

Superlist Environment

Research Methodology



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Project Superlist

Supermarkets have a major influence on what their customers buy. This gives them the opportunity to make food habits healthier and more sustainable. With Superlist, the Questionmark Foundation helps supermarkets seize this opportunity. Superlist is an ongoing research programme that provides insight into what supermarkets are doing to encourage healthy diets and make the food system more sustainable. Superlist also shows which supermarkets are leading the way and which are lagging behind, and what they can do to improve their position. As part of this research programme, reports have been published in the Netherlands, Sweden and the United Kingdom. The current project, Superlist Belgium Environment, assesses the extent to which Belgian supermarkets make the food system more sustainable.

Governance

Questionmark is an international research institute that is committed to providing facts, figures and arguments to further the public debate on healthy and sustainable food. Questionmark is governed by an independent board whose members have no stake in the food industry. Questionmark does not receive any funding that is related to the Belgian retail or food industry, whether directly or indirectly. The integrity policy of Questionmark can be found on their website.

Financial support

This project would not have been possible without the generous contributions of Rikolto, Test Aankoop, Directorate-general Development Cooperation, the Environment & Spatial Development department of the Flemish authorities and EU-LIFE.

Experts

As we developed this research methodology, we consulted both our partner organisations and experts from:

- Civil society (Sarah Vanden Eede, Beatrice Wédeux, Joris Aertsens - WWF; Wouter Dieleman - MSC; An Jamart - BioForum; Annemarie Ijkema, Isabelle Poppe - EVA vzw; Ariane Louwaege, Amy Verbeke - Mosquito In The Room; Lieven Callewaert - President RTRS Belgium).
- Policymakers (Kris Roels - Flemish authorities, Department of Agriculture and Fisheries; Heleen Lenoir - ILVO; Laurens Demeyer - Health & Environment Advisor, General Policy Cell Petra De Sutter; Kristof Rubens - Flemish authorities, Environment & Spatial Development department; Katrijn Alaerts - INBO (Research Institute for Nature and Forest); and Salima Kempnaers - FBS Health, Biodiversity).
- Individual supermarkets.

Scientific advisory board

Superlist Belgium established a scientific advisory board with expertise on sustainability. This board has contributed to the development of this methodology at various stages. Its members are:

- Erik Mathijs (Faculty of Bioscience Engineering, KU Leuven)
- Sybille Mertens (HEC Liège Management School, University of Liège)
- Philippe Baret (Faculty of Bioscience Engineering, UCLouvain)
- Valerie Swaen (Louvain School of Management, UCLouvain)
- Hendrik Slabbinck (Faculty of Economics and Business Administration, Ghent University)

Project partners

Superlist Belgium Environment 2022 was created in collaboration with the following organisations, which all shared their knowledge and expertise as we developed this research methodology and designed the study.



Introduction

This document describes the methodology behind Superlist Environment, which is part of the overarching research project Superlist Belgium. The methodology was designed to help supermarkets monitor their contribution to a more sustainable food system and compare themselves with other players in the market.

The methodology describes the following three levels:

- The **issues** or problems in the food system that require solutions to which supermarkets can make a substantial contribution.
- The possible **interventions** or measures supermarkets can take to address these issues.
- The **indicators** that make the interventions measurable. Each indicator has a weighting that expresses the indicator's relative importance for the theme as a whole.

The general method we use to assess and compare supermarkets is described in Superlist Research Framework (Questionmark, 2020), a document that explains issues such as how we collect data, how we display the results, and how we involve various stakeholders in drawing up the research methodology. This Research Framework can be found at www.superlijst.org.

Supermarkets

Our research focuses on the five largest supermarket chains in Belgium in terms of market share: Carrefour (17.9%), Delhaize (22.8%), Colruyt (25.7%), Aldi (10.6%) and Lidl (7.4%) (Gondola, 2021). Together, they have a total market share of 84.4%.

If they have a webshop, we analyse supermarkets' online assortment. For supermarkets that don't have a webshop, we visit a large store to manually collect product information.

Regional differences

Belgium comprises three regions: Flanders, Brussels and Wallonia. Supermarkets' assortments may differ between and within these regions. We recognise the importance of taking these regional differences into account for supermarkets without a webshop. That is why we invite supermarkets to provide us with information on whether there are differences between regions and, if there are substantial differences, to tell us in which region they take most steps to promote sustainable products. When a supermarket without a webshop does not give us any information on regional differences, we do a quick scan to check in which region this supermarket performs best, and then visit a branch in that region to collect product information.

In the general ranking, we always analyse the assortment of the online branch or, when there is no online branch, the most representative offline branch (as explained above). While the report may discuss regional differences if there are major differences between supermarkets' efforts, this will not be included in the scoring.

When we check whether supermarket policy is properly implemented, we do so at branches in all three regions.

Research period

Data on assortment, policy and promotions will be collected during a period of two months, from June 16 to the final reference date of **August 15, 2022**. Supermarkets that make any changes to their assortment may communicate this to Questionmark up to the final reference date.

Issues and interventions

The ambition of Superlist Environment is to contribute to a systemic transition of our food system. Superlist encourages supermarkets to use their leverage in the food system to provide more sustainably produced food and to promote a diet that does not exceed the planetary boundaries. We identified the most important levers retailers can apply in the short term to contribute to a systemic transition.

This chapter gives an overview of the issues the Belgian Superlist Environment focuses on. The issues were selected using the 'Framework for comparison criteria' that is included in the Superlist Research Framework (Questionmark, 2022). They should be approached as a single system: together, these issues address the most important and systemic problems in our food system, which supermarkets could play a major role in solving.

Relationship with health

A more sustainable diet is often also a healthier diet, but not always. Although this research focuses on the influence of the food system on the environment and nature, we have made sure that the interventions we propose do not contradict other demands in the areas of health, human rights and animal welfare.

Transparency as an intersecting topic

Transparency is the first step towards improvement. Clear goals can only be formulated when there is knowledge about current practices. For this reason, transparency in itself is rewarded in some indicators of this first version of Superlist Environment, regardless of the quality of the underlying practices. Because transparency about practices helps policymakers and society get a better idea of the efforts that are being taken, which in turn tells us what else we need to do to facilitate the transition to a sustainable food system.

Not included: price

Food prices can play a key part in accelerating the transition to a sustainable food system. On one end of the value chain, the environmental efforts of farmers and other suppliers should be valued and reflected in the prices they receive if we expect everyone to make a fair contribution. On the other end of the value chain, low prices for non-sustainably produced food (such as animal-based products) risk making these products more popular.

As an indicator of sustainability, however, shop prices rarely tell the whole story.

First of all, prices are a key way in which supermarkets compete with each other.

Supermarkets may choose to lower their margin on certain products to attract more customers, while increasing their margin on other products. So a product's shop price is no indicator of the price the supermarket has paid its suppliers.

Shop prices are even a poor indicator of whether an unsustainable product is (too) attractively priced. Because comparing prices of unsustainable products between retailers

mostly reveals a difference in general price level (which is influenced by supermarkets' market position, commercial formula, target audience, etc). In practice, controlling for these factors leads to a complex aggregation of figures that, in the end, fails to tell us much. Instead of shop prices, we therefore focus on promotions. Evidence shows that promotions, regardless of their type or the reduction in price, increase consumption, not only of the promoted product but also of the product category as a whole (PHE, 2020).

Not included: packaging

There are more problems in the food system than this methodology can cover. Although packaging was part of an earlier Superlist Environment in the Netherlands, it will not be included in the Belgian Superlist Environment. While it remains important to avoid excessive and unsustainable packaging (Fevia, 2022), the topic has a lower priority for the Belgian Superlist Environment than the issues below.

Not included as a separate topic: sustainable fish

While the Dutch Superlist Environment treated sustainable fish as a separate topic, in the Belgian Superlist Environment it is included in the issue 'sustainable agriculture'.

Construction of methodology

For each issue, we list a number of possible supermarket interventions. In this document, we formulate indicators to assess these interventions at the supermarket level. Every indicator is just one piece of a larger puzzle. As a whole, however, they provide a useful picture of a supermarket's commitment to an issue (bearing in mind that every methodology and indicator has its limitations). All interventions and indicators associated with an issue are numbered to make it easy to identify related parts of the method. The next chapter provides an overview of all issues, interventions and indicators.

Protein transition (EN-1)

The production of animal proteins has a relatively large environmental footprint. Farmland is used to produce animal feed, at the expense of agricultural land for human food or at the expense of vulnerable nature and (tropical primeval) forests. Although the consumption of meat in Belgium has decreased over the past years, we still consume twice as much as the recommended amount (Riera, Antier, and Baret, 2019). Animal proteins currently make up about 62% of protein in the average Belgian diet (Our World in Data, 2017).

