they are indirect.

Scope 2 GHG emissions are primarily calculated from metered electricity consumption and supplier-specific, local grid or other published EFs. To quantify scope 2 emissions, the GHG Protocol Corporate Accounting and Reporting Standard recommends that companies obtain source/supplier-specific EFs for purchased electricity. If these are not available, regional or grid EFs should be used.

For some office buildings, Eneco does not purchase the energy ourselves. Instead, it is included in the services charged by the lessor. In such cases, Eneco estimates the annual energy consumption on the basis of the rented square meters and an average consumption per square meter if there is an overview of the energy consumption. Eneco purchases GoOs for this estimated consumption because it is not always known whether the lessor purchases renewable energy.

In 2019, the GHG Protocol published its Scope 2 Guidance: an amendment to the Corporate Standard.⁷ One significant change in this Guidance is the new dual reporting requirement, whereby companies are required to report their Scope 2 emissions using the following two methods:

1. Location-based method: quantified scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational or national boundaries.
2. Market-based method: quantified scope 2 GHG emissions based on GHG emissions emitted by the generators from which the reporting company contractually purchases electricity bundled with contractual instruments, or contractual instruments on their own (this often means the use of a more specific emission factor).

⁷ https://ghgprotocol.org/sites/default/files/ghgp/standards/Scope%20%20Guidance_Final_0.pdf

Dual reporting involves using the same data on electricity usage, but with different emission factors. Location-based emission factors are not supplier-specific and are based on grid average emission factors for a certain region or even at country level. Market-based emission factors are usually much more specific, these may be provided via GoOs or other certificate instruments, or be based on information in contractual agreements. If such EFs are not available, residual mix or location-based emission factors should be used.

Eneco owns some district heating grids, and has to make up for the heat that is lost when district heating is supplied. The heat Eneco buys to make up for the distribution loss is produced by other parties. Eneco uses a specific emission factor that expresses this distribution loss based on the total supplied figures, as published in our heat label.

4.4.1 Other electricity-related indirect emissions

Emissions associated with the generation of purchased electricity that is resold to an intermediary (e.g. trading transactions) may be reported under optional information under the category "Generation of purchased electricity, heat, or steam for resale to non-end users." Examples of trading transactions include brokerage/trading room transactions involving purchased electricity or any other transaction in which electricity is purchased directly from one source or the spot market and then resold to an intermediary (e.g. a non-end user). These emissions are reported under optional information separately from scope 3 because there could be a number of trading transactions before the electricity finally reaches the end user. This may cause duplicative reporting of indirect emissions from a series of electricity trading transactions for the same electricity.

- Eneco also supplies LNG (liquid natural gas) to retailers in order to make heavy transport more sustainable, among other things. These emissions are also reported separately as optional information.
- Furthermore, Eneco sells electricity and gas to other suppliers that are not considered responsible parties in themselves, and that supply the electricity and gas to their B2C and B2B customers. Eneco does not supply the end users and Eneco is not regarded as the supplier under the Energy Act. These emissions are therefore also reported under optional information.
- In addition, Eneco trades 'sleeve' deals on a daily basis. In these trades, Eneco 'sleeves' baseload volume to other responsible parties. This is part of our everyday business and the total emissions associated with these energy volumes cannot be accurately determined. Consequently, to ensure transparency Eneco reports under optional information that trading in sleeve deals is part of our everyday business.

Moreover, Eneco is exposed to the imbalance risk for a power plant (CCI MaasStroom) in Rotterdam, which means there is a construction for the supply of gas in order to generate electricity. Eneco supplies the natural gas, which the owner of the power plant then supplies back to Eneco's Energy Trade department. The balance of this input is therefore zero, and accordingly no emissions are accounted for. The electricity that is generated is bought and supplied, and is subsequently incorporated into Eneco's energy supply mix and carbon footprint.

Because some of the above exclusions can have a significant impact on the carbon footprint, a check is performed each year to determine whether these exclusions are still in place or not. Any changes will be reported in the accounting manual, along with the impact on Eneco's carbon footprint.

4.5. Scope 3: Other indirect GHG emissions

Scope 3 emissions are a consequence of the activities of a reporting company but result from sources that are not owned or controlled by the reporting company. Scope 3 include emissions from activities in the value chain of the entities included in a reporting company's organisational boundaries. Furthermore, the scope 3 categories that are applicable create Eneco's carbon footprint value chain.

Based on the proposed methodology, business context, and explanations for each category, no additional value chain information seems necessary.

With respect to scope 3, Eneco reports its emissions in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard ('Scope 3 Standard'), which is a supplement to the GHG Protocol Corporate Accounting and Reporting Standard. The Scope 3 Standard provides requirements and guidance for companies and other organisations concerning the preparation and public reporting of a GHG emissions inventory that includes indirect emissions resulting from upstream and downstream value chain activities (i.e. scope 3 emissions). Eneco calculates its emissions in accordance with the GHG Technical Guidance for Calculating Scope 3 Emissions, which is a supplement to the Scope 3 Standard. This guidance document serves as a companion to the Scope 3 Standard by offering companies practical guidance on calculating their scope 3 emissions. It provides information not contained in the Scope 3 Standard, such as methods for calculating GHG emissions for each of the 15 scope 3 categories, data sources, and worked examples.

4.5.1 Summary of requirements

The Scope 3 Standard presents accounting and reporting requirements to help companies prepare a GHG inventory that represents a true and fair account of their scope 3 emissions. Standardised approaches and principles are designed to increase the consistency and transparency of scope 3 inventories.

The standard uses precise language to indicate which provisions of the standard are requirements, which are recommendations, and which are permissible or allowable options that companies may choose to follow. The term "shall" is used throughout the standard to indicate what is required in order for a GHG inventory to be in conformance with the Scope 3 Standard. The term "should" is used to indicate a recommendation, but not a requirement. The term "may" is used to indicate an option that is permissible or allowable. The term "required" is used in the guidance to refer to requirements in the standard. "Needs", "can" and "cannot" may be used to provide guidance on implementing a requirement or to indicate when an action is or is not possible. The following requirements are laid down on page 21 of the Scope 3 Standard:

Accounting and Reporting Principles

GHG accounting and reporting of a scope 3 inventory shall be based on the following principles: relevance, completeness, consistency, transparency and accuracy.

Eneco fully complies with this requirement and bases its GHG accounting and reporting on the following principles: relevance, completeness, consistency, transparency and accuracy. Please refer to [chapter 2](#) for detailed information on the accounting and reporting principles.

Setting the Scope 3 Boundary

Companies shall account for all scope 3 emissions and disclose and justify any exclusions.

Eneco fully complies with this requirement, and accounts for all scope 3 emissions and discloses and justifies any exclusions. Please refer to [section 4.5.4](#) for detailed information on setting the scope 3 boundary.

Companies shall account for emissions from each scope 3 category according to the minimum boundaries listed in the Technical Guidance for Calculating Scope 3 Emissions.

Eneco fully complies with this requirement and accounts for emissions from each scope 3 category according to the minimum boundaries listed in the technical guidance. Please see [section 4.5.5](#) for a description of each category, details of the minimum boundary requirement for each category, and an explanation of how the minimum boundary is achieved for each applicable category.

Companies shall account for scope 3 emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, if they are emitted in the value chain.

Eneco fully complies with this requirement. As the EFs that Eneco uses to calculate the emissions are expressed in CO₂ equivalents, the EFs incorporate reporting on the six aforementioned greenhouse gases (CO₂, CH₄, N₂O, HFCs, PFCs and SF₆) where relevant. Please see [section 3.3.2.](#) for more information on the EFs.

Biogenic CO₂ emissions that occur in the value chain shall not be included in the scopes, but shall be included and separately reported in the public report.

Eneco fully complies with this requirement. The biogenic CO₂ emissions that occur in the value chain are reported separately by Eneco in its One Planet Plan (OPP) report, which is available to the public.⁸

Setting a GHG Target and Tracking Emissions over Time. When companies choose to track performance or set a reduction target, companies shall

Choose a scope 3 base year and specify their reasons for choosing that particular year.

Eneco fully complies with this requirement. Please see [section 5.1](#) for details of how the base year is chosen.

Develop a base year emissions recalculation policy that articulates the basis for any recalculations.

Eneco fully complies with this requirement. Please see [section 5.3](#) for details of how a GHG target is set and emissions are tracked over time.

Recalculate base year emissions when significant changes in the company structure or inventory methodology occur.

Eneco fully complies with this requirement. Please see [section 5.3.3](#) for details of how the base year emissions are recalculated to reflect changes in inventory methodology.

Reporting. Companies shall publicly report the following information

A scope 1 and scope 2 emissions report in conformance with the GHG Protocol Corporate Standard

⁸ <https://www.eneco.nl/en/about-us/what-we-do/one-planet-plan/> One Planet Plan (p. 23, footnote 3)

Eneco fully complies with this requirement. Please see [section 4.3](#) for detailed information on scope 1 reporting and [section 4.4](#) for detailed information on scope 2 reporting. Emissions that are applicable are reported in the OPP report, which is available to the public.

