

Reporting manual for Product Climate Footprint (PCF)

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

1.	Introduction.....	3
1.1	Purpose of the reporting manual	3
1.2	Version management of the reporting manual.....	3
1.2.1	Revisions regarding version 1.1	3
1.2.2	Revisions regarding version 1.2	3
2.	Who can report	4
2.1	Reporting responsibility.....	4
2.2	Selection strategy	4
3.	Requirements regarding activity data	5
3.1	Requirements regarding activity data within cultivation	5
3.1.1	Requirements regarding type of raw material.....	5
3.1.2	Requirements regarding quantity of raw material.....	6
3.1.3	Guidance for voluntary reporting	6
3.1.4	Principles for a large number of homogeneous growers	6
3.2	Requirements regarding activity data within packaging	8
3.3	Data points	8
3.4	Requirements for approved reporting	8
3.5	Consequences of incomplete or missing reporting.....	8
	Appendix 1 Selection strategy for implementation.....	9
	Appendix 2 Data Points	10

1. Introduction

1.1 Purpose of the reporting manual

This document is a manual for reporting activity data related to the **Product Carbon Footprint – PCF**. The purpose of the reporting manual is to create clarity about who can report and what data shall be reported.

In this document, you can find answers to the following questions:

- **Who can report:**
Describes who has the possibility to report activity data.
- **Sample strategy:**
Explains the principles for how products are selected prior to implementation of the reporting procedure, including distribution between different product categories.
- **Requirements regarding activity data:**
Clarifies which parts – cultivation, production, packaging, and transports – are mandatory or voluntary and what data shall be reported.
- **Requirements for approved reporting:**
Describes what is required for approved reporting.
- **Selection strategy:**
Explains the principles for how products are selected for the implementation of the reporting procedure, including distribution among different product categories.

1.2 Version management of the reporting manual

The reporting manual regarding the reporting of the product carbon footprint (PCF) has been designed for use in the initial pilot phase and subsequent rollout stages. The purpose of a step-by-step implementation is to test and improve systems and processes. Therefore, the reporting manual may be updated if needed, with clear information about the changes made.

1.2.1 Revisions regarding version 1.1

The revisions below have been made.

- Clarification regarding reporting extent the minimum requirements for PCF.
- Clarification regarding data point Ingredients.
- Clarification regarding data point Packaging volume.
- Clarification regarding data point Transportation route.
- Changed from green electricity to renewable electricity.

1.2.2 Revisions regarding version 1.2

The following adjustments have been made.

- Clarification that the requirements aim to enable a qualitative PCF.
- Clarification regarding reporting of cultivation data.
- Appendix 2 Data points.

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

2. Who can report

The possibility to report activity data includes all actors that are part of the supply chain for products in Systembolaget's range.

2.1 Reporting responsibility

Everyone who has a product in Systembolaget's assortment has the opportunity to report activity data. This includes:

- Suppliers
- Producers
- Growers
- Packaging producers
- Transporters

An actor can hold multiple roles, for example, being both the producer of the beverage and the grower of the raw material. The supplier will be ultimately responsible for all data to be reported. The supplier is expected to give authorization to other actors in the supply chain to enable direct reporting from them. The final approval is made by the supplier, in conjunction with the reporting of the aggregated data.

2.2 Selection strategy

Products are selected according to the established selection strategy; see Appendix 1. The actors in question are provided with instructions about what parts should be reported and the applicable time periods for the reporting.

After the initial pilot phase, it will be possible to report additional products in addition to those selected through the selection strategy. Additional reporting is encouraged; this helps create a more comprehensive overview of products' carbon footprint.

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

3. Requirements regarding activity data

The requirements in this manual apply to the data points that need to be reported in order for a PCF to be calculated based on activity data that is of sufficient quality in relation to a reasonable amount of effort.

The parts of the product's carbon footprint for which activity data can be reported are:

- Cultivation
- Production
- Packaging
- Transports

To calculate a PCF, it is required that activity data is reported for:

- **Cultivation** (detailed requirements specified in section 3.1)
- **Production**
- **Packaging** (detailed requirements specified in section 3.2)

Reporting activity data for transports is initially voluntary.

Systembolaget encourages and welcomes voluntary reporting of activity data for all parts of the product's carbon footprint, as well as more detailed reporting than what's required as minimum for calculating a PCF. To enable evaluation of all aspects of the reporting process and to increase knowledge and understanding of how different parts of the value chain contribute to the product's carbon footprint. As knowledge increases and efforts are deemed reasonable, the reporting requirements may change.