The 'protein transition' we refer to is a shift in consumers' food patterns towards more sustainably produced animal proteins and/or plant-based protein (Flemish Authorities, 2021b). Superlist includes possible interventions for supermarkets to speed up this protein transition. Rather than calling plant-based proteins 'good' and animal-based proteins 'bad', we focus on a shift in proportion. The aim is not to completely substitute all animal-based proteins for plant-based ones, since the average Belgian diet already contains more protein than is reasonable within planetary boundaries (Willett et al., 2019). The protein transition should be seen as part of a larger transition towards a more balanced diet. From a consumer's perspective, however, substitution could be a first step to take. That is why we value all supermarket interventions that make it easier for consumers to make this shift.

Existing agreements and objectives in Belgium

- *Federal Plan for Sustainable Development* (ICDO, 2021)
This plan aims to reform the Belgian economy, including by facilitating sustainable consumption and kick-starting the transition of our food system.
- *De Vlaamse Eiwitstrategie 2021-2030* (Flemish Authorities, 2021b)
'Flanders' Protein Strategy 2021-2030' sets out ways for Flanders to produce more and more diverse plant-based proteins for daily consumption, and to make animal feed more sustainable. It proposes six strategies, including:
 - More plant-based proteins and more new proteins: Flemish agriculture must produce more plant-based proteins and become a main actor with regards to knowledge, production and processing of new proteins, such as insects, algae and seaweed.
 - A more sustainable protein consumption. Through education and a dietary adjustment in the context of health, rather than sustainability, it hopes to change consumers' behaviour. Its vision is to shift the ratio of animal/plant products/proteins, avoid overconsumption and waste of proteins, diversify the range of proteins, and promote the consumption of local proteins.
- *Green Deal - Eiwitshift op ons bord* (Flemish Authorities, 2021b)
'Flanders' Protein Strategy' is implemented through an action programme, the 'Green Deal - Protein Shift On Our Plate'. The aim is to transform people's consumption and eating habits, change the kind of proteins they consume and reduce their overall protein intake. Today, Flanders' ratio is about 60/40 (animal/plant protein sources). The goal is to reverse that ratio to 40/60 animal/plant proteins by 2030. Various actors in the wider food system play an important role in consumers' consumption patterns. They shape people's routines and steer their choices via communication and promotions. All main Belgian retailers have signed the Green Deal programme.
- *Beleidsnota Landbouw en Visserij 2019-2024* (Flemish Authorities, 2019)
The Government of Flanders' 'Agriculture and Fisheries Policy 2019-2024' refers to a shift towards a more sustainable diet, including a more balanced consumption of protein: "As part of this agricultural policy, we are developing a protein policy that focuses on a broad and sustainable fulfilment of protein needs in Flanders, both for human food and feed, in the framework of healthy and qualitative food and feed."

Interventions

EN-1.1 The supermarket sets goals to increase the share in sales of plant-based proteins.

EN-1.2 The supermarket makes buying plant-based proteins easy.

EN-1.3 The supermarket tempts customers towards food routines in which plant-based proteins play a major role.

Sustainable agriculture (EN-2)

Today's agricultural methods can have negative consequences on valuable nature, climate and the environment around the world. Excessive use of fertilisers and pesticides causes disruption of natural cycles and loss of biodiversity. In Belgium too, this disrupts natural cycles, impoverishes the landscape and makes animal and plant species go extinct.

Cultivation in (heated) greenhouses and transporting food by air increases greenhouse gas emissions. Clearing forests for new farmland in natural areas accelerates climate change and loss of biodiversity.

Nature-inclusive agriculture is an important form of sustainable agriculture and part of a resilient eco- and food system. This kind of agriculture makes optimal use of the natural environment and integrates it into business operations. It also actively contributes to the quality of that same natural environment (Gies et al., 2019; Erisman et al., 2017).

It would be impossible to look at all aspects of sustainable agriculture in this one report. To determine which aspects to look into, we considered the extent to which each aspect violated planetary boundaries. Two topics were revealed to be more pressing than others:

- 1) Loss of biodiversity.
- 2) Use of inputs that cause a major disturbance in the biogeochemical cycles of mainly nitrogen (N) and phosphorus (P).

A third aspect of nature-inclusive agriculture that we consider important is:

- 3) Livestock farming in harmony with the environment. By also including this sub-topic, we emphasise the need for a drastic shift in livestock farming, with smaller livestock populations and animals being part of a circular model.

Existing agreements and objectives in Belgium

- *European Green Deal with the EU Biodiversity Strategy 2030 and Farm to Fork Strategy* (EC, 2020; EU, 2020).

These strategies set several targets for 2030, including (a) turning at least 30% of EU land and 30% of EU seas into effectively managed and coherently protected areas; (b) restoring degraded ecosystems and stopping any further damage to nature; (c) reducing the use and risk of pesticides by at least 50%; (d) managing 25% of agricultural land through organic farming and promoting the update of agro-ecological practices; and (e) establishing biodiversity-rich landscape features on at least 10% of farmland.

- *EU Code of Conduct on Responsible Food Business and Marketing Practices* (EU, 2021).

This Code (which mirrors one of the first deliverables of the Farm to Fork Strategy) sets out seven objectives, including actions that actors (including retailers) can voluntarily commit to, to improve and communicate their sustainability performance. Delhaize, Carrefour and Colruyt have all pledged to follow this Code of Conduct. The Code includes targets such as a food environment that makes it easier to choose healthy and sustainable diets. It defines actions like (a) promoting more sustainably-produced food products (e.g. organic food, sustainable fish) and increasing consumers' awareness of healthy, balanced and sustainable diets; (b) reviewing and/or offering a range of appropriate portion and serving sizes aimed at sustainable food consumption; (c) voluntarily providing consumers with transparent product information; (d) and identifying and contributing to appropriate solutions and strategies to prevent deforestation and to promote conversion-free food supply chains.

- *Walloon Plan Bio 2030* (SPW Agriculture, 2021).

The Walloon Government has set several objectives to stimulate organic production, increasing its share of overall production to 30% by 2030.

- *Strategic Plan Organic Agriculture 2018-2022* (Departement landbouw & visserij, 2018)..
The Government of Flanders aims for a sustainable qualitative and quantitative growth of organic production.
- *Vlaamse Eiwitstrategie 2021-2030* (Flemish Authorities, 2021c).
Flanders' Protein Strategy states that all soy used for animal feed should comply with FEFAC Soy Sourcing Guidelines and its criteria on deforestation and ecosystem conversion by 2030. One of the criteria is that no soy should be produced in converted natural ecosystems after a certain cut-off date.
- *Beyond Chocolate* (IDH, 2022)
All signatories of Beyond Chocolate commit to working together to solve a series of challenges in the field of sustainable chocolate (IDH, 2020a). This means that all chocolate that is manufactured or traded in Belgium must meet a relevant certification standard or be manufactured using cocoa products from the company's own sustainability programmes by the end of 2025. Agreements between governments and private partners that fall under the Cocoa & Forests Initiative must also be fully respected by that same deadline. The deforestation resulting from cocoa production for the Belgian chocolate industry must end by 2030. By then, all cocoa producers must be able to earn a viable income (or more).

Interventions

EN-2.1 The supermarket provides insight into the most important sustainability aspects of supply chains.

EN-2.2 The supermarket offers products from sustainable agriculture.

EN-2.3 The supermarket takes action against deforestation and land use changes worldwide.

Food waste (EN-3)

Globally, food loss and waste is responsible for about 6% of greenhouse gas emissions caused by mankind (Poore and Nemecek, 2018). It also uses up 24% of all freshwater, 23% of all fertilisers and 23% of our cropland (Kummu et al., 2012). Additionally, disposal of food loss and waste takes up 21% of our landfill volume, which again contributes to climate change.

Food loss and waste occurs all along the supply chain. Usually, the term 'food loss' is reserved for a decrease in the mass of food at any stage of the food chain *before* the retailer/consumption stage. 'Food waste' refers to throwing away food (or allowing it to spoil) that is fit for human consumption from the retailer stage onwards. Food waste thus includes all food that consumers waste at home.

A Flemish study from 2015 showed that Flanders' annual food loss is around 907,000 tonnes, with 36% of that amount coming from the agricultural sector, 25% from the food industry and 23% from private households (Voedselverlies, 2017).