Total scope 3 emissions reported separately by scope 3 category.

Eneco fully complies with this requirement. Each applicable scope 3 emissions category, as defined in [section 4.5.5](#), is included in the OPP report.

For each scope 3 category, total GHG emissions reported in metric tons of CO₂ equivalent, excluding biogenic CO₂ emissions and independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.

Eneco fully complies with this requirement. Biogenic CO₂ emissions are reported separately in accordance with this requirement. The amount of CO₂ equivalent for each applicable category (see previous requirement) is included in our OPP report.

A list of scope 3 categories and activities included in the inventory.

Eneco fully complies with this requirement. A list of all scope 3 categories is included in our annual report.

A list of scope 3 categories or activities excluded from the inventory with justification of their exclusion.

Eneco fully complies with this requirement. Please see [section 4.5.5](#) for detailed information on scope 3 reporting. In addition, this accounting manual will be made available to the public. Justification of any scope 3 exclusions is therefore included in this manual.

Once a base year has been established: the year chosen as the scope 3 base year; the rationale for choosing the base year; the base year emissions recalculation policy; and scope 3 emissions by category in the base year, consistent with the base year emissions recalculation policy.

Eneco fully complies with this requirement. Please refer to [chapter 5](#) for detailed information on setting a GHG target and tracking emissions over time.

For each scope 3 category, any biogenic CO₂ emissions reported separately.

Eneco fully complies with this requirement. The biogenic CO₂ emissions that occur in the value chain are reported separately by Eneco in its OPP report, which is available to the public. Please see [section 4.6](#) for detailed information on setting the scope 3 boundary.

All information is publicly available because this accounting manual will be published online.

For each scope 3 category, a description of the types and sources of data, including activity data, EFs and global warming potential (GWP) values, used to calculate emissions, and a description of the data quality of reported emissions data.

Eneco fully complies with this requirement. All information is publicly available because this accounting manual will be published online.

For each scope 3 category, a description of the methodologies, allocation methods, and assumptions used to calculate scope 3 emissions.

For each scope 3 category, the percentage of emissions calculated using data obtained from suppliers or other value chain partners.

In cases where data is obtained from suppliers, this is mentioned under the corresponding category in scope 3 in the accounting manual, which is published online.

4.5.2 Upstream and downstream scope 3 emissions

Scope 3 emissions are divided into upstream and downstream emissions. The distinction is based on the financial transactions of the reporting company.

- Upstream emissions are indirect GHG emissions related to purchased or acquired goods and services.
- Downstream emissions are indirect GHG emissions related to sold goods and services. In the case of goods purchased or sold by the reporting company, upstream emissions occur up to the point of receipt by the reporting company, while downstream emissions occur subsequent to their sale by the reporting company and transfer of control from the reporting company to another entity (e.g. a customer).

Both upstream and downstream emissions can occur within the various activities carried on at Eneco. In some specific cases, it is more convenient to include both types of emissions in a single EF. If this approach is preferred in a specific case, this will be explicitly mentioned.

4.5.3 Time boundary of scope 3 categories

All emissions related to a reporting company's activities in the reporting year should be accounted for (e.g. emissions related to products purchased or sold in the reporting year). For some scope 3 categories, emissions occur simultaneously with the activity (e.g. from combustion of energy), so emissions occur in the same year as the company's activities. For some categories, emissions may have occurred in previous years. For other scope 3 categories, emissions are expected to occur in future years because the activities in the reporting year have long-term emissions impacts. For these categories, reported emissions have not yet happened, but are expected to happen as a result of the waste generated, investments made, and products sold in the reporting year. For these categories, the reported data should not be interpreted to mean that emissions have already occurred, but that emissions are expected to occur as a result of activities that occurred in the reporting year.

Eneco expects that most scope 3 emissions will occur in the same year as the related activity. This also follows from the EF database that Eneco uses. For most upstream and downstream emissions, EFs are estimated in the same units as the activity data.

In cases where the time boundary is not the same as the period covered by activity data, it is explained how Eneco deals with this.

4.5.4 Disclosing and justifying exclusions

Companies should strive for completeness, but it is acknowledged that accounting for all scope 3 emissions may not be feasible. Some categories may not be applicable to all companies. In such cases, companies should report zero emissions or “not applicable” for any categories that are not applicable. In some situations, companies may have scope 3 activities, but be unable to estimate emissions due to a lack of data or other limiting factors. For example, companies may find that, based on initial estimates, some scope 3 activities are expected to be insignificant in size (compared to the company’s other sources of emissions) and that for these activities, the ability to collect data and influence GHG reductions is limited. In such cases, companies may exclude scope 3 activities from the report, provided that any exclusion is disclosed and justified.

Companies should follow the principles of relevance, completeness, accuracy, consistency and transparency when deciding whether to exclude any activities from the scope 3 inventory. Companies should not exclude any activity that would compromise the relevance of the reported inventory.

List of criteria for determining relevant scope 3 activities:

- **Size:** They contribute significantly to the company’s total anticipated scope 3 emissions
- **Influence:** There are potential emissions reductions that could be undertaken or influenced by the company
- **Risk:** They contribute to the company’s risk exposure (e.g. climate change related risks, such as financial, regulatory, supply chain, product and customer, litigation and reputational risks)
- **Stakeholders:** They are deemed critical by key stakeholders (e.g. customers, suppliers, investors or civil society)
- **Outsourcing:** They are outsourced activities previously performed in-house or activities outsourced by the reporting company that are typically performed in-house by other companies in the reporting company’s sector
- **Sector guidance:** They have been identified as significant by sector-specific guidance
- **Other:** They meet any additional criteria for determining relevance developed by the company or industry sector

Companies should ensure that the scope 3 inventory appropriately reflects the GHG emissions of the company, and serves the decision-making needs of users, both internal and external to the company. In particular, companies should not exclude any activity that is expected to contribute significantly to the company’s total scope 3 emissions.

Eneco fully complies with the requirement to account for all scope 3 emissions, and discloses and justifies any exclusions. To make these justifications, Eneco uses a quantitative materiality level, based on a threshold. This materiality threshold makes it possible to identify whether a specific source or emission contributes significantly to Eneco’s total emissions.

The GHG protocol makes no specific recommendations as to what constitutes “significant.” However, as a rule of thumb, an error or discrepancy is considered to be materially misleading if its value exceeds 5% of the total inventory for the part of the organisation being verified. Eneco therefore applies a materiality threshold of 5%. This 5% threshold is based on the reported year. Whenever this threshold is not exceeded, a category may be omitted. This threshold criterion is reassessed every year for applicable categories that did not exceed the threshold.

Some of these categories may, however, still be included for specific reasons. Qualitative arguments for inclusion, based on the aforementioned criterion, will be provided for these categories. An overview of the Scope 3 categories and their materiality assessment can be found in [Annexe II](#).

Please note that the 5% threshold is cumulative. In other words, whenever the total amount of any omitted scope 3 emissions reaches 5%, those emissions are included. This is reviewed once a year.

4.5.5 Scope 3-categories

Scope 3 emissions are categorised into 15 distinct categories. The categories are designed to be mutually exclusive. A minimum boundary has been identified for each scope 3 category, in order to standardise the boundaries of each category and help companies understand which activities should be accounted for. The minimum boundaries are intended to ensure that major activities are included in the scope 3 inventory, while clarifying that companies need not account for the value chain emissions of each entity in its value chain, ad infinitum. Companies may include emissions from optional activities within each category. Companies may exclude scope 3 activities included in the minimum boundary of each category, provided that any exclusion is disclosed and justified.

A brief description, along with the relevant minimum boundary, is given for each of the 15 categories. In cases where the minimum boundary is not reached, this is disclosed and arguments are presented to justify the exclusion. This justification is also in line with the criteria proposed in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (p. 60) to make sure no relevant categories are omitted.

Category 1: Purchased goods and services

This category includes all upstream (i.e. cradle-to-gate) emissions from the production of products purchased or acquired by a reporting company in the reporting year. Products include both goods (tangible products) and services (intangible products). This category includes emissions from all purchased goods and services not otherwise included in the other categories of upstream scope 3 emissions (i.e. categories 2 to 8). Specific categories of upstream emissions are separately reported in categories 2 to 8 to enhance the transparency and consistency of scope 3 reports.

Cradle-to-gate emissions include all emissions that occur in the life cycle of purchased products, up to the point of receipt by a reporting company (excluding emissions from sources that are owned or controlled by the reporting company).