3.1 Requirements regarding activity data within cultivation

Within cultivation, the requirements for reporting activity data are as follows:

3.1.1 Requirements regarding type of raw material

A beverage can consist of one or more agricultural raw materials. Below is a list of the agricultural raw material activity data for which cultivation is to be reported per beverage category. Reporting of cultivation activity data for additional agricultural raw materials is voluntary. Where cultivation data is not reported, standard data is used to calculate the climate footprint.

- Wine: Grapes
- Beer: Hops and the specific grain from which the malt origin, such as barley, rye, or wheat
- Spirits: The agricultural raw material from which the alcohol origin, such as sugarcane, agave, barley, or potatoes
- Cider: The fruit, such as apples or pears
- Mixed drinks: The agricultural raw materials from which the alcohol origin, i.e., spirits, fruit wine, or malt beverage (see definitions above)

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

3.1.2 Requirements regarding quantity of raw material

- If the producer has their own cultivation, their activity data shall be reported.
- Cultivation activity data should be reported if the three largest growers (whether it is own cultivation or purchased raw material) together account for 50 per cent or more of the total volume of raw material in the product. If fewer than three growers account for 50 per cent or more of the total volume of raw material in the product, only activity data from the grower(s) who together account for 50 per cent or more of the total quantity of raw material is required.

3.1.3 Guidance for voluntary reporting

If the requirement in 3.1.2 is not applicable, i.e., the producer does not have own cultivation and the three largest growers account for less than 50 per cent of the total volume of raw material, reporting of activity data is not required. Standard data can then be used to calculate the carbon footprint for the total volume of raw material. However, voluntary reporting of activity data from all contributing growers is encouraged. The share of raw materials from each grower is specified in the reporting in the production section. For the share of the raw material – in whole or in part – where activity data cannot be reported, standard data can be used to calculate the carbon footprint.

3.1.4 Principles for a large number of homogeneous growers

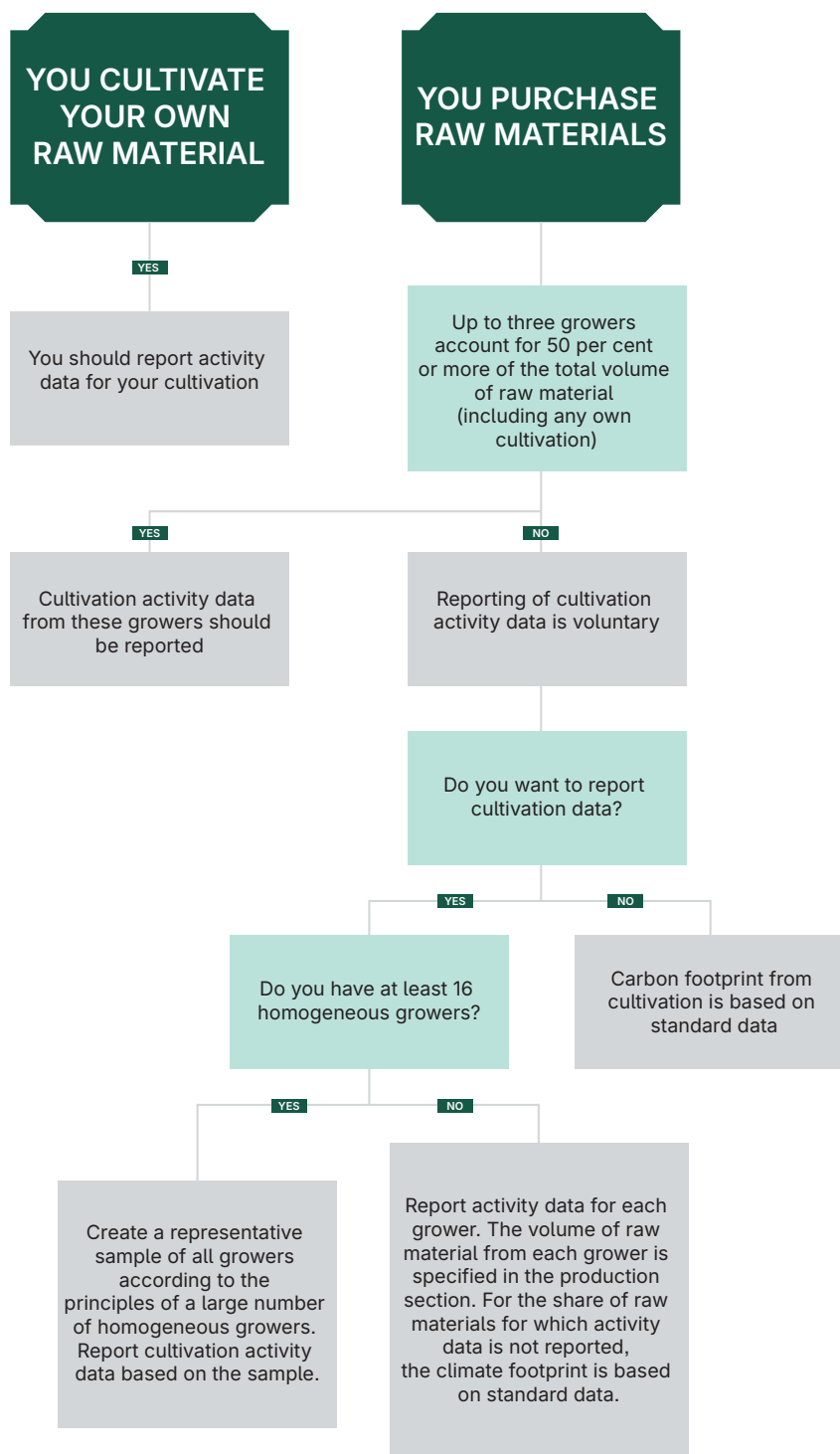
If the raw material is supplied by a large number of growers (minimum of 16) and the producer does not want to use standard data, it is possible to report a representative average of activity data based on a sample of growers. This can be done on the condition that the group of growers is homogeneous and the sample covers the variations that might still exist. Consider the following factors – and others that are relevant in each specific case – to ensure that cultivation occurs under similar conditions:

- Comparable size of cultivation
- Similar climate conditions
- Same or equivalent crop and variety
- Limited geographical distribution
- If possible, joint cultivation programme through standards, regulations or practices

The number of growers selected to report activity data should be at least the square root of the total number of growers, rounded up. The sample, to the greatest extent possible, should cover the variations that could exist within the entire group, in line with the factors listed above. Also ensure that there is not a risk that the sample has a lower climate impact than the group's average by applying a conservative approach. Each grower included in the sample is invited to report activity data for their cultivation. The share of raw materials from each grower is specified in the reporting in the production section. For cooperatives: sum the activity data for the sample of growers representing the entire group and report each total in the tool.

Documentation and justification for the above – applied safeguards to ensure that the group is homogeneous and how the sample of growers was determined – must be documented and available upon request.

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------



3.2 Requirements regarding activity data within packaging

Within packaging, the requirements for reporting activity data are as follows:

- Type of packaging
- Volume
- Weight of packaging
- Weight of content

3.3 Data points

All data points for which activity data is possible to report, can be found in Appendix 2, divided per the parts of the product's carbon footprint – cultivation, production, packaging, and transports.

3.4 Requirements for approved reporting

To generate a PCF, the following requirements must be met for the reporting to be considered approved:

- **Complete reporting:**
Required parts must be reported on.
- **Comprehensive reporting:**
Reporting of activity data for individual data points within a part, such as production, is not allowed. This is because there is a correlation between the amounts consumed regarding the different data points. The whole picture is therefore important for comparability between products.
- **Reporting by deadlines:**
Reporting is done according to a separately communicated rollout plan.

3.5 Consequences of incomplete or missing reporting

In the absence of reported activity data for a product, the PCF value is based on default data.

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

Appendix 1 Selection strategy for implementation

The purpose of the selection strategy for the products during the implementation of the PCF reporting procedure, is to include a large proportion of Systembolaget's sales volume while reflecting the breadth of Systembolaget's assortment.

Distribution among main categories:

The selection at main category level is based on the sales volumes of the categories in the fixed assortment and the climate impact (based on default values) for each category. This results in the following distribution for the selection of products during the implementation phase:

- Spirits: 16 %
- Wine: 41 %
- Beer and mixed drinks: 43 %

Selection principle within each category:

Within each main category, products are selected in order based on sales volume:

1. The largest product in the largest segment is selected first.
2. Then the largest product in the second largest segment.
3. The process continues until all segments are covered and the number of products reaches what is predetermined in each part of the pilot and rollout.