Supermarkets can combat both food loss and waste. Food loss (in the supply chain, before it reaches the retailer) can be avoided by optimising coordination between retailers and suppliers. The literature on this food waste (for instance (Kulikovskaja and Aschemann-Witzel, 2017) suggests a host of interventions supermarkets can take. One can think of:

- removing the 'best by' date on products whenever safely possible;

- giving discounts on food nearing its expiration date;
- avoiding bulk packaging/allowing customers to purchase small amounts;
- avoiding overconsumption incentives, such as high price reductions of perishable foods;
- avoiding bulk promotions;
- improve prediction of stock and demand;
- technology that prolongs shelf life (spraying, coating, smart packaging).

Not all interventions have been studied or tested for their effectiveness. But the first step every supermarket can take is to formulate a plan in which it expresses an ambition to combat food loss and waste. In this research, we assess the extent to which supermarkets have formulated and published such policies.

Existing agreements and objectives in Belgium

- *European Farm to Fork Strategy* (EU, 2020)
Halving per-capita food waste at the retail and consumer levels by 2030. The Commission will propose legally binding targets to reduce food waste across the EU by 2023.
- *Ketenroadmap 2015-2020* (Government of Flanders, 2014)
Formulates the objective to reduce food loss by 30% between 2015 and 2025.
- *Vizier 2030* (Government of Flanders, 2019)
Objective 33 aims to reduce food loss in Flanders by 30% by 2030.
- *Federal Plan for Sustainable Development* (ICDO, 2021)
Acknowledges food as a prerequisite for sustainable development in Belgium. "Raising awareness amongst citizens of good product use and maintenance practices, sustainable consumption, reuse, repair and recycling is envisaged, which would ultimately reduce food waste."
- *Walloon Regal plan, Lutte contre les pertes et gaspillages alimentaires* (Gouvernement wallon, 2018)
Includes 17 actions aimed at reducing loss and waste at all levels of the food chain by 30% between 2015 and 2025.
- *Flemish action plan 'Voedselverlies en biomassa - (rest)stromen'* (Flemish Authorities, 2021a)
Reduce food loss by 30% along the entire chain, reprocessing any loss as food or valorising it in a better way compared to 2015. Businesses (catering, hospitality, retail) are encouraged to decrease their residual waste by 20% by 2025.

Interventions

EN-3.1 The supermarket takes action to reduce food waste.

Overview of interventions and indicators

Protein transition (EN-1)

Interventions	Indicators	Weight
The supermarket sets goals to increase the share in sales of plant-based proteins. (EN-1.1)	To what extent does the supermarket have a target for increasing the share of plant-based proteins in the total volume of protein sold? (EN-1.1.1)	1
The supermarket makes buying plant-based products easy. (EN-1.2)	To what extent do ready meals contain animal protein? (EN-1.2.1)	0,5
The supermarket tempts customers into food routines in which plant-based proteins play a major role. (EN-1.3)	What proportion of protein-rich promotions consists of plant-based protein sources? (EN-1.3.1)	1
	Do the portion sizes of ready-to-eat meat products help to reduce meat consumption? (EN-1.3.2)	0,5
	What policies does the supermarket have for shifting food routines towards a more plant-based diet? (EN-1.3.3)	1

Sustainable agriculture (EN-2)

Interventions	Indicators	Weight
The supermarket provides insight into the most important sustainability aspects of supply chains. (EN-2.1)	To what extent does the supermarket report on the origin, transport and cultivation method of the products it sells? (EN-2.1.1)	1
The supermarket offers sustainable agriculture products. (EN-2.2)	To what extent does the supermarket's assortment meet relevant sustainable agriculture requirements? (EN-2.2.1)	1
The supermarket takes action against deforestation and land use changes worldwide. (EN-2.3)	To what extent does the supermarket take action to stop deforestation linked to the use of soy in animal feed? (EN-2.3.1)	0,33
	To what extent does the supermarket take action to stop deforestation linked to the use of palm oil in its products? (EN-2.3.2)	0,33
	To what extent does the supermarket take action to stop deforestation linked to the use of cocoa in its products? (EN-2.3.3)	0,33

Food Waste (EN-3)

interventions	Indicators	Weight
The supermarket takes action to reduce food waste (EN-3.1)	Has the supermarket published a concrete and measurable action plan aimed at reducing both food loss in the supply chain and food waste at the consumer stage? (EN-3.1.1)	1

Indicators

Protein transition (EN-1)

Goal plant-based protein (EN-1.1)

Indicator EN-1.1.1

policy

To what extent does the supermarket have a target for increasing the share of plant-based proteins in the total volume of protein sold?

Explanation

The ratio between animal protein and plant-based protein in Belgians' diet is currently about 60:40. Shifting to a more plant-based diet is important if we want to reach the goals determined in the Green Deal 'Eiwitshift op ons bord' (which all major supermarkets in Belgium committed themselves to).

For this indicator, we investigate whether a supermarket has set itself the goal of increasing the share of plant-based proteins in its sales. With such an objective, the supermarket shows that it endorses a more plant-based diet at all levels of its operations.

Measurement and weighting

We investigate whether a supermarket has a target for the share of plant-based proteins in the total volume of food products sold. We recognize four levels of commitment:

1. Awareness

The supermarket is aware of its own role in the protein transition and actively takes responsibility to accelerate this transition.

2. Global insight

The supermarket provides insight into the ratio of animal/plant-based proteins in the volumes it sells. This gives the government and society greater insight into the transition to a sustainable food system. At this level, figures may still be reported in any format, as long as the format and the terms it uses are relevant to the subject and clearly explained. Supermarkets' reports must relate to a period that ended no more than 24 months ago.

3. Clear goal & reporting

To count as a fully-fledged goal, we should be able to derive a target figure for the ratio of animal to plant-based proteins in the volume sold. In this edition of Superlist Environment, supermarkets are allowed to use their own definition of 'plant-based' and 'animal' proteins, provided the definition is clear and reasonably applicable to the protein

transition. The target should at least include the following product categories: meat, fish, dairy (incl. cheese), eggs, vegetarian alternatives and pulses.

To count as a fully-fledged goal, the supermarket should regularly (at least once a year) report on its progress, covering a period that ended no more than 24 months ago.

4. Clear goal & detailed reporting

As a final step, supermarkets' reports may differentiate between different types of protein, based on their effect on the environment. Appendix 2 provides an overview of the different categories our method distinguishes. Further division would be possible, for example by animal species.

Level	Points	Examples	
1. Awareness Supermarket recognises its own role in protein transition and provides policy examples to support the transition.	5	Insufficient	"Belgians' food patterns have to change in order to make the protein transition possible." (No mention of the role of the supermarket).
		Sufficient	"We support the protein transition and are actively expanding our plant-based range with more and more substitutes for meat and dairy."
2. Global insight Supermarket reports sales figures relevant to protein transition. Concerns a period concluded no more than 24 months ago. Terms are clearly explained.	20	Insufficient	"X percent of our sales were plant-based proteins." (No explanation of the term 'plant-based proteins', unclear which period was measured, no figures for sales of animal proteins).
		Sufficient	"X percent of our sales in 2021 consisted of plant-based proteins. By 'plant-based proteins', we mean products with legumes, nuts and mushrooms as the main ingredients. X percent of our sales in 2021 consisted of animal proteins. By 'animal', we mean all meat and fish, processed and unprocessed."
3. Clear goal & reporting Supermarket has a target and reports the share of animal and plant-based products in the total volume of food products it sells, as described above.	90 (*)	Insufficient	"X percent of our sales were plant-based in 2019. By 'plant-based', we mean all products with ingredients of plant-based origin only." (Report too old, no target, animal products missing).
		Sufficient	<p>"X% of sales in 2019 were in the categories of meat, fish, dairy, plant-based alternatives, eggs and legumes. 60% were animal proteins, 40% plant-based proteins. Our target for 2025 is 60% plant-based."</p> <p>"X of our 2021 sales consisted of protein-rich products, of which 60% were predominantly animal, 30% predominantly plant-based and 10% mixed or unknown. Our goal for 2025 is for 50% of protein-rich products to be predominantly plant-based. 'Protein-rich products' are products with a protein content of more than 30%. By 'animal', we mean all types of meat, fish, dairy (incl. cheese) and eggs, with 'plant-based' being everything else."</p>

4. Clear goal & detailed reporting Objective as at level 3, reporting split at the level of animal product type, distinguishing at least between the four impact categories of Appendix 2. (Further distinction is possible.)	100 (*)	Insufficient	<i>"30% of meat and meat alternatives we sold in 2019 was red meat, 50% was white meat and 20% vegetarian." (Product categories missing, objective missing.)</i>
		Sufficient	<i>"X% of sales in 2019 consisted of meat, fish, cheese, plant-based alternatives, eggs and pulses. 15% was red meat, 30% white meat and fish, 20% cheese and 35% plant-based. Our goal for 2025 is for 45% to be plant-based. Liquid dairy and alternatives accounted for X% of turnover, with 30% being plant-based. Our target for 2025 is 55% plant-based."</i>

Table 1. Scoring of EN-1.1.1 with examples per level. (*) At levels 3 and 4, the number of points is multiplied by the known proportion(s) of protein sources.