Due to the diverse nature of purchased goods and services, emissions related to cradle-to-gate activities can differ. They may include:

- Extraction of raw materials
- Agricultural activities
- Manufacturing, production and processing
- Generation of electricity consumed by upstream activities
- Disposal/treatment of waste generated by upstream activities
- Land use and land-use change
- Transportation of materials and products between suppliers
- Any other activities prior to acquisition by a reporting company.

Companies may use the following methods to calculate scope 3 emissions from purchased goods and services:

- Supplier-specific method – collects product-level cradle-to-gate GHG inventory data from goods or services suppliers.
- Hybrid method – uses a combination of supplier-specific activity data (where available) and secondary data to fill the gaps.
- Average-data method – estimates emissions for goods and services by collecting data on the mass (e.g. kilograms or pounds) or other relevant units of goods or services purchased, and multiplying by the relevant secondary (e.g. industry average) EFs (e.g. average emissions per unit of good or service).
- Spend-based method – estimates emissions for goods and services by collecting data on the economic value of goods and services purchased and multiplying it by relevant secondary (e.g. industry average) EFs (e.g. average emissions per monetary value of goods).

The first two methods – supplier-specific and hybrid – require the reporting company to collect data from the suppliers, whereas the second two methods – average-data and spend-based – use secondary data (i.e. industry average data). These methods are listed in order of how specific the calculation is to the individual supplier of a good or service. However, companies need not always use the most specific method as a first preference.

Even though the supplier-specific and hybrid methods are more specific to the individual supplier than the average-data and spend-based methods, they may not produce results that are a more accurate reflection of the product's contribution to the reporting company's scope 3 emissions. In fact, data collected from a supplier may actually be less accurate than industry-average data for a particular product. Accuracy derives from the granularity of the emissions data, the reliability of the supplier's data sources, and which, if any, allocation techniques were used. The need to allocate the supplier's emissions to the specific products it sells to the company can add a considerable degree of uncertainty, depending on the allocation methods used.

The **minimum boundaries** are the upstream emissions related to cradle-to-gate activities of purchased goods and services.

This category is applicable because Eneco has a variety of suppliers from which it purchases goods and services. Even though this category is not material (**Annexe II**), Eneco will still include it within our VCCF. This is primarily due to company policy. Eneco wants suppliers that contribute to our OPP goals and targets. Eneco therefore, impose corporate social responsibility (CSR) criteria and select our partners and suppliers on the basis of those criteria.⁹

Eneco uses the spend-based method to calculate the GHG of purchased goods and services. Although this might seem contradictory to the aforementioned CSR criteria, the spend-based method is preferred because all spend data is available, and so this method provides the most complete result. It also allows us to compute the GHG emissions, rather than relying on data from the supplier. Moreover, the use of the spend-based method has also been validated scientifically.¹⁰

Eneco takes the financial value of all purchased good and service and multiplies it by an emission factor – the amount of emissions produced per financial unit – to obtain an estimate of the emissions produced. Eneco will use Defra spend-based EFs, which include emissions from the cradle-to-gate activities, for purchases of capital goods and office supplies, etc.

⁹ <https://www.eneco.com/general-conditions/>

¹⁰ <https://www.climatiq.io/blog/science-behind-spend-based-emission-factors>

Note on categories 1 and 2: Eneco makes no distinction between categories 1 and 2 in its GHG accounting. They are viewed as a single category because they are both determined using the spend-based method.

Category 2: Capital goods

This category includes all upstream (i.e. cradle-to-gate) emissions from the production of capital goods purchased or acquired by a reporting company in the reporting year. Emissions from the use of capital goods by a reporting company are accounted for in either scope 1 (e.g. for fuel use) or scope 2 (e.g. for electricity use), rather than scope 3. Capital goods are final products that have an extended life and are used by the company to manufacture a product, provide a service, or sell, store and deliver merchandise. Examples of capital goods include equipment, machinery, buildings, facilities and vehicles.

In financial accounting, capital goods are typically depreciated or amortised over the life of the asset. For the purpose of accounting for scope 3 emissions, companies should not depreciate, discount or amortise the emissions from the production of capital goods over time. Instead, companies should account for the total cradle-to-gate emissions of purchased capital goods in the year of acquisition, in the same way the company accounts for emissions from other purchased products in category 1.

The **minimum boundaries** are the upstream emissions related to cradle-to-gate activities of purchased goods and services.

Category 2 is applicable to Eneco. As Eneco makes no distinction between categories 1 and 2 in its GHG accounting, the materiality assessment is included in the category 1 assessment. The categories are viewed as a single category because they are both determined using the spend-based method.

Category 3: Fuel- and energy-related emissions not included in scope 1 or scope 2

This category includes emissions related to the production of fuels and energy purchased and consumed by a reporting company in the reporting year that are not included in scope 1 or scope 2. This category includes emissions from four distinct activities:

- a. **Upstream emissions of purchased fuels:** Extraction, production, and transportation of fuels consumed by a reporting company;
- b. **Upstream emissions of purchased electricity:** Extraction, production, and transportation of fuels consumed in the generation of electricity, steam, heating and cooling consumed by the reporting company;
- c. **Transmission and distribution (T&D) losses:** Generation of electricity, steam, heating and cooling consumed (i.e. lost) in a T&D system – reported by the end user;
- d. **Generation of purchased electricity that is sold to end users:** Generation of electricity, steam, heating and cooling purchased by the reporting company and sold to end users – reported by the utility company or energy retailer.

The **minimum boundaries** for categories 3a, 3b and 3c, are all the upstream emissions. The minimum boundary for category 3c also includes combustion in T&D systems. Category 3d includes emissions from the generation of purchased energy.

All category 3 emissions are applicable to Eneco. Categories 3a to 3c are non-material, whereas category 3d is material (**Annexe II**). All of these subcategories are included in the VCCF because they are all important in the context of Eneco's OPP strategy of Eneco.

Category 3a: Upstream emissions of purchased fuels

Companies may use either of the following methods to calculate scope 3 emissions from upstream emissions of purchased fuels:

- **Supplier-specific method**, which involves collecting data from fuel providers on upstream emissions of fuel consumed by the reporting company
- **Average-data method**, which involves estimating emissions by using secondary (e.g. industry average) emission factors for upstream emissions per unit of consumption (e.g. kg CO₂ e/kWh).

In this subcategory, Eneco reports the upstream emissions related to natural gas consumption for heat and electricity production. This subcategory also includes the upstream emissions related to the fuel and energy consumption of company cars.

The average-data method is used to calculate the emission factors of this category. This method has been chosen because of the reliability of the "well-to-tank" EF provided by the database on co2emissiefactoren.nl. Furthermore, the minimum boundaries of this subcategory are met through the use of this EF.

The volumes of natural gas consumption for the generation of electricity and heat are the same quantities used for the scope 1 calculation. Similarly, the data for fuel consumption is also used as activity data for this subcategory.

Important! The EF used for this subcategory also incorporates the methane leakage (scope 1, fugitive emissions) in the upstream process.

Category 3b: Upstream emissions of purchased electricity

Companies may use either of the following methods to calculate scope 3 emissions from upstream emissions of purchased electricity:

- **Supplier-specific method**, which involves collecting data from electricity providers on upstream emissions (extraction, production and transportation) of electricity consumed by the reporting company
- **Average-data method**, which involves estimating emissions by using secondary (e.g. industry average) emission factors for upstream emissions per unit of consumption (e.g. kg CO₂ e/kWh).

In this subcategory, Eneco reports the upstream emissions related to the energy consumption of our premises.

Since the identity of the energy supplier at some premises (e.g. multi-tenant premises) are not known, the average-data method is used to estimate the data. In this subcategory, the amount of electricity purchased and reported under scope 2 is once again multiplied by the WTT EF for the relevant source. This WTT EF is derived from the database on co2emissiefactoren.nl.

Moreover, this EF is adjusted for the supplier-specific method, in the sense that Eneco purchases the GoOs for energy that is not purchased directly from us. All energy reported under scope 2 is therefore renewable energy. The upstream EFs for wind and solar energy are weighted averages (i.e. the share of the renewable energy source is multiplied by its upstream EF). Adjustment takes place on an annual basis.

Category 3c: Transmission and distribution (T&D) losses

T&D losses refer to the portion of the electricity supplied by a utility company that is consumed during its transmission and distribution to end-consumers. In keeping with the scope 2 definition, emissions from the generation of purchased electricity that is consumed during transmission and distribution are reported in scope 2 by the company that owns or controls the T&D operation.

Eneco reports indirect emissions associated with T&D losses that are related to district heating in scope 2 because it owns and controls the T&D operation where the heat is consumed (T&D loss). In the case of electricity, however, Eneco does not own or control the T&D operation where the electricity is consumed (T&D loss), and so these losses are accounted for in scope 3 category 3c.

In addition to all energy that is consumed by Eneco itself – as an end user, Eneco will also account for the T&D losses of the electricity it sells to its customers as end users.