Appendix 2 Data Points

DATA POINT		INPUT 1	UNIT	INPUT 2	UNIT	COMMENT
FARM LEVEL						
Product						Type of raw material
Country of cultivation						Where is it grown?
Yield			tonnes/ha/yr			Yearly average based on the 3 past years
Diesel usage for machinery			L/ha/yr			
Diesel usage for irrigation			L/ha/yr			
Electricity usage for irrigation			kWh/ha/yr			
Type of Complex fertilizer	NPK Complex 10-10-10		kg/ha/yr			Possible to fill in different levels of data depending on how much knowledge you have on the top level. For example if you choose a specific type of fertilizer like NPK Complex 15-15-15 you do not need to fill in the value for Mineral nitrogen, K2O or P2O5 fertilizers.
	NPK Complex 15-15-15		kg/ha/yr			
	NPK Complex 20-20-20		kg/ha/yr			

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

Type of Mineral nitrogen fertilizer	Nitrogen solutions		kg/ha/yr			
	Urea		kg/ha/yr			
	Ammonium nitrate based fertilizer		kg/ha/yr			
	Ammonium sulfate		kg/ha/yr			
	Calcium ammonium nitrate		kg/ha/yr			
Type of K ₂ O fertilizer	Potassium chloride		kg/ha/yr			
	Potassium sulphate (Sulfate of Potash, SOP)		kg/ha/yr			
Type of P ₂ O ₅ fertilizer	Triple superphosphate (TSP)		kg/ha/yr			
	Monoammonium phosphate (MAP)		kg/ha/yr			
	Di-ammonium phosphate (DSP)		kg/ha/yr			
Organic nitrogen fertilizer	Farmyard manure (FYM), cattle		kg/ha/yr			
	Farmyard manure (FYM), pig		kg/ha/yr			
	Farmyard manure (FYM), poultry		kg/ha/yr			

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------

	Farmyard manure (FYM), horse		kg/ha/yr			
	Farmyard manure (FYM), sheep		kg/ha/yr			
	Farm slurry (liquid manure)		kg/ha/yr			
	Compost		kg/ha/yr			
	Green manure		kg/ha/yr			
Type of pesticide	Conventional farming - Herbicides		kg/ha/yr		Concentration of active substance (%)	
	Conventional farming - Fungicides		kg/ha/yr		Concentration of active substance (%)	
	Conventional farming - Insecticides		kg/ha/yr		Concentration of active substance (%)	
	Organic farming - Oils and plant extracts		kg/ha/yr		Concentration of active substance (%)	
	Organic farming - Mineral-Based Pesticides		kg/ha/yr		Concentration of active substance (%)	

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
-------------------------------------	-----------------------------------	-------------------------	--------------------

	Organic farming - Physical pest control	kg/ha/yr		Concentration of active substance (%)
Limestone		kg/ha/yr		
Dolomite		kg/ha/yr		
PRODUCTION				
Ingredient				<p>Main ingredient, other ingredients and additives.</p> <p>Type of ingredient, e.g. grapes, sugar.</p> <p>Add all needed ingredients and their amount.</p>
Amount		kg input/kg output		
What kind of energy is used?	Biodiesel	L/kg of output		<p>How much energy is used per kg of product?</p> <p>Add as many energy types as you need for your processes.</p>
	Diesel	L/kg of output		
	Renewable electricity	kWh/kg of output		

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------



	Electricity		kWh/kg of output			
	District heating		kWh/kg of output			
	District steam		kWh/kg of output			
	Natural gas		kWh/kg of output			
	Biogas		kWh/kg of output			
	Steam		kWh/kg of output			
	Industrial heating oil		kWh/kg of output			
Country of production						Where is your product produced?
Market						Where is your product sold?
PACKAGING						
Country of packaging						Where does the packaging take place?
Content per full package			kg			
What type of packaging material is it?						Provide information about the packaging used for this product. Possible to use ready-made packaging types and components. Or add new materials, update exsisting ones so that you get all necessary

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------



					components for your product.
Weight per package		kg/product			
Country of purchase					
TRANSPORTS					
From					Add as many steps to the journey as you need. Or let the system calculate by default values.
To					
Mode of transport		Ship, truck, train, flight			
Distance		km			
Refrigerated		yes/no			

Responsible Sustainability & Health	Decided and valid from 2025-03-10	Last revised 2025-05-05	Version number 1.2
--	--------------------------------------	----------------------------	-----------------------