The key figure for this indicator is the highest number of points a supermarket receives according to [table 1](#). At levels 3 and 4, the number of points is multiplied by the known proportion(s) of protein sources. For example: 20% animal, 50% plant-based and 30% unknown gives: $90 \text{ points} \times (20\% + 50\%) = 63 \text{ points}$.

Weighting in the ranking

This key figure is not scaled but directly converted into the score on this indicator. The weighting of this indicator in determining the ranking of supermarkets is: 1.

Plant-based food the easy choice (EN-1.2)

Indicator EN-1.2.1

assortment

To what extent do ready meals contain animal protein?

Explanation

Not everyone has to eat a vegetarian or vegan diet: a sustainable diet that respects planetary boundaries still leaves room for meat or cheese. However, the proportion of animal proteins in our diet should be reduced in favour of plant-based food. Supermarkets can contribute to this shift by making it easier for consumers to choose plant-based products.

In some product groups, animal proteins such as meat are common but unnecessary; just think of pizzas or pasta sauces, which do not need to contain any meat. Avoiding meat in those product groups does not require a rigorous change in food choices and thus makes eating (more) plant-based an easy choice.

In this indicator, we distinguish between protein sources according to their contribution to a protein shift, as explained in [Appendix 2](#).

Measurement and weighting

In every supermarket, we look at ready meals whose animal protein content could be reduced without rigorous change. We cover the following product groups:

- Traditional Belgian meals
- Pasta, lasagne
- Pizza

- Quiche
- Ready-made soup
- Meal salads

[Table 2](#) indicates how different protein sources affect the score of these products. The classification of food types is explained in [Appendix 2](#).

Protein source	Contains	Examples of ready meals	Points
Meat and fish	Meat, fish or shellfish	Lasagne with mince, pizza with meat, salad with shrimp or ham	0
Dairy and eggs	Dairy, cheese or eggs	Tomato cream soup, vegetarian stew containing milk, quiche with eggs, Caesar salad with cheese, pizza with cheese	5
Plant	No meat, fish, dairy, cheese or eggs	Vegetable soup, pasta with tomato sauce, meal salad with grilled vegetables	10

Table 2. Points per product for EN-1.2.1. See [Appendix 2](#) for more details.

Each product is awarded the number of points described in table 2. If a product contains different protein sources, it receives the lowest number of points. For example: a salad with strips of beef (0 points), cheese (0 points) and peas (10 points), gets 0 points. A product group's score is the average number of points of all products within the product group. The key figure for this indicator is the average number of points for all product groups.

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 7, the lower limit is 4. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 0.5.

Shifting routines toward plant-based proteins (EN-1.3)

Consumers do not always make conscious decisions about their food, as our food choices are often routine behaviour. But routines can evolve, including through the interaction between consumers and other parties that shape our food routines (PBL, 2020). When it comes to the consumption of plant-based and animal proteins, supermarkets can help steer shoppers' choices. The following indicators measure the extent to which supermarkets contribute to more plant-based food routines.

Indicator EN-1.3.1

weekly promotions

What proportion of protein-rich product promotions consists of plant-based protein sources?

Explanation

Advertising meat not only directly encourages customers to buy meat, but also reinforces the image that meat should be part of a natural, normal daily meal. In this indicator, we investigate whether a supermarket helps to change that image by including more plant-based proteins and fewer animal proteins in its weekly promotions. (For our definition of 'promotion', see Research framework (Questionmark, 2020).

Measurement and weighting

For each promotion flyer in the research period, we look at promotions of protein sources (products with a protein-rich main ingredient).

Liquid dairy (milk, yoghurt) is not included in this indicator (even though it should not be encouraged as a source of protein from an environmental point of view), because milk is an important source of calcium and vitamins in the Belgian diet (Gezond Leven, 2022).

Product type	Examples
Counts as protein source	
Meat and poultry	beef steak, chicken leg, kebab, ham
Fish and shellfish	cod, salmon, sardine, herring, shrimp
Vegetarian alternatives for meat	vegetarian burgers, tofu, tempeh
Pulses ¹	lentils, chickpeas, kidney beans, green peas
Nuts and seeds	walnuts, hazelnuts, peanuts, quinoa
Cheese	cottage cheese, goat cheese, Gouda, Parmesan
Eggs	eggs
Excluded for this indicator	

¹ We use Voedingscentrum's definition of 'vegetables' and 'pulses' (Voedingscentrum, 2021 sec B13.3.2).

Dairy products	milk, buttermilk, yoghurt, custard
Plant-based alternatives for dairy	rice milk, soy yoghurt, coconut cream
Fruit and vegetables	potato, broad beans, cucumber, apricots, bananas

Table 3. Products that count for indicator EN-1.3.1.

A special offer for several products is taken into account if at least one product is a protein source according to the above [table 3](#).

We categorise product promotions based on the environmental impact of the main ingredient, as described in [Appendix 2](#). If a special offer applies to several protein products with different impacts, each type of protein is interpreted as a separate offer. Example: a special offer for various snacks, including cheese cubes (dairy) and nuts (plant-based), counts as two different offers.

Protein source	Main ingredient	Examples	Points
Meat and fish	Meat, fish & shellfish	beef tartare, pork schnitzel, shrimps	0
(Non-liquid) dairy and eggs	Dairy/cheese, eggs	eggs, aged cheese	5
Plant	No meat, fish, dairy/cheese or eggs	hazelnuts, nut butter, bean salad, meat substitute without cheese	10

Table 4. Points per promotion of EN-1.3.1. See [Appendix 2](#) for more details.

Each special offer gets the number of points described in [table 4](#). If a product contains several protein sources, it is awarded the lowest number of points. For example: a salad with strips of beef (0 points), cheese (5 points) and peas (10 points), gets 0 points.

The average number of points for all protein promotions is calculated per promotion flyer. The key figure for this indicator is the average number of points of all promotion flyers of a supermarket during the research period.

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 7.5, the lower limit is 4. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 1.

Indicator EN-1.3.2

assortment

Do the portion sizes of ready-to-eat meat products help to reduce meat consumption?

Explanation

Consumers view the portion sizes of meat offered in supermarkets and restaurants as an indication of the appropriate 'normal' consumption amount, since consumers eat *one* burger or *one* schnitzel, not 150 grams of burger or 100 grams of schnitzel (Be4Life, 2018). Portion sizes create a certain implicit standard (Steenhuis, Leeuwis, and Vermeer, 2010),

with larger portions unconsciously perceived as the recommended consumption amount. This has led to an increase in the population's total food consumption (Cavanagh et al., 2014). A meta-analysis has actually shown that doubling the portion size leads to a 35% increase in consumption (Zlavetska, Dubelaar, and Holden, 2014).

One way to reduce animal protein intake is to encourage smaller portion sizes, especially for red processed meat. This intervention can help change what is seen as a 'normal' portion of meat, without requiring rigorous change of consumers.

Measurement and weighting

For this indicator, we examine the portion sizes of different pre-packaged meat products in each supermarket:

- burgers (beef burgers, hamburgers, chicken burgers, etc.)
- sausages
- schnitzels (including filled schnitzels such as cordon bleu)

Portion description	Portion size	Points
small	≤ 80 grams	1
standard	> 80 grams and ≤ 100 grams	0.5
large	> 100 grams and ≤ 150 grams	0.1
extra large	> 150 grams	0

Table 5. Scoring per product of EN-1.3.2

Each product receives the number of points described in [table 5](#). The score of each product group is the sum of all points, divided by the number of products in the product group. The key figure for this indicator is the average score of all product groups.

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 0.6, the lower limit 0.4. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 0.5.

Indicator EN-1.3.3

policy

What policies does the supermarket have for shifting food routines towards a more plant-based diet?

Explanation

In recent years, some supermarkets have taken initiatives to encourage a plant-based diet or have experimented with related interventions. Some of these initiatives are having a positive effect. Even if an intervention turns out to have little effect, however, the experiment may have successfully raised awareness of the influence of the food environment on a plant-based diet. We use this indicator to compare the extent to which supermarkets contribute to this.

Measurement and weighting

For this indicator, we look at interventions, both in physical stores and online, that encourage people to eat (more) plant-based rather than animal proteins. We focus hereby on in-store tactics. The measurement is done primarily by assessing publicly available documents (policies, annual reports, etc). Spot checks may be conducted if there is reason to doubt that a certain policy is actually implemented in practice.