Companies may use the following methods to calculate scope 3 emissions from T&D losses:

- **Supplier-specific method**, which involves collecting data from electricity providers on T&D loss rates of grids where electricity is consumed by the reporting company
- **Average-data method**, which involves estimating emissions by using average T&D loss rates (e.g. national, regional, or global averages, depending on data availability).

Consequently, in this subcategory Eneco only reports the emissions lost in T&D systems for electricity. To calculate emissions in this subcategory, Eneco makes partial use of the supplier-specific method and full use of the average-data method. The latter method has been chosen in view of the supplier of the relevant database. The EFs are purchased annually from the International Energy Agency (IEA). Even though the IEA does not provide the numbers used to calculate these EFs, it provides transparency on its methodology, which enables us to check that the factors will accurately calculate the emissions.

Moreover, the IEA uses the method proposed in the GHG Protocol¹¹, and the factors provide a more accurate reflection of the actual situation. For example, the IEA determines its CO₂ per kWh factor based on the energy mix of the entire country¹² and the T&D system cannot decide what portion of the lost energy is renewable or was conventionally generated. Moreover, the IEA updates the grid loss values once a year, whereas other sources are not based on very recent numbers.

Partial use is made of the supplier-specific method in the case of the Netherlands EF for T&D loss. Eneco does this because grid operators in the Netherlands publicly report the purchase of GoOs to ensure emissions resulting from T&D loss are from renewable sources. Belgian and German T&D EFs are taken solely from the IEA's EF database.

The data used to calculate the emissions comprises the energy data relating to purchases from Eneco for the offices and energy supplied to customers. The supplied energy data (category 3.3d below) includes the amount of energy used for Eneco offices and so this is not added manually, in order to avoid double counting.

Category 3d: Generation of purchased electricity that is sold to end users

Companies may use the following methods to calculate scope 3 emissions from power that is purchased and sold:

- **Supplier-specific method**, which involves collecting emissions data from power generators
- **Average-data method**, which involves estimating emissions by using grid average emission rates.

Eneco also resells energy as a utility company. In this subcategory, Eneco reports the direct and upstream emissions related to all purchased electricity and heat that is supplied to end users. Please note that all electricity that is fed back (including conventionally generated electricity) is included in our energy balance as purchased energy.

¹¹ Technical Guidance for Calculating Scope 3 Emissions (p. 45)

¹² Emission Factors 2022 Database documentation (p. 38-39)

As our electricity label does not differentiate between self-generated energy and resold energy, the relevant quantities must be corrected to avoid double counting. Consequently, when it comes to the emissions associated with energy production, 98% of the total emissions from stationary combustion in scope 1 are deducted from the emissions associated with the supply of electricity and heat in scope 3, category 3d. Please see the [section on double counting](#) for visual information and a more detailed explanation.

Eneco is obliged by the Dutch government to determine the EF of the electricity that is supplied every year, which is then published on our website.¹³ Eneco therefore uses the supplier-specific method. In addition, Eneco draws distinctions between the Netherlands, Belgium and Germany and each business unit.

Category 4: Upstream transportation and distribution

This category includes emissions from the transportation and distribution of products (excluding fuel and energy products) purchased or acquired by a reporting company in the reporting year in vehicles and facilities not owned or operated by a reporting company, as well as other transportation and distribution services purchased by a reporting company in the reporting year (including inbound and outbound logistics). Specifically, this category includes:

- Transportation and distribution of products purchased by a reporting company in the reporting year, between a company's tier 1 suppliers and its own operations (including multi-modal shipping where multiple carriers are involved in the delivery of a product).
- Third-party transportation and distribution services purchased by a reporting company in the reporting year (either directly or through an intermediary), including inbound logistics, outbound logistics (e.g. of sold products), and third-party transportation and distribution between a company's own facilities.

Emissions may arise from the following transportation and distribution activities throughout the value chain:

- Air transport
- Rail transport
- Road transport
- Marine transport
- Storage of purchased products in warehouses, distribution centres and retail facilities

Outbound logistics services purchased by a reporting company are categorised as upstream because they are a purchased service. Emissions from transportation and distribution of purchased products upstream of the reporting company's tier 1 suppliers (e.g. transportation between a company's tier 2 and tier 1 suppliers) are accounted for in scope 3, category 1 (Purchased goods and services). A reporting company's scope 3 emissions from upstream transportation and distribution include the scope 1 and scope 2 emissions of third-party transportation companies.

Tier 1 suppliers are companies with which the reporting company has a purchase order for goods or services. Tier 2 suppliers are companies with which tier 1 suppliers have a purchase order for goods and services (see figure 7.3 in the Scope 3 Standard).

The **minimum boundaries** are the scope 1 and scope 2 emissions of transportation and distribution providers that occur during use of vehicles and facilities (e.g. as a result of energy use).

¹³ <https://www.eneco.nl/stroometiket/>

The emissions from transportation of tier 1 suppliers are included in category 1 (and in category 2). In addition to these transportation movements, there are some transportation movements to Eneco's Bio Golden Raand power plant. This category is therefore applicable.

Furthermore, approximately 300,000 kg of woodchips arrive in Delfzijl every year. Eneco can therefore estimate the emissions using the emission factor of 0.256 kg CO₂ per ton kilometre¹⁴. Assuming that, in the Netherlands, 300 kilometres must be driven in order to reach Delfzijl, this would mean emissions amount to 23 kilotonnes. This is less than 0.3%. This category is therefore omitted, except with respect to the service included in categories 1 and 2 in scope 3.

Category 5: Waste generated in operations

This category includes emissions from third-party disposal and treatment of waste that is generated in a reporting company's owned or controlled operations in the reporting year. This category includes emissions from disposal of both solid waste and wastewater. Only waste treatment in facilities owned or operated by third parties is included in scope 3. Waste treatment at facilities owned or controlled by a reporting company is accounted for in scope 1 and scope 2. Treatment of waste generated in operations is categorised as an upstream scope 3 category because waste management services are purchased by a reporting company.

This category includes all future emissions that result from waste generated in the reporting year. Waste treatment activities may include:

- Disposal in a landfill
- Disposal in a landfill with landfill-gas-to-energy (LFGTE), i.e. combustion of landfill gas to generate electricity
- Recovery for recycling
- Incineration
- Composting
- Waste-to-energy (WTE) or energy-from-waste (EfW), i.e. combustion of municipal solid waste (MSW) to generate electricity
- Wastewater treatment

Companies may optionally include emissions from transportation of waste.

A reporting company's scope 3 emissions from waste generated in operations include the scope 1 and scope 2 emissions of solid waste and wastewater management companies.

The **minimum boundaries** are the scope 1 and scope 2 emissions of waste management suppliers that occur during disposal or treatment.

Waste is generated as part of Eneco's operations, which means this category is applicable. However, a rough estimate shows that these emissions are not material. This estimate was made using the highest possible EF where no specific EF was available, which was multiplied by the data gathered from the third-party that handles our waste management. In addition to the fact that the emissions are not material in terms of their size, the materiality analysis¹⁵ also reveals that multiple stakeholders do not consider this topic to be material. Moreover, the quality of data is questionable. Given the rough estimate of the data, in combination with the lack of EFs for accurately estimating emissions, the quality of the data is poor. For that reason, this category is omitted.

¹⁴ co2emissiefactoren.nl, goederenvervoer, vrachtwagen 10-20 ton.

¹⁵ Eneco Annual Report (2022) – Materiële thema's (pp. 16 and 17)

Category 6: Business travel

This category includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses and passenger cars. Emissions from transportation in vehicles owned or controlled by a reporting company are accounted for in either scope 1 (for fuel use) or scope 2 (for electricity use). Emissions from leased vehicles operated by a reporting company not included in scope 1 or scope 2 are accounted for in scope 3, category 8 (Upstream leased assets). Emissions from transportation of employees to and from work are accounted for in scope 3, category 7 (Employee commuting).

Emissions from business travel may arise from:

- Air travel
- Rail travel
- Bus travel
- Car travel (e.g. business travel in rental cars or employee-owned vehicles other than employee commuting to and from work)
- Other modes of travel

Companies may optionally include emissions from business travellers staying in hotels.

A reporting company's scope 3 emissions from business travel include the scope 1 and scope 2 emissions of transportation companies (e.g. airlines).

The **minimum boundaries** are the scope 1 and scope 2 emissions of transportation carriers that occur during the use of vehicles (e.g. as a result of energy use).

Even though this category is not material, Eneco includes this category in its scope 3 boundaries. Eneco feels it has a responsibility to take the lead in the transition to more sustainable practices, and this includes creating a sustainable environment for its employees. Eneco wants – and has full authority - to adjust and implement policies regarding this topic, which is why this category is included in the VCCF.

Companies may use one of the following methods to calculate scope 3 emissions from business travel:

- Fuel-based method, which involves determining the amount of fuel consumed during business travel (i.e. scope 1 and scope 2 emissions of transport providers) and applying the appropriate emission factor for that fuel
- Distance-based method, which involves determining the distance and mode of business trips, then applying the appropriate emission factor for the mode used
- Spend-based method, which involves determining the amount of money spent on each mode of business travel transport and applying secondary (EEIO) emission factors.