[Table 6](#) below lists the conditions a policy needs to meet to receive a minimum of 10 points. [Table 7](#) lists a number of aspects of the policy that may result in extra points. In the two right-hand columns, we provide examples of what does or does not meet the conditions.

Set of minimum conditions	Basic points	Examples	
		Insufficient	Sufficient
<p>The intervention is aimed at reducing the share of animal proteins in food routines.</p> <p><i>This does not include:</i></p> <ul style="list-style-type: none"> - reformulating products without changing food routines - promoting plant-based products in general, unless it is plausible that this will (also) reduce the amount of animal protein being produced. 	10	<p>"Our meal kits do not contain animal-based stock cubes. If a recipe requires stock, we add garden herb stock." (Not aimed at changing food routines)</p>	<p>"During barbecue season (June-Sept), X% of products on our BBQ shelf are vegetarian."</p> <p>"We never picture meat, fish or poultry in our marketing material, unless we are actually marketing animal products."</p> <p>"The standard preparation method listed on all our meal kits is vegetarian. The option to add meat or fish is only mentioned as an alternative."</p>
<p>The intervention goes beyond legal requirements and is not yet common practice in supermarkets.</p>		<p>"We offer a wide selection of delicious alternatives to meat." (Common practice)</p>	<p>"Our meat substitutes are placed right next to comparable meat products, to inspire non-vegetarians."</p> <p>"We offer a substantially larger range of meat substitutes than the average supermarket. Compared to x number of meat products, our range encompasses y number of alternatives."</p> <p>"We no longer indicate on our wines whether they go well with meat, fish or poultry. Instead, we suggest pairings with vegetarian dishes or describe the wine's taste in a neutral way."</p>
<p>The implementation, scope and size of the intervention are clearly described.</p>		<p>"Where possible, we inspire our customers to eat tasty vegetarian food." (Unclear how and where)</p>	<p>"At least x percent of our recipe suggestions for main dishes online and in each store are vegetarian."</p>
<p>The intervention is (also) aimed at customers who are not actively looking for a more plant-based diet.</p>		<p>"Vegetarians will find all meat substitutes on a separate shelf."</p>	<p>"We make a vegetarian suggestion for every meat product on our shelves."</p>

		<i>"Our webshops have a filter that allows customers to easily find vegetarian or vegan products."</i>	<i>"Every meat product selected online comes with a flag; clicking on the flag immediately gives customers a list of vegetarian alternatives."</i>
The intervention will be in effect for more than a year and is preferably permanent (unless it concerns a scientific experiment).		<i>"During our Plant Food Week, our promotion flyer did not contain any special offers for meat."</i>	<i>"Every other week, our promotion flyer does not contain any special offers for meat."</i>

Table 6. Conditions that EN-1.3.3 policies must meet.

Each intervention that meets all of the conditions mentioned in [table 6](#) will be awarded 10 points. Spot checks may be conducted if there is reason to doubt that a certain policy is actually implemented in practice. Interventions that are listed as policy but not implemented in practice get 0 points.

[Table 7](#) below lists a number of circumstances that result in extra points.

Extra points (add to basic points)		Insufficient (examples)	Sufficient (examples)
Supermarket quantitatively reports on the effect of the intervention.	+ 5	<i>"The intervention was successfully implemented."</i> (No quantification)	<i>"The intervention led to a 30% decrease in sales of minced meat, in favour of pulses."</i> <i>"The intervention did not demonstrably increase sales of meat substitutes."</i>
The intervention has been scientifically researched (previously or elsewhere) and has proven to be effective.	+ 5	No reference to literature.	Reference to relevant scientific literature.
In 2020-2022, one or more branches took part/will take part in scientific research into this intervention or other interventions that meet the above conditions.	+ 5 ²	Internal research. Research for product improvement.	Research (e.g. in collaboration with a university) into influencing behaviour at a specific branch in favour of a plant-based diet.
Supermarket takes several distinct actions that all meet the above conditions.	+ 5 per extra intervention	<i>"At least 80% of main meal recipes are vegetarian. Lunch meal recipes are even 100% vegetarian."</i> (Does not involve different interventions)	<i>"At least 80% of our recipe suggestions are vegetarian, and our promotion flyer never contains more than one offer for meat."</i>

Table 7. Circumstances that can each yield extra points within EN-1.3.3

The key figure for this indicator is the sum of the points for all interventions that a supermarket has published as official policy and, when checked, implemented.

² In the exceptional event that a supermarket has stopped all interventions because scientific research showed them to be ineffective, the supermarket will still receive these extra points for taking part in that research.

Weighting in the ranking

In theory, this key figure has no upper limit. To determine the score, we scale this key figure with flexible limits; the upper limit is 60 points, the lower limit 0. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework.

The weighting of this indicator in determining the ranking of supermarkets is: 1.

Sustainable agriculture (EN-2)

Transparency of supply chains (EN-2.1)

Indicator EN-2.1.1

policy

To what extent does the supermarket report on the origin, transport and cultivation method of the products it sells?

Explanation

Transparency is the first step towards improvement. Knowledge about products' origin, cultivation and transport and whether or not products are certified enables the supermarket to try and increase its sales of sustainable and, if possible, local products. This insight also gives policymakers and society greater insight into the transition towards a sustainable food system.

Apart from the assessment of the share of certified products, this indicator primarily measures the *transparency* of the supermarket, rather than the sustainability of the food it sells. Only if supermarkets are transparent about the origin, transport and cultivation of their products will it become possible to properly compare their practices.

Measurement and weighting

We investigate the extent to which the supermarket reports about a number of characteristics of the supply chain that are relevant for the environment. [Table 8](#) provides the points awarded for each type of information that the supermarket publishes or that can potentially be derived from more extensive or more detailed reporting. The format of reporting has no influence on the number of points awarded; what matters is that the information is available.

Category	Metrics to be reported			
	Certificates	Cultivation method	Origin	Transport method
Fresh vegetables, incl. potato	20 points	20 points	20 points	20 points
Fresh fruit	20 points	20 points	20 points	20 points
Vegetables, preserves	10 points	10 points		
Fruit, preserves	10 points	10 points		
Eggs	10 points		10 points	
Dairy	10 points		10 points	
Meat	10 points		10 points	
Fish	10 points	10 points	10 points	

Table 8. Scoring of EN-2.1.1

Intermediate step: EcoScore coverage

A recent development regarding the transparency of supply chains is the EcoScore concept (see [Appendix 3](#) for more information). EcoScore assesses the environmental impact of individual food products. The assessment is (partly) based on *average* data, derived from what is known about parameters like the origin, cultivation and transport of the general product type.

For this indicator, we consider EcoScore as an intermediate step towards transparency of the actual supply chain. The EcoScore coverage of sales in a category can be reported as follows:

Products with EcoScore A	...% of sales in the category
Products with EcoScore B	...% of sales in the category
Products with EcoScore C	...% of sales in the category
Products with EcoScore D	...% of sales in the category
Products with EcoScore E	...% of sales in the category
Products for which EcoScore is unknown	...% of sales in the category

When figures are reported for a certain category, the *EcoScore coverage* of that category is calculated as the sum of shares outside 'Ecoscore is unknown'. This figure will be taken into account as described for each of the metrics below.

Certificates

Report the share of certified products in the total volume of products sold in that particular category. We take into account all certificates and company purchasing programmes that have been assessed by Milieu Centraal with a minimum of 4 out of 5 points for the environment and control (see [Appendix 3](#)).

A supermarket may also report on other certificates, as long as the share is covered by the certificates can be deduced:

- One or more distinctive certificates as ...% of sales in the category
- No (distinctive) certificate or unknown ...% of sales in the category

This metric is valued for each separate category according to the following calculation.

The number of points indicated in the cell in [table 8](#) is multiplied by the reported share of sales with distinctive certificates in that category.

Cultivation method

Report a breakdown of the volume sold in the category, by cultivation method:

- share of open field cultivation ...% of sales in the category
- share(s) of other cultivation method(s) (to be specified) ...% of sales in the category
- share (partly) unknown ...% of sales in the category

This metric is valued for each separate category according to the following calculation.

The number of points indicated in the cell in [table 8](#) is multiplied by either the sum of reported shares outside of '(partly) unknown', or by 0,05 x Eco-Score coverage for the category (whichever is highest).

Origin

Report a breakdown of the volume sold in the category, by origin:

- share coming from the region ...% of sales in the category
- share coming from Belgium ...% of sales in the category
- share from the EU (except Belgium) ...% of sales in the category

- share from outside the EU ...% of sales in the category
- share of origin mixed EU/non-EU ...% of sales in the category
- share (partly) unknown ...% of sales in the category

This metric is valued for each separate category according to the following calculation. The number of points indicated in the cell in [table 8](#) is multiplied by either the sum of reported shares outside of '(partly) unknown', or by 0,05 x Eco-Score coverage for the category (whichever is highest).