Eneco's business travel emissions are calculated on the basis of a combination of the distance-based method and the spend-based method, depending on the mode of travel. This allows for consistency and is the most accurate method for estimating data. For example, the distance travelled on the basis of the reimbursement policies for car travel (based on €0.25/km) can be estimated, whereas the quantities for air travel are determined on the basis of the Schiphol travel database, in which all business travel flights are entered.

The division into car fuel-types is based on the fuel distribution obtained from the mobility survey, as explained in category 7. The distance travelled by public transport for business travel is calculated on the basis of the costs claimed and the average costs per kilometre (€0.15/km: average of €0.19/km for peak hours and €0.11/km for off-peak hours, source: NS).

The requirements of the minimum boundary are met using the TTW EFs for person-kilometres as provided by co2emissiefactoren.nl.

Category 7: Employee commuting

This category includes emissions from the transportation of employees between their homes and their worksites. Emissions from employee commuting may arise from:

- Car travel
- Bus travel
- Rail travel
- Air travel
- Other modes of transportation

Companies may include emissions from teleworking (i.e. employees working remotely) in this category. A reporting company's scope 3 emissions from employee commuting include the scope 1 and scope 2 emissions of employees and third-party transportation providers. Even though employee commuting is not always purchased or reimbursed by a reporting company, it is categorised as an upstream scope 3 category because it is a service that enables company operations, similar to purchased or acquired goods and services.

The **minimum boundaries** are the scope 1 and scope 2 emissions of transportation carriers that occur during the use of vehicles (e.g. as a result of energy use).

Emissions resulting from employee commuting are similar to emissions resulting from business travel in that they do not exceed the materiality threshold. This category enables company operations and is deemed important by Eneco, which is why it is included in the VCCF.

Figure 7.1 (as shown in the Technical Guidance, p. 88) offers a decision tree for selecting a calculation method for scope 3 emissions from employee commuting. Companies may use one of the following methods:

- Fuel-based method, which involves determining the amount of fuel consumed during commuting and applying the appropriate emission factor for that fuel
- Distance-based method, which involves collecting data from employees on commuting patterns (e.g. distance travelled and mode used for commuting) and applying appropriate emission factors for the modes used
- Average-data method, which involves estimating emissions from employee commuting based on average (e.g. national) data on commuting patterns.

The distance-based method is used because no data is available for the quantity or costs of employee commuting. Our HR department makes an estimate of total employee commuting. The number of kilometres commuted is calculated on the basis of the total commuting distance per employee and the number of working days per year. Several assumptions are made in order to adjust for holidays. For example, the maximum number of working days per year is 260. The average amount of days' holiday (38 and 7 national holidays like Christmas) is deduced using that number. This results in an average number of working days per FTE (215 working days per year). This average number is then multiplied by the total commuting distance.

To enable us to distinguish between modes of travel, an annual survey is held, which takes place separately for the Netherlands, Belgium and Germany. The responses are subsequently analysed to reveal the share per mode of travel. The response rate for this survey is high (58%, with the survey being sent to 3,872 employees). This share per mode of travel is multiplied by the total amount of commuting kilometres as derived according to the calculation described above.

Important! In specific circumstances, a different method is used. For example, as a result of the Covid-19 pandemic, the estimate for commuting in 2020 and 2021 was not made using measured data, but was instead based on the occupation of Eneco's head office.

The emission factors are derived from co2emissiefactoren.nl. These EFs include emissions per passenger kilometre for each mode of travel. For carpooling, the emission factor is divided by two, since at least two people must be present in the vehicle in order for carpooling to take place.

Category 8: Upstream leased assets

This category includes emissions from the operation of assets that are leased by a reporting company in the reporting year and not already included in a reporting company's scope 1 or scope 2 inventories. This category is only applicable to companies that operate leased assets (i.e. lessees). For companies that own and lease assets to others (i.e. lessors), see category 13 (Downstream leased assets).

Leased assets may be included in a company's scope 1 or scope 2 inventory depending on the type of lease and the consolidation approach the company uses to define its organisational boundaries.

If a reporting company leases an asset for only part of the reporting year, it should account for emissions for the portion of the year that the asset was leased. A reporting company's scope 3 emissions from upstream leased assets include the scope 1 and scope 2 emissions of lessors (depending on the lessor's consolidation approach).

The **minimum boundaries** are the scope 1 and scope 2 emissions of lessors that occur during the reporting company's operation of leased assets (e.g. as a result of energy use).

According to IFRS 16, assets that are leased by Eneco must be financially consolidated. Eneco groups upstream leased assets into four distinct categories:

- Land: for building wind farms and solar parks. This mostly occurs in the Netherlands, Belgium and the United Kingdom, and is now also starting in Germany.
- Buildings and rooftops: buildings comprise the offices in the Netherlands, Belgium, Germany and the United Kingdom, whereas rooftops are mostly used for solar panels in Belgium.
- Machinery and equipment: this chiefly consists of Belgium-based financial lease contracts (related to solar panels).
- Vehicles: this refers to the vehicles leased as company cars or personal vehicles.

Emissions from vehicles and buildings that occur during operational control are included in scopes 1 and 2. Since the other two categories consist exclusively of wind farms and solar parks, category 8 activities apply to Eneco but are not included in the VCCF. Following the closure of each financial year, the Eneco Financial Services team is consulted to determine whether new lease contracts must be included in either scope 1 or 2 based on operational control, or within this category.

Category 9: Downstream transportation and distribution

This category includes emissions from transportation and distribution of products sold by a reporting company in the reporting year between a reporting company's operations and the end consumer (if not paid for by a reporting company), in vehicles and facilities not owned or controlled by a reporting company. This category includes emissions from retail and storage. Outbound transportation and distribution services that are purchased by a reporting company are excluded from category 9 and included in category 4 (Upstream transportation and distribution) because the reporting company purchases the service. Category 9 only includes transportation-related and distribution-related emissions that occur after a reporting company pays to produce and distribute its products.

Emissions from downstream transportation and distribution can arise from:

- Storage of sold products in warehouses and distribution centres
- Storage of sold products in retail facilities
- Air transport
- Rail transport
- Road transport
- Marine transport

Companies may include emissions from customers traveling to retail stores in this category, which can be significant for companies that own or operate retail facilities.

A reporting company's scope 3 emissions from downstream transportation and distribution include the scope 1 and scope 2 emissions of transportation companies, distribution companies, retailers and (optionally) customers.

The **minimum boundaries** are the scope 1 and scope 2 emissions of transportation providers, distributors and retailers that occur during use of vehicles and facilities (e.g. as a result of energy use).

Eneco has several products within its product portfolio. However, products that are sold or leased downstream are brought to customers in Eneco's company vehicles, which are incorporated in scopes 1 and 2. Consequently, this category is not applicable with respect to the VCCF.

Category 10: Processing of sold products

This category includes emissions from the processing of sold intermediate products by third parties (e.g. manufacturers) subsequent to their sale by a reporting company. Intermediate products are products that require further processing, transformation or inclusion in another product before use, and therefore result in emissions from processing subsequent to their sale by a reporting company and before their use by the end consumer.

Emissions from processing should be allocated to the intermediate product. In certain cases, the eventual end use of sold intermediate products may be unknown.

Companies may calculate emissions from category 10 without collecting data from customers or other value chain partners. A reporting company's scope 3 emissions from the processing of sold intermediate products include the scope 1 and scope 2 emissions of downstream value chain partners (e.g. manufacturers).

The **minimum boundaries** are the scope 1 and scope 2 emissions of downstream companies that occur during processing (e.g. as a result of energy use).

Category 10 activities do not apply to Eneco and are therefore not included in the VCCF.

Category 11: Use of sold products

This category includes emissions from the use of goods and services sold by a reporting company in the reporting year. A reporting company's scope 3 emissions from the use of sold products include the scope 1 and scope 2 emissions of end users. End users include consumers as well as business customers that use final products.

This standard divides emissions from the use of sold products into two types:

- Direct use-phase emissions
- Indirect use-phase emissions

The minimum boundary of category 11 includes direct use-phase emissions of sold products.

Companies may also account for indirect use-phase emissions of sold products, and should do so when indirect use-phase emissions are expected to be significant. Eneco does not report on the indirect use-phase of its products because the indirect use-phase of gas is not expected to be significant.

This category includes the total expected lifetime emissions from all relevant products sold in the reporting year across a reporting company's product portfolio. By doing so, the scope 3 inventory accounts for a company's total GHG emissions associated with its activities in the reporting year.

The **minimum boundaries** are the direct use-phase emissions of sold products over their expected lifetime (i.e. the scope 1 and scope 2 emissions of end users resulting from the use of: products that directly consume energy (fuels or electricity) during use; fuels and feedstocks; and GHGs and products that contain or form GHGs that are emitted during use).

Category 11 is applicable and material for Eneco, which is why it is included in the VCCF. Despite the fact that Eneco has multiple energy products in its portfolio (i.e. electricity, heat and natural gas), only natural gas is included in this category because the other energy sources are included in scope 2 and scope 3.3.

Eneco sells natural gas to end users (consumers and business customers), resulting in indirect emissions from combustion that Eneco must report on under scope 3 category 11. Calculating the emissions requires collecting fuel use data and multiplying this by representative fuel emission factors.

Eneco uses an WTW emission factor for sold natural gas in category 11, which includes the emissions related to upstream emissions. However, in order to calculate the emissions from natural gas and biogas, the EF is converted from m³ to MWh for consistency. This is similar to the conversion of the EF for **scope 1, stationary combustion**. In the context of this conversion, a distinction has to be made between the gross calorific value (GCV) and the net calorific value (NCV). These express the amount of energy that can be generated by the combustion of 1 cubic meter of natural gas. In the Netherlands¹⁶, gas is traded in energy units expressed by the gross caloric value, which is in keeping with the conversion method explained in **Annexe I**.

The energy volumes for Belgium¹⁷ shown in the energy balance are also expressed in GCV. Consequently, in order to calculate the emissions correctly, the EF, which is obtained from the GEMIS model, must be converted. The GEMIS model expresses both direct and indirect emissions in NCV¹⁸. In order to express the emissions in GCV, the EF is multiplied by a net/gross ratio.

¹⁶ Gasunie; <https://www.gasunietransportservices.nl/aangeslotenen/gaskwaliteit-en-meet zaken/calorische-waarden>

¹⁷ <https://www.atrias.be/sector-data>

¹⁸ Öko-Institute, GEMIS Manual (p. 41)

Important! With respect to high and low calorific gas, no distinction is made in terms of CO₂ emissions. According to the TNO Research institute¹⁹, no significant difference has been found despite the fact that differences in emissions between the gas types might be expected. For this reason, no distinction is made between sold gas with a high calorific value and sold gas with a low caloric value (the latter is primarily sold outside the Netherlands).

Within this category, Eneco also adjusts for double counting because some of the supplied natural gas is used to generate electricity which is facilitated by Eneco on the electricity markets. Double counting occurs when Eneco purchases the CoOs from these customers and redeems these certificates on portfolio level for its power label. More specifically, these CoOs are purchased from AgroEnergy customers and Pergen – who use natural gas supplied by Eneco in their CHPs to generate heat and electricity.

Since the emissions allocated to the CoOs are then included in both scope 3, category 3d and category 11, Eneco deducts the share of CoOs that is not self-generated to the maximum of the remaining emissions from scope 3d, after the self-generated electricity and related emissions are deducted.

Besides selling energy, Eneco has products in its portfolio that directly consume energy during their use phase (equipment, appliances). However, because these products use energy that is incorporated in category 3 and 11, these are not explicitly mentioned in the VCCF. Furthermore, no reliable data is available right now to account for double counting and maintain the level of accuracy desired for the VCCF. As these goods are purchased, their upstream emissions are included in the scope 3 category 1 emissions.

Category 12: End-of-life treatment of sold products

This category includes emissions from the waste disposal and treatment of products sold by a reporting company (in the reporting year) at the end of their life. This category includes the total expected end-of-life emissions from all products sold in the reporting year. A reporting company's scope 3 emissions from end-of-life treatment of sold products include the scope 1 and scope 2 emissions of waste management companies.

The **minimum boundaries** are the scope 1 and scope 2 emissions of waste management companies that occur during disposal or treatment of sold products.

Eneco has a diverse product portfolio, as noted in the section on category 11. As a result, category 12 is applicable. This category is omitted, however, due to a similar line of reasoning as that followed for scope 3 category 5 and the low amount of sold products other than energy (e.g. heat pumps).

Eneco maintains contact with several partners (waste management companies, and suppliers that produce life cycle-assessments (LCAs)) to obtain accurate data so that it can perform calculations for this category.

¹⁹ Vaststellingsmethodieken voor CO₂-emissiefactoren van aardgas in Nederland, TNO 2006

Category 13: Downstream leased assets

This category includes emissions from the operation of assets that are owned by a reporting company (acting as lessor) and leased to other entities in the reporting year that are not already included in scope 1 or scope 2. This category is applicable to lessors (i.e. companies that receive payments from lessees). Companies that operate leased assets (i.e. lessees) should refer to category 8 (Upstream leased assets).

Leased assets may be included in a company's scope 1 or scope 2 inventory depending on the type of lease and the consolidation approach the company uses to define its organisational boundaries. If a reporting company leases an asset for only part of the reporting year, a reporting company should account for emissions from the portion of the year that the asset was leased.

A reporting company's scope 3 emissions from downstream leased assets include the scope 1 and scope 2 emissions of lessees (depending on the lessee's consolidation approach).

The **minimum boundaries** are the scope 1 and scope 2 emissions of lessees that occur during operation of leased assets (e.g. as a result of energy use).

Category 13 activities are applicable to Eneco. The current estimate is that some 90,000 central heating boilers (CHBs) are leased to consumers. The fuel and energy consumed by these products are partially included in scope 3, in either category 3 or category 11, in a similar way to the direct use-phase of sold products.

A calculation screening, which includes various scenarios, has been carried out to determine whether category 13 exceeds the materiality threshold. The rough estimate shown below indicates that these emissions are immaterial in the various scenarios, based on the approximately 90,000 central heating boilers (CHBs) leased to customers.

Proportion that does not buy energy from Eneco	Corresponding number of CHBs	Consumption (total m ³)	Emissions (kt)	Share of footprint (2022 ²⁰)
0%	0	0	0	0%
25%	22,500	27,000,000	56.1	0.6%
50%	45,000	54,000,000	112.3	1.1%
75%	67,500	81,000,000	168.4	1.7%
100%	90,000	108,000,000	224.5	2.2%

In this table, a distinction is drawn between various percentages of leased CHBs, ranging from all customers with leased CHBs are Eneco energy customers (0%) to no customers with leased CHBs are Eneco energy customers (100%). In addition, it is assumed that all boilers use natural gas. In reality, some boilers use natural gas, while other boilers use electricity or biogas.

²⁰ In 2022, total emissions amounted to 10.0 megatonnes. Please see the Annual Report 2022 or One Planet Plan 2022 for details.

The average amount of natural gas consumed per household in 2022 was 1200 m³ according to Nibud²¹, and this average is used to estimate the total emissions (EF derived from co2emissiefactoren.nl). The table above shows that, even in the worst scenario, the share of the 2022 footprint is immaterial. The emissions are therefore not explicitly mentioned or incorporated in the VCCF.

Category 14: Franchises

This category includes emissions from the operation of franchises not included in scope 1 or scope 2. A franchise is a business operating under a license to sell or distribute another company's goods or services within a certain location. This category is applicable to franchisors (i.e. companies that grant licenses to other entities to sell or distribute its goods or services in return for payments, such as royalties for the use of trademarks and other services). Franchisors should account for emissions from the operation of franchises (i.e. the scope 1 and 2 emissions of franchisees) in this category.

Franchisees (i.e. companies that operate franchises and pay fees to a franchisor) should include emissions from operations under their control in this category if they have not included those emissions in scope 1 and scope 2 due to their choice of consolidation approach. Franchisees may optionally report upstream scope 3 emissions associated with the franchisor's operations (i.e. the scope 1 and scope 2 emissions of the franchisor) in category 1 (Purchased goods and services).

The **minimum boundaries** are the scope 1 and scope 2 emissions of franchisees that occur during operation of franchises (e.g. as a result of energy use).

Eneco has no franchises. If it had franchises, they would be included in scope 1 and scope 2 due to use of the operational control approach. For this reason, category 14 is not included in the VCCF.

²¹ <https://www.nibud.nl/onderwerpen/uitgaven/kosten-energie-water/>

Category 15: Investments

This category includes scope 3 emissions associated with the reporting company's investments in the reporting year, not already included in scope 1 or scope 2. This category is applicable to investors (i.e. companies that make an investment with the objective of making a profit) and companies that provide financial services. Investments are categorised as a downstream scope 3 category because the provision of capital or financing is a service provided a reporting company.

Category 15 is designed primarily for private financial institutions (e.g. commercial banks), but is also relevant to public financial institutions (e.g. multilateral development banks, export credit agencies, etc.) and other entities with investments not included in scope 1 and scope 2.

Investments not included in the company's scope 1 or scope 2 emissions are included in scope 3, in this category. A reporting company's scope 3 emissions from investments are the scope 1 and scope 2 emissions of investees.