Transport method

Report a breakdown of the volume sold in the category, by type of transport

- road transport ...% of sales in the category
- air + road transport ...% of sales in the category
- water + road transport ...% of sales in the category
- (partly) unknown ...% of sales in the category

This metric is valued for each separate category according to the following calculation. The number of points indicated in the cell in [table 8](#) is multiplied by either the sum of reported shares outside of '(partly) unknown', or by 0,05 x Eco-Score coverage for the category (whichever is highest).

If reporting is aggregated for certain product categories, we will count half the number of points for each of the categories that are merged. For example: a supermarket that reports a combined figure on certified eggs and dairy receives 2 x a maximum of 5 points, instead of 2 x 10 points for separate reporting. If the figure also covers categories not mentioned in [table 8](#) (for example, the supermarket's total sales), we award a quarter of the points. The key figure for this indicator is the sum of the points awarded, which means the maximum achievable score is 290 points.

Weighting in the ranking

To determine the score, we scale this key figure with flexible limits; the upper limit is 145 points, the baseline is 0 points. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework.

The weighting of this indicator in determining the ranking of supermarkets is: 1.

Sustainable agriculture (EN-2.2)

Indicator EN-2.2.1

assortment

To what extent does the supermarket's assortment meet relevant sustainable agriculture requirements?

Explanation

A supermarket can take responsibility for making agriculture more sustainable by guaranteeing a minimum sustainability level through their purchasing conditions. Alternatively, supermarkets offer their customers a choice of certified and uncertified products. In this indicator, we investigate the extent to which a supermarket's assortment is covered by relevant certificates or company purchasing programmes that take into account environment and nature.

We acknowledge that only looking at certifications to assess retailers' sustainable agriculture efforts may mean we fail to spot certain individual supermarket policies. However, there is currently no other solid way to measure relevant requirements at product level.

Measurement and weighting

Relevant certificates and company purchasing programmes are those that receive at least 4 out of 5 points for environment and control in Milieu Centraal's assessment (see [Appendix 3](#)). This method analyses the extent to which a supermarket takes responsibility for making agriculture more sustainable at three different levels, see [table 9](#).

Level of responsibility	Points
1. No responsibility The assortment does not include any products of the product type that meet the requirements of relevant certificates or company purchasing programmes.	no points
2. Responsibility lies with the customer The assortment includes at least one choice for this product type that meets the requirements of relevant certifications or company purchasing programmes.	1 point per product type
3. Supermarket takes responsibility For this product type, the assortment only includes products that meet the requirements of relevant certificates or company purchasing programmes.	5 points per product type

Table 9. Scoring per product type within EN-2.2.1

We have made a selection of clearly defined product types that are widely sold by supermarkets and that reflects the extent to which a supermarket takes responsibility. For fruits and vegetables, we looked at the most sold products (in kg of product) (GfK Belgium, 2020). For each of the selected product types in [table 10](#), we determine the level at which a supermarket takes responsibility for sustainable agriculture. The key figure is the average number of points for all product types.

Fresh vegetables	Fresh fruit	Animal-based	Other
tomato	banana	milk (natural)	potatoes
carrot	apple	yoghourt (natural)	pasta
onion	orange	Gouda (natural, slices)	rice
chicory	tangerine	eggs	chocolate tablets
lettuce	melon	minced beef (natural)	filter coffee and coffee beans
capsicum	pear	brochettes	tea (black)
courgette	grapes	sausage	

Table 10. Product types per product group within EN-2.2.1.

Weighting in the ranking

The key figure is scaled with flexible limits: 2.5 as the upper limit and 1 as the lower limit. A supermarket with 2.5 points gets a score of 100 (unless another supermarket scores higher), a supermarket with 1 point gets a score of 0 (unless another supermarket scores lower). For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 1.

Fighting deforestation (EN-2.3)

Indicator EN-2.3.1

policy

To what extent does the supermarket take action to stop deforestation linked to the use of **soy** in animal feed?

Explanation

The most important forest-risk commodities for embedded deforestation and CO₂ emissions in Belgium are soybean and palm oil (Bager, Persson, and dos Reis, 2021). Much of this soy is used as animal feed for the production of animal products such as meat, cheese and milk. But the cultivation of soy is problematic. It requires a lot of space, for example, often at the expense of forested areas and other important ecosystems (WWF, 2021b). Deforestation plays an important role in climate change and contributes to the loss of biodiversity. And the import of soy is a key driver of the nitrogen surplus. In this indicator, we focus on deforestation as a separate problem that requires a solution.

Measurement and weighting

For this indicator, we look at a supermarket's publicly available publications to check which action(s) it is taking to stop deforestation linked to the production of soy for animal feed. To make a real impact, European retailers should encourage upstream supply chain actors to become 100% sustainable, and only work with upstream actors that are not involved in any unsustainable activities, such as deforestation or conversion of nature.

The reported volume sold must include all products that have animal protein (including meat, fish, egg and all dairy products) as their main ingredient. Wild meat and fish are excluded.

The supermarket receives points for each action in [table 11](#). For the component 'Implementation and control', points can only be obtained if the supermarket scores 2 or more points on 'Deforestation-free soy in animal feed via certification or origin' (see [table 12](#) for the scoring of this).

The key figure for this indicator is the total of all points awarded in [table 11](#).

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 25, the lower limit is 0. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 0.33.

Intervention		Points
Deforestation-free target		
The supermarket has a clear goal with a target date for deforestation- and land conversion-free soy in animal feed in the supply chain (max 3 points).		
A	Target date no later than 2030 (Glasgow Climate Pact/Beyond Chocolate)	1
B	Target date no later than 2025 (Amsterdam Declaration)	2
C	Target date no later than 2023 (EU law)	3
The supermarket uses the so-called 'cut-off date' of August 2020, after which deforestation or conversion will no longer be accepted (AFi, 2019).		3
Transparency about the supply chain		
First step: The supermarket provides information on the origin of soy (max 2 points).		
A	Publication of countries and/or regions of origin	% × 1
B	Publication of municipalities and/or farms of origin	% × 2
The supermarket provides information on the supply chain (max 10 points).		
A	Publication of a list of direct suppliers	% × 5
B	Publication of a list of direct and indirect suppliers	% × 10
Implementation and control		
Baseline: deforestation-free soy in animal feed via certification or origin (max 10 points).		Table 12
The supermarket publicly publishes an action plan with a clear target date for implementation of the zero-deforestation policy in the supply chain of soy for animal feed. (*) (max 6 points) This includes:		
A	An overview of the risks in the chain, including the soy suppliers with the highest risk;	2
B	A step-by-step plan to address these risks, including a cut-off date;	2
C	An escalation approach with concrete consequences if suppliers/traders do not comply with the agreements, including dialogue, suspension and exclusion, as recommended by the Accountability Framework Initiative. This escalation approach enters into force when the cut-off date is not met.	2
The supermarket's purchasing conditions stipulate that soy for animal feed must be deforestation- and land conversion-free. (*)		2
Collaboration with third parties on initiatives that have measurable goals to improve transparency throughout the supply chain and/or to promote sustainable production. (*)		2

Reporting action plan	
Reporting on the compliance action plan at least once a year.	2

Table 11. Scoring of EN-2.3.1. The number of points is the sum of the points of all interventions a supermarket reports on. % stands for the share that is reported on.

(*) This intervention only counts if ≥ 2 points are given for the 'baseline'.

Efforts to stop deforestation via certification	Points
<p>a. Share unknown: deforestation not (completely) excluded Sales-weighted share of animal products from farms that (partly) use soy in their animal feed, for which forests (might) have been felled, if this is explicitly included in the report. One point is awarded for transparency.</p>	$\% \times 1$
<p>b. Share from farms exclusively using certified soy that allows for legal deforestation Sales-weighted share of animal products from farms that exclusively use soy covered by (separately purchased) certificates/credits. All certificates that comply with the FEFAC Soy Sourcing Guidelines are applicable.</p> <p><i>The following apply as certificates/credits: Agricultura Sustentable Certificada, Amaggi Responsible Soy Standard, BFA mv-soja, Cargill Triple S, Sustainable Farming Assurance Program, US Soy Sustainability Assurance Protocol (SSAP), ISCC, Sustainable Feed Standard, ADM Responsible Soybean Standard, Bunge Pro-S, Louis Dreyfus Company (LDC), Programa Coamo (IDH, 2022, sec. 3.4.1).</i></p>	$\% \times 3$
<p>c. Share from farms exclusively using certified soy that is free from both deforestation and conversion of other natural ecosystems Sales-weighted share of animal products from farms that only use soy in their animal feed that is certified deforestation-free beyond level b.</p> <p><i>This applies to guaranteed deforestation-free soy: RTRS, SFAP-Non-Conversion, Proterra, Danube Soy/Europe Soy, ISCC+, CRS (IDH, 2022, sec. 3.4.2).</i></p>	$\% \times 6$
<p>d. Share of soy sourced from 100% sustainable suppliers Sales-weighted share of animal products from 100% sustainable suppliers. A supplier is 100% sustainable if none of the actors in the supply chain are involved in activities that cause deforestation or conversion of other natural ecosystems.</p> <p><i>We ask retailers to explain how they encourage their suppliers to become sustainable and how they assess whether suppliers have done so (criteria, labels).</i></p>	$\% \times 10$

Table 12. Levels of deforestation-free soy in animal feed via certification. The total number of points for this component is the sum of the points, where % is the reported share that meets the level. Each kilogram of product sold can only count for one of the above levels. The total is therefore a maximum of 10 points.