For purposes of GHG accounting, financial investments are divided into four types:

- Equity investments
- Debt investments
- Project finance
- Managed investments and client services

Emissions from investments should be allocated to a reporting company based on a reporting company's proportional share of investment in the investee. Because investment portfolios are dynamic and can change frequently throughout the reporting year, companies should identify investments by choosing a fixed point in time, such as 31 December of the reporting year, or using a representative average over the course of the reporting year.

The **minimum boundaries** are the proportional scope 1 and 2 emissions (i.e. the investor's proportional share of equity in the investee and relevant projects).

Eneco uses the operational control method to establish the organisational boundaries for consolidated reporting. Because subsidiaries and JOs are consolidated, they both come under scope 1 or 2. The JVs and affiliates that Eneco participates in are not consolidated. Instead, they are included in the financial statements as profit of associates and joint ventures. The GHG Accounting consolidation is the same as the financial consolidation, and so the JVs and affiliates are treated as equity investments, which means scope 3 category 15 is applicable. Scope 1 and scope 2 emissions could be included proportionally for each of these entities, based on the share of equity in the entity. The JVs and associates are also included in the entity list, which shows that most of the equity investments are in software, services and renewable energy projects.

Eneco has sent templates to the JVs and associates and asked the respondents to enter their scope 1 and scope 2 consumption volumes. From these templates, the averaged scope 1 and scope 2 consumption volumes are calculated. These averages are multiplied by the total number of JVs and associates and linked to the according direct emission factors to obtain a rough estimate of the emissions. These totalled 43 kilotonnes, which is 0.5% of Eneco's emissions. That percentage is immaterial, which is why this category is omitted.

To obtain a rough estimate of the emissions in this category, a template is filled in for each new equity investment in order to calculate the scope 1 and scope 2 emissions. The result of this calculation is then multiplied by Eneco's share of the relevant equity investment. The entities' total emissions are then added together to determine whether this category exceeds the materiality threshold or not.

4.5.6 Boundary requirements

A reporting company shall account for all scope 3 emissions as defined in the standard, and disclose and justify any exclusions. A reporting company shall account for emissions from each scope 3 category according to its minimum boundaries. Companies may include emissions from optional activities within each category. Companies shall account for scope 3 emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆), if they are emitted in the value chain. A reporting company may exclude scope 3 activities from the inventory, provided that any exclusion is disclosed and justified.

Biogenic CO₂ emissions (e.g. CO₂ from the combustion of biomass) that occur in a reporting company's value chain shall not be included in the scopes, but shall be included and separately reported in the public report. Any GHG removals (e.g. biological GHG sequestration) shall not be included in scope 3, but may be reported separately.

Eneco meets the required minimum boundaries through the use of the proposed EFs. Moreover, the EFs are expressed in CO₂-equivalents and incorporate the GHGs covered by the Kyoto Protocol. The biogenic emissions are reported separately in our OPP.

4.6. Accounting for emissions and removals from biogenic sources

The GHG Protocol Corporate Accounting and Reporting Standard requires that direct CO₂ emissions from the combustion of biomass be included in the public report, but reported separately from the scopes, rather than included in scope 1. The separate reporting requirement also applies to scope 3. Biogenic CO₂ emissions (e.g. CO₂ from the combustion of biomass) that occur in a reporting company's value chain are required to be included in the public report, but reported separately from scope 3. The requirement to report biogenic CO₂ emissions separately refers to CO₂ emissions from combustion or biodegradation of biomass only, not to emissions of any other GHGs (e.g. CH₄ and N₂O), or to any GHG emissions that occur in the life cycle of biomass other than from combustion or biodegradation (e.g. GHG emissions from processing or transporting biomass).

Scope 1, scope 2, and scope 3 inventories include only emissions, not removals. Any removals (e.g. biological GHG sequestration) may be reported separately from the scopes.

Biogenic emissions are reported separately in our OPP and are not included in our VCCF.

5. Tracking emissions over time

Eneco tracks emissions over time in connection with a variety of business goals, including:

- Public reporting
- Establishing GHG targets
- Managing risks and opportunities
- Addressing the needs of investors and other stakeholders

5.1. Base year

Companies shall choose and report a base year for which verifiable emissions data are available and specify their reasons for choosing that particular year.

Eneco has chosen the calendar year 2019 as a base year. This is because 2019 was the most recently available calendar year at the time our One Planet Plan (published in June 2021) was drafted. The inventory base year can also be used as a basis for setting - and tracking progress towards - Eneco's GHG target, in which case it is referred to as a target base year.

5.2. Calendar year

Even though Eneco's financial reporting period has changed from a calendar year to a broken financial year (April to March), Eneco has opted to report its GHG emissions in calendar years owing to the use of the best available data.

Dutch law obliges Eneco to publish its emissions and sources used for electricity and heat supply on its website and our customers' invoices by 1 May at the latest. The use of such EFs ensures the accurate reporting of Eneco's value chain carbon footprint in the annual report.

5.3. Recalculating base year emissions

Companies shall develop a base year emissions recalculation policy, and clearly articulate the basis and context for any recalculations. If applicable, the policy shall state any “significance threshold” applied for deciding on historic emissions recalculation.

Base year emissions shall be retroactively recalculated to reflect changes in a reporting company that would otherwise compromise the consistency and relevance of the reported GHG emissions information.

The following cases shall trigger recalculation of base year emissions:

- Structural changes in a reporting company that have a significant impact on a reporting company’s base year emissions. A structural change involves the transfer of ownership or control of emissions-generating activities or operations from one company to another. While a single structural change might not have a significant impact on the base year emissions, the cumulative effect of a number of minor structural changes can result in a significant impact. Structural changes include:
 - Mergers, acquisitions and divestments
 - Outsourcing and insourcing of emitting activities
- Changes in calculation methodology or improvements in the accuracy of EFs or activity data that result in a significant impact on the base year emissions data
- Discovery of significant errors, or a number of cumulative errors, that are collectively significant.

5.3.1 Significance thresholds for recalculations

In line with the scope 3 inclusion threshold, Eneco uses a significance threshold that triggers a recalculation of the base year emissions if exceeded. This threshold is a cumulative amount of 5% of the base year data (2019). This threshold is based on both the rule of thumb proposed in the GHG protocol²² and on the SBTi with which Eneco complies.

The SBTi states: “A company’s base year emissions recalculation policy must include a significance threshold of 5% or less that is applied to emission recalculations, or in the absence of a base year emissions recalculation policy a company must agree to apply a 5% significance threshold for emission recalculations.”²³

Here, too, the cumulative 5% significance threshold means that, when taken together, all changes in the aforementioned textbox must exceed 5% of the base year emissions in order for recalculation to take place. The total cumulative impact of changes is assessed every reporting year, for example in an annual assessment of structural changes. If the cumulative changes exceed the threshold, Eneco shall recalculate the base year emissions. If the cumulative changes lay under the threshold, Eneco assesses whether a recalculation is preferred.

²² GHG Protocol, A Corporate Accounting and Reporting Standard (p. 70)

²³ SBTi CRITERIA AND RECOMMENDATIONS FOR NEAR-TERM TARGETS, version 5.1 (p. 17)

5.3.2 Timing of recalculations for structural changes

When significant structural changes occur during the middle of the year, the base year emissions should be recalculated for the entire year, rather than only for the remainder of the reporting period after the structural change occurred. This avoids the need to recalculate base year emissions again in the succeeding year. Similarly, current year emissions should be recalculated for the entire year to maintain consistency with the base year recalculation. If it is not possible to make a recalculation in the year of the structural change (e.g. due to a lack of data for an acquired company), the recalculation may be carried out in the following year.

Every year, at the end of the fiscal year, an assessment will be done to see if any structural changes have occurred and trigger the recalculation.

5.3.3 Recalculations for changes in calculation methodology or improvements in data accuracy

A company might report the same sources of GHG emissions as in previous years, but measure or calculate them differently. For example, a reporting company might have used a national electric power generation emission factor to estimate scope 2 emissions in year one of reporting. In later years, it may obtain more accurate utility-specific EFs (for the current as well as past years) that better reflect the GHG emissions associated with the electricity that it has purchased. If the differences in emissions resulting from such a change are significant, historic data is recalculated applying the new data and/or methodology.

Sometimes the more accurate data input may not reasonably be applied to all past years, or new data points may not be available for past years. A company may then have to backcast these data points, or the change in data source may simply be acknowledged without recalculation. This acknowledgement should be made in the report each year in order to enhance transparency; otherwise, new users of the report in the two or three years after the change may make incorrect assumptions about the performance of the company.

Any changes in emission factor or activity data that reflect real changes in emissions (i.e. changes in fuel type or technology) do not trigger a recalculation.

Eneco strives to estimate its carbon footprint by using the most accurate data possible. This is in line with the criteria mentioned in [section 2.2](#). However, the amount of data is constantly increasing and methods available for calculating EFs can change. Moreover, new rules and regulations, such as the CSRD, might also specify the use of a particular disclosure method. In that case, a new method may be used.

Whenever a new method is applied to estimate the carbon footprint of a specific activity, the 5% significance threshold is used to determine whether it is necessary to recalculate the historic data. If the changes exceed the threshold, Eneco shall recalculate the previous years' emissions. If the cumulative changes lay under the threshold, Eneco assesses whether a recalculation is preferred. Recalculations will be mentioned in the public report.

5.3.4 Optional reporting for recalculations

Optional information that companies may report on recalculations includes:

- The recalculated GHG emissions data for all years between the base year and the reporting year.
- All actual emissions as reported in respective years in the past, i.e. the figures that have not been recalculated.

To promote transparency, Eneco will recalculate GHG emissions data for all years between the base year and the reporting year. Whenever this happens, this will be explicitly mentioned in public reports. Furthermore, Eneco will not report the original figures in cases where recalculation was necessary. Despite this, the recalculation will be explained thoroughly.

5.3.5 No base year emissions recalculations for facilities that did not exist in the base year

Base year emissions are not recalculated if a reporting company acquires (or insources) operations that did not exist in its base year. There may only be a recalculation of historic data back to the year in which the acquired company came into existence. The same applies to cases where a reporting company makes a divestment of (or outsources) operations that did not exist in the base year.

Even though these changes would not require a recalculation of the base year emissions, Eneco will include these changes in the original targets set in the context of its GHG accounting, in accordance with the SBTi.

5.3.6 No recalculation for “outsourcing/insourcing” if reported under scope 2 and/or scope 3

Structural changes due to “outsourcing” or “insourcing” do not trigger base year emissions recalculation if a reporting company is reporting its indirect emissions from relevant outsourced or insourced activities. For example, outsourcing production of electricity, heat or steam does not trigger base year emissions recalculation, since the GHG Protocol Corporate Accounting and Reporting Standard requires scope 2 reporting. However, outsourcing/insourcing that shifts significant emissions between scope 1 and scope 3 when scope 3 is not reported does trigger a base year emissions recalculation (e.g. when a reporting company outsources the transportation of products).

All relevant outsourced activities with GHG emissions should be included, as specified in the stated requirements in scope 3 emissions. In cases where such activities have not been included, Eneco will recalculate the scope 3 emissions as explained in [section 4.5.5](#).

5.3.7 No recalculation for organic growth or decline

Base year emissions and any historic data are not recalculated for organic growth or decline. Organic growth/decline refers to increases or decreases in production output, changes in product mix, and closures and openings of operating units that are owned or controlled by a reporting company. The rationale for this is that organic growth or decline will result in a change of emissions to the atmosphere and therefore needs to be counted as an increase or decrease in a reporting company’s emissions profile over time.

Eneco discloses the historic data in its OPP. Consequently, any organic growth or decline in GHG emissions can be seen in a trend over time.

Glossary

Base year: A historic datum (a specific year or an average over multiple years) against which a company's emissions are tracked over time.

Base year emissions recalculation: Recalculation of emissions in the base year to reflect a change in the structure of the company, or to reflect a change in the accounting methodology used. This ensures data consistency over time, i.e. comparisons of like with like over time

Biogas: Biogas is produced from sludge, landfill waste, garden waste, leftover fruit and vegetables, and animal by-products such as cow manure, among other things. The biogas is then purified and dried and enhanced so it has the same quality as natural gas. Once all this processing has been completed, it may be called green gas and is a sustainable alternative to fossil natural gas. (source: [Platform Groen Gas – Platform Groen Gas](#) in Dutch).

Biomass: Biomass is the biodegradable part of products, wastes and by-products from natural products. These include by-products of agriculture, horticulture, forests and the sea, as well as industrial and municipal waste. 'Biodegradable' implies that something can be decomposed naturally by mould and bacteria. Eneco uses these biodegradable substances to produce electricity for industry and heat for our heating grids. Eneco applies the rule of thumb that biomass is only used if other sustainable alternatives are not available in sufficient quantities. The biomass Eneco processes, trade and/or use meets international sustainability criteria and chain management requirements. These are guaranteed by certificates approved by the European Union and Dutch government. Example of such certificates include Better Biomass.

Climate neutral: Also referred to as CO₂ neutral and net-zero. These terms indicate that a process or product does not contribute to climate change along the chain as a whole. This can be achieved by saving energy, generating and supplying sustainable energy, storing and/or using CO₂, and/or reducing and/or offsetting CO₂.

Control: The ability of a company to direct the policies of another operation. More specifically, it is defined as either operational control (the organisation or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation) or financial control (the organisation has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities)

CO₂ equivalent (CO₂-eq): The universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.

Eneco heat: Eneco heat is water that has been heated by heat released from various sources. This heated water is transported through the heating grid to provide buildings with hot water or to heat spaces. The sources used depend on the location.

Internal operations: By internal operations Eneco means work-related travel by our employees and the energy used for our premises.

Kyoto Protocol: A protocol to the United Nations Framework Convention on Climate Change (UNFCCC). Once entered into force it will require countries listed in its Annex B (developed nations) to meet reduction targets of GHG emissions relative to their 1990 levels during the period of 2008–12.

Renewable energy sources: These are sources that are replenished by nature. These include wind energy, solar energy (solar thermal and photovoltaic), geothermal energy, ambient energy, tidal energy, wave energy and other ocean energy, hydropower, and energy from biomass, landfill gas, sewage treatment plant gas and biogas (source: European Directive 'On the Promotion of the Use of Energy from Renewable Sources').

Residual heat: This is heat generated as a by-product in industrial or commercial processes. This residual heat is produced anyway and, if not connected to a heating grid, would end up unused in the air or water (source: draft Dutch Collective Heat Supply Act, Article 1).

Annexe I: Conversion of Data and Emission Factors

Scope 1: EF of Stationary Combustion

The gross calorific value (GCV), is used to estimate the energy generated by the combustion of natural gas. The GCV expresses how much energy can be generated by burning a gaseous fuel. In the Netherlands, a value of 35.17 MJ/m³ is commonly used as the GCV. One MJ is equal to 0.000277778 MWh, and 1 m³ of natural gas with a GCV of 35.17 MJ/m³ gas generates 0.009769444 MWh (Source: [Gasunie Unit Converter](#)).

The EF in kg CO₂-equivalents must be divided by the value in MWh per m³ to convert the value into kg CO₂-equivalents/MWh.

Annexe II: Overview of materiality of scope 3 categories

Category	Description	Applicable category	Materiality threshold (2022 values)	Reasoning to include; if not exceeding threshold	Included in VCCF
Category 1	Purchased goods and services	Yes	2.6%	Eneco chooses partners and providers based on sustainability criteria	Yes
Category 2	Capital goods	Yes	N/A	Included in category 1 threshold value	Yes
Category 3a	Upstream emissions of purchased fuels	Yes	2.4%	Included in the OPP strategy	Yes
Category 3b	Upstream emissions of purchased electricity	Yes	0.0%	Included in the OPP strategy	Yes
Category 3c	T&D losses	Yes	1.2%	Included in the OPP strategy	Yes
Category 3d	Generation of purchased electricity that is sold to end users	Yes	8.1%	Included in the OPP strategy	Yes
Category 4	Upstream transportation and distribution	Yes	0.3%	It is applicable, but as it is immaterial it is omitted.	No
Category 5	Waste generated in operations	Yes	No (2.3%)	Applicable. Eneco's operations generate waste. Accurate data is missing but estimated emissions do not exceed the threshold.	No
Category 6	Business travel	Yes	No (0.0%)	Eneco encourages sustainable business travel	Yes
Category 7	Employee commuting	Yes	No (0.0%)	Eneco has implemented sustainable commuting policies	Yes

Category	Description	Applicable category	Materiality threshold (2022 values)	Reasoning to include; if not exceeding threshold	Included in VCCF
Category 8	Upstream leased assets	Yes	-	Applicable. Eneco leases upstream assets but as these are under operational control they are included in scopes 1 and 2. The only other leased asset is land (for wind farms and solar parks) but this is not expected to be material.	No
Category 9	Downstream transportation and distribution	N/A	-	-	No
Category 10	Processing of sold products	N/A	-	-	No
Category 11	Use of sold products	Yes	72.8%	Applicable and included in VCCF	Yes
Category 12	End-of-life treatment of sold products	Yes	-	Applicable. Eneco sells products, but the estimated emissions do not exceed threshold because of the low number of products sold.	No
Category 13	Downstream leased assets	Yes	No (0%-2.2%)	Applicable. Eneco leases downstream heating boilers, but the estimated emissions do not exceed threshold.	No
Category 14	Franchises	N/A	-	-	No
Category 15	Investments	Yes	0.5	Applicable. Eneco has investments (joint ventures and associates) in software, services and renewable energy projects, and the scope 1 and 2 emissions are immaterial.	No