To what extent does the supermarket take action to stop deforestation linked to the use of **palm oil** in its products?

Explanation

Palm oil is used in a wide range of products, from cosmetics and detergents to candles and biscuits. Worldwide, (tropical) forests and peatlands are burned down to create palm oil plantations. This practice puts local communities and plantation workers at high risk of having their human rights violated, and has a major impact on the climate and ecosystems.

Measurement and weighting

For this indicator, we examine a supermarket's palm oil policy. The indicator uses the Palm Oil Buyers Scorecard as developed by the World Wildlife Fund (WWF, 2021a).

We will use the final score in the most recent Palm Oil Buyers Scorecard as the score, if available. All supermarkets will have the opportunity to answer the questions of the Palm Oil Buyers Scorecard (again) with the most recent information. For supermarkets that choose not to take this opportunity, the score of the most recently published Palm Oil Buyers Scorecard will apply. Supermarkets that were not included in that survey and that do not take the opportunity to answer the questions will be assessed on the basis of their own palm-oil policy, if publicly available. The key figure is the outcome of the Palm Oil Buyers Scorecard 2021 (WWF, 2021a).

Weighting in the ranking

The key figure is fully scaled to a score of 0-100. The weighting of this indicator in determining the ranking of supermarkets is: 0.33.

To what extent does the supermarket take action to stop deforestation linked to the use of **cocoa** in its products?

Explanation

Cocoa is not only a popular Belgian commodity, but also a very important forest-risk commodity. Belgium is Europe's second-largest direct cocoa bean importer and an important distributor of cocoa derivatives, mainly for cocoa-processing industries in neighbouring countries (CBI, 2020). While Belgian chocolate may be known for its quality, it still leaves a trail of deforestation in its wake, particularly in Ghana and Ivory Coast. Together, these two countries produce nearly two-thirds of the world's supply of cocoa (World Cocoa Foundation). To mitigate the risk of deforestation, European retailers should encourage and support upstream supply actors to become 100% sustainable. Going forward, they should only work with upstream cocoa actors that are not involved in any unsustainable activities (or that have a clear action plan on how to achieve sustainable production within a well-defined period of time), such as deforestation or the conversion of nature.

Measurement and weighting

For this indicator, we use publicly available information to assess which action(s) the supermarket is taking to stop deforestation linked to the production of cocoa. We measure the supermarket's self-reported policies and performance against the criteria in [table 13](#). All reported volumes must include all products that contain cocoa. The key figure for this indicator is the total of all points awarded in [table 13](#).

Intervention		Points
Deforestation-free target		
The supermarket has a clear goal with a target date no later than 2025 for deforestation- and land conversion-free chocolate.		3
The supermarket uses the so-called 'cut-off date' of August 2020, after which deforestation or conversion will no longer be accepted (AFi, 2019).		2
Transparency about the supply chain		
What percentage of the volume of cocoa beans is sourced from direct/indirect suppliers, using the following supply chain systems: (max 3 points)		
A	Mass balance	% × 1
B	Segregated	% × 2
C	Bean to bar	% × 3
The supermarket provides information on its chocolate bean suppliers in the direct and/or indirect supply chain: (max 4 points)		
A	Publication of a list of direct suppliers	% × 1
B	Publication of a list of direct and indirect suppliers	% × 4
Implementation and control		
To what extent does the supermarket limit the risk of deforestation linked to cocoa via certification/corporate sustainability schemes? (max 4 points)		
A	The % of the volume of cocoa beans that complies with a relevant corporate sustainability scheme (see Appendix 3)	% × 2
B	The % of the volume of cocoa beans that complies with an environmentally relevant third-party certification (see Appendix 3)	% × 4
The supermarket publicly publishes an action plan with a clear target date for implementation of the zero-deforestation policy in the chocolate supply chain. This includes (max 8 points):		
A	An overview of the risks in its assortment of chocolate	2
B	A step-by-step plan to address these risks, including a cut-off date	2

C	An escalation approach with concrete consequences if suppliers/traders do not comply with the agreements, including dialogue, suspension and exclusion, as recommended by the Accountability Framework Initiative. This escalation approach enters into force when the cut-off date is not met.	2
D	A description of the additional investments of retailers in the supply chain to support suppliers in the transition to sustainable cocoa (beyond sourcing strategies)	2
	The supermarket's purchasing conditions for direct and indirect suppliers stipulate that cocoa in the value chain has to be deforestation-free.	2
Reporting action plan		
	Reporting on the compliance action plan at least once a year.	2

Table 13. Scoring of EN-2.3.3. The number of points is the sum of the points of all interventions that a supermarket reports on. % stands for the share that is reported on.

The key figure for this indicator is the total of all points awarded in [table 13](#).

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 17, the lower limit is 0. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 0.33.

Food Waste (EN-3)

Food Waste (EN-3.1)

Indicator EN-3.1.1

policy

Has the supermarket published an action plan with concrete interventions, aimed at reducing both food loss in the supply chain and food waste at the consumer stage?

Explanation

Supermarkets are not directly responsible for their customers' behaviour at home. But they do have an influence over people's shopping behaviour, which in turn has an influence on the amount of food that customers waste. Campaigns that stimulate bulk purchases, impulse buying and fast sales, larger packaging and supermarket design, for example, can all make people buy more than they need. This increases the risk of food being thrown away (faster) at home. Consumers have indicated that the main reasons they throw away food are preparing too much food, not using food in time or having bought too much food (Criel and Fleurbaey, 2019).

Measurement and weighting

For this indicator, we use publicly available information to assess which action(s) the supermarket is taking to decrease food loss in the supply chain and food waste at the consumer stage. We measure supermarkets' self-reported policies and performance against the criteria in [table 14](#). The key figure for this indicator is the total of all points awarded in [table 14](#). We adopt the definition of food waste proposed by Fusions (FUSIONS EU, 2014)

Points are awarded according to the following levels:

Level	Actions	Points
1	The supermarket has published an action plan with concrete interventions aimed at reducing both food loss in the supply chain and food waste at the consumer stage.	1 point
2	The action plan includes measurable targets and clear definitions of figures and indicators used. The company monitors and reports its own performance against the targets.	+ 2 points
3	The plan includes an estimate by an independent third party of the total food loss and waste that is related to the supermarket.	+ 4 points
4	The plan includes an assessment by an independent third party of actions the supermarket should prioritise to combat food loss and waste. Cost-effectiveness may be used as a prioritisation criterion. Targets in the action plan reflect this prioritisation.	+ 6 points

Table 14. Scoring of EN-3.1.1 The number of points is the sum of the points of all actions the supermarket takes.

Weighting in the ranking

To determine the score, this key figure is scaled with flexible limits; the upper limit is 7, the lower limit is 0. For an explanation of this way of scaling, see 'Score and scaling' in the Research Framework. The weighting of this indicator in determining the ranking of supermarkets is: 0.5.

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Definitions

This research methodology for Belgium's Superlist Environment uses the following definitions, unless stated otherwise. The definitions used in the Research Framework are also applicable.

Promotion	Mention of one product or a group of products in a supermarket's weekly promotion flyer, for which, for example, a special price applies, or which the supermarket highlights for a different reason. See also the Research Framework (Questionmark, 2020).
Main ingredient	The first ingredient in a product's list of ingredients. If the second ingredient is present in a comparable amount, both ingredients may be considered the main ingredient. If a product lacks an ingredient declaration, the main ingredient is derived from the product's name or category, if possible.
Sustainable agriculture	Sustainable agriculture meets the needs of present and future generations, while ensuring profitability, environmental health, and social and economic equity. Sustainable food and agriculture contributes to all four pillars of food security – availability, access, utilisation and stability – and the dimensions of sustainability (environmental, social and economic) (FAO, 2022).
Distinctive certificate	A certificate or company purchasing programme (as a company logo) that takes relevant environmental action, with a proper control system in place. See also Appendix 3 .
Volume sold	Weight in kilograms of total food sales.

Food types contributing to the protein shift

Meat and other animal-based products do have a place in a healthy and environmentally responsible diet. But the environmental impact of the lowest-impact animal products usually exceeds that of plant-based substitutes (Poore and Nemecek, 2018). Therefore, consumption of animal products –especially in Western countries – has to be lowered to a level that is in line with planetary boundaries. The change in our food culture and eating habits that this will require is generally referred to as the 'protein transition' or 'protein shift' (Willett et al., 2019).

In this research methodology, we distinguish three categories of protein-rich foods, according to the contribution they make to this protein shift:

- No contribution
- Minor contribution (small step)
- Important contribution

This categorisation reflects the environmental impact of the food type and the extent to which it helps diminish the central role of animal products in our cooking habits and food culture.

No contribution: meat, fish & shellfish

Meat, fish & shellfish are not considered to contribute to the protein shift. With 'meat', we mean red meat from mammals such as cattle, pigs, goats, sheep and horses, and white meat from domestic rabbits and from poultry, such as chickens, turkeys, ducks and geese. In terms of greenhouse gas emissions, land, water and energy use, red meat has the largest impact. The international EAT Lancet report has calculated that we should, on average, consume no more than 14 grams of red meat per day and per person around the world by 2050 (Willett et al., 2019). An average inhabitant of Belgium eats 158.5 grams of red meat per day, expressed in slaughter weight (Statbel, 2020). White meat, fish and shellfish generally have a lower impact on climate change than red meat, but their role in our food culture is similar to that of red meat: meat and fish are still regarded as the main attraction of most dishes or meals.

Small step: dairy, cheese, eggs

Other animal products such as cheese, dairy and eggs generally have a slightly lower environmental impact. This is not a rule, however; some (aged) cheeses have an environmental footprint similar to or even considerably higher than some types of white meat or fish.

Still, dairy and eggs play a different role in our cooking habits and food culture. They are usually just an ingredient or a topping, not the centrepiece of a dish. As such, they are easier to replace in (or remove from) dishes than meat or fish. The public tends to view vegetarian products (containing dairy or eggs) as being situated 'halfway' on the spectrum between animal and plant-based foods.

Important contribution: plant-based protein sources

Plant-based protein sources such as pulses, nuts and seeds are the substitutes for meat that contribute the most to the dietary shift that is required. The environmental impact of these food types is almost always much lower than that of both other categories (EAT, 2019).

Sustainability certifications and corporate sustainability programmes

Certifications

Several of the indicators of this methodology use certifications to measure (an aspect of) sustainability. But the certifications that are in use today have varying degrees of control, and not all of them have distinctive environmental requirements. For this research, we used a selection of certifications, based on the Keurmerkenwijzer assessment of Milieu Centraal (Milieu Centraal, 2020).

That assessment provides an overview of certifications and company purchasing programmes (in the form of company logos) used in the Netherlands and applicable to Belgium as well. Milieu Centraal assessed these certifications on a number of aspects: their level of ambition with regards to environmental, social and animal welfare efforts; reliability and transparency. Standards, sustainability labels and logos are marked as 'top certifications' if they score a minimum of 4 out of 5 points on all aspects. These 'top certifications' correspond to the certifications deemed 'most ambitious' in another analysis conducted by Basic, WWF and Greenpeace (WWF/Greenpeace/Basic, 2021). Because the emphasis of our study is on the difference a certification makes on the environment, we only considered Milieu Centraal's assessment in terms of environmental requirements and control. We use the same lower limit as they did for their top certifications, namely 4 out of 5 points.

Keurmerk	Fish	Meat	Dairy	Eggs	Vegetables	Fruit	Wine	Coffee	Tea	Cocoa*
ASC	✓									
Better life Label - 1 star		–	✓	–						
Demeter		✓	✓	✓	✓	✓	✓			
EKO		✓	✓	✓	✓	✓	✓	✓	✓	✓
EU organic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fair for Life					✓	✓	–	✓	✓	✓
GGN Certified Aquaculture	✓									
KRAV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MSC	✓									
Naturland Aquakultur	✓									
On the way to PlanetProof			✓	✓	✓	✓				

Rainforest Alliance					✓	✓		✓	✓	✓
UTZ								✓	✓	✓
Soil Association	✓									

Table 15. Certifications accepted for this theme. All combinations of certifications and product groups marked with '✓' are accepted; when there is a '-' the certification does have criteria for the product category, but these are not strict enough for us to be able to accept them. (*) UTZ, Rainforest Alliance, EKO and Fairtrade have also been acknowledged by Beyond Chocolate. For more information about how we handle Fairtrade, see the text below.

For indicator EN-2.3.3 on cocoa, we make an exception for Fairtrade. Even though Fairtrade does not comply with the minimum environmental requirements of Milieu Centraal, Beyond Chocolate has acknowledged its value for the cocoa sector and views it as being on a par with other top certificates (UTZ, Rainforest Alliance and EKO). For this reason, we do count Fairtrade as a corporate sustainability scheme under point A in indicator EN-2.3.3.

Corporate sustainability programmes

Certifications give a brand the opportunity to prove that its environmental efforts are verified by an independent third party. This is the most transparent, and thus preferred, route. However, a brand or supermarket can choose to take action by itself, for example when certifications do not yet exist for a certain product type.

Retailers can include ambitious environmental requirements in their purchasing programmes or comply with sector-wide or nationwide programmes. If such requirements are publically available and if they meet the Keurmerkenwijzer criteria, we will take them into account.

Corporate sustainability programmes for cocoa

Indicator EN-2.3.3 looks at corporate sustainability programmes for cocoa. To determine which programmes have distinctive environmental requirements, we use Beyond Chocolate's assessment of chocolate labels (IDH, 2020b). [Table 16](#) shows which programmes we accept for this indicator.

Corporate sustainability programmes for cocoa
Cocoa Horizons (Barry Callebaut)
Cacao-Trace (Puratos Belcolade)
Together, we can make all chocolate 100% slave free (Tony's Chocolonely – open-chain model)
Cocoa Life (Mondelez)

Table 16: Company logo's accepted for this theme because Beyond Chocolate acknowledges them. We may add other corporate initiatives in the future.

Other corporate programmes

So far, Belgian purchasing programmes/company logos have not yet been (thoroughly) assessed in terms of their environmental efforts for products and ingredients other than chocolate/cocoa. That is why we apply the same three criteria Milieu Centraal uses in its assessment of environmental labels: ambition level, reliability and transparency (Milieu Centraal, 2020). Based on information that is available today, we have not found any Belgian purchasing programme to be relevant for the scope of this research, as none currently meet the necessary requirements.

Development of international standards for comparison

Apart from certifications and corporate sustainability programs, two new concepts are relevant to this research: Product Environmental Footprint and EcoScore. Both concepts have the potential to make our food system more transparent. The active contribution of several supermarkets to the developments of these concepts is an indication of the importance they attach to ecological sustainability and should be applauded. Below, we describe the role these concepts (may) have in this project (going forward).

Product and Organisation Environmental Footprint (PEF/OEF)

Product Environmental Footprint (PEF) is a standardised way of measuring the environmental performance of a service or goods throughout its life cycle. A closely related concept is the Organisation Environmental Footprint (OEF), which is calculated at the level of an organisation (such as the retailer). The development of the PEF/OEF methodology was initiated by the European Commission.

PEFs are not yet available for all food products or product types, and a retail OEF (which might be more relevant in this context) is still being developed. We may adjust our Superlist methodology in the next few years to align with (or include) PEF/OEF requirements. For now, however, we cannot expect supermarkets to use these concepts at a scale that would be relevant to the objectives of this project.

EcoScore

EcoScore is an environmental score from A to E, intended to help consumers compare the environmental impact of different food products. The EcoScore approach has its roots in France but is currently being adjusted to and tested in several other European countries as well. While it has the potential to become a useful benchmark for indicating a product's environmental sustainability, there is still no broad consensus on the exact methodology to be used and most products still lack an EcoScore. The concept currently relies on self-assessment by the supplier, with no third-party verification provided.

EcoScores are based on an assessment of the environmental impact of food products in absolute terms, including their emission of CO₂ equivalents, water footprint, etc. This exact assessment requires information about several different parameters like the product's production methods, origin and method of transport. If such data is not available, sector averages (based on knowledge about the general product type) may be used. We consider EcoScore an intermediate step towards supply chain transparency in indicator EN-2.1, but don't yet take EcoScores into account in other indicators.

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