# FEAST.

# BIA-Obesity/ Sustainability



www.feast2030.eu



# Co-funded by the European Union

#### Project funded by



Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Education, Research and Innovation SERI

Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 22.00156.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for



Innovate UK Innovate UK [grant number 10041509]

Funded by the European Union.

them. Project No 101060536

Start Date 01/07/2022, End Date 30/06/2027

- Cite as: Steele, M., Dastoum, S., Campos, S., Mendes Alves, R., Harrington, J., & Vandevijvere, S. (2024). FEAST - Report on BIA-Obesity/Sustainability assessments (1.0). Zenodo. FEAST project - Food systems that support transitions to hEalthy And Sustainable dieTs.
- DOI: https://doi.org/10.5281/zenodo.10551887



This document is shared under Creative Commons Attribution 4.0 International License (CC BY 4.0).



# Food systems that support transitions to hEalthy And Sustainable dieTs

Deliverable Name	Report on BIA-Obesity/Sustainability assessments Report on BIA-Obesity and BIA- sustainability assessment of businesses including recommendations in Belgium and France		
Description			
Work Package (WP)	Mapping and monitoring factors that shape food environments (WP3)		
Deliverable Related No.	D3.1		
Lead Beneficiary	Sciensano - ScS		
Туре	Report (R)		
Dissemination level	Public (PU)		
Due Date and project month	December 31 2023 / Month 18		
Author(s)	Margaret Steele (UCC), Sara Dastoum (Sciensano), Susana Campos (IPVC), Ricardo Mendes Alves (IPVC), Ana Teres Oliveira (IPVC), Janas Harrington (UCC) Stefanie Vandevijvere (Sciensano)		
Revision	N/A		
Reviewed by (if applicable)	N/A		

# **Table of Content**

Table of Con	tent
List of Figure	s
List of Tables	
Key Facts	
ACRONYMS	AND ABBREVIATIONS
Foreword	
1 Method	lology9
1.1 Ov	erview of the BIA process
1.2 Co	mpany selection methodology10
1.2.1	Company selection methodology for Retailers and Quick Service Restaurants
1.2.2	Company selection methodology for non-alcoholic beverage manufacturers12
1.2.3	Company selection for packaged food manufacturers
1.2.4	Company selection for Catering companies15
1.2.5	Exclusions
1.3 Ini	tial assessment of publicly available data on commitments
1.3.1	BIA-Obesity
1.3.2	BIA-Sustainability
2 Results	by country
2.1 Re	sults from Belgium
2.1.1	BIA-Sustainability Belgium
2.1.2	BIA-Obesity Belgium
2.2 Re	sults from Ireland
2.2.1	BIA-Sustainability Ireland
2.2.2	BIA-Obesity Ireland
2.3 Re	sults from Portugal
2.3.1	BIA-Sustainability Portugal
2.3.2	BIA-Obesity Portugal
3 Compar	ison between the countries
3.1 BIA	A-Sustainability
3.1.1	Packaged Food Manufacturers
3.1.2	Quick Service Restaurants
3.1.3	Supermarkets
3.2 BIA	A-Obesity
3.2.1	Packaged food manufacturers
3.2.2	Quick Service Restaurants
3.2.3	Supermarkets
	Page 2 of 62

4	Com	parison of the two BIAs	. 46
	4.1	Belgium	. 46
	4.2	Ireland	. 47
	4.3	Portugal	. 49
5	Disc	ussion and conclusions	. 50
	5.1	Key points emerging from analysis of publicly available information	. 50
	5.1.2	1 BIA-Sustainability	. 50
	5.1.2	2 BIA-Obesity	. 52
	5.2	Strengths and Limitations	. 53
	5.3	Next steps	. 53
	5.3.2	1 Assessing practices	. 53
	5.3.2	2 Preparing scorecards by company	. 54
	5.3.3	3 Preparing country-specific reports	. 54
	5.3.4	4 Comparison over time	. 54
	5.4	Conclusion	. 54
A	nnex		. 55
	Annex	1 - BIA-Obesity domains and indicators	. 55
	Annex	2 - BIA-Sustainability domains and indicators	. 56
	Annex	3 - Table of Sources used for BIA-Sustainability	. 57
	Annex	4 - Table of Sources used for BIA-Obesity	. 60
R	eference	es	. 61

# **List of Figures**

Figure 1	Total disease burden in WHO Europe region 2019, OurWorldInData.org
Figure 2	Diagram of the Business Impact Assessment process (https://www.informas.org/bia-
obesity/)	10
Figure 3	Maximum (Max) scores and median scores in BIA-Sustainability domains for packaged
food and no	n-alcoholic beverage manufacturers in Belgium23
Figure 4	Maximum (Max) scores and median scores for BIA-Sustainability domains in the quick
service resta	aurants sector in Belgium
Figure 5	Maximum (Max) scores and median scores in the domains of BIA-Sustainability for
supermarke	ts in Belgium
Figure 6	Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity
domains to	the overall score (out of 100) for packaged food and beverage companies selected in
Belgium	26
Figure 7	Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity
domains to	the overall score (out of 100) for quick service restaurants selected in Belgium
Figure 8	Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity
domains to	the overall score (out of 100) for retailers selected in Belgium
Figure 9	Maximum (max) and median scores for each domain of BIA-Sustainability among
packaged fo	od and beverage manufacturers selected in Ireland

Figure 10 Maximum (max) and median scores for each domain of BIA-Sustainability among quick Figure 11 Maximum (max) scores and median scores for each domain of BIA-Sustainability among Figure 12 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for packaged food and beverage companies selected in Ireland 32 Figure 13 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity Figure 14 Figure 15 Maximum (Max) scores and median scores in BIA-Sustainability domains for packaged Maximum (Max) scores and median scores for BIA-Sustainability domains in the quick Figure 16 Maximum (Max) scores and median scores in the domains of BIA-Sustainability for Figure 17 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity Figure 18 domains to the overall score (out of 100) for packaged food and beverage companies selected in Portugal 38 Figure 19 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity Figure 20 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity Comparison of median scores of packaged food and non-alcoholic beverage Figure 21 Figure 22 Comparison of median scores of Quick Service Restaurants in each domain of BIA-Comparison of median scores of Supermarkets in each domain of BIA-Sustainability Figure 23 Figure 24 Comparison of median scores of Packaged Food Manufacturers in each domain of BIA-Comparison of median scores of Quick Service Restaurants in each domain of BIA-Obesity Figure 25 Comparison of median weighted scores of Supermarkets in each domain of BIA-Obesity Figure 26 

#### **List of Tables**

Table 1	History of Changes	ŝ
Table 2	List of acronyms and abbreviations	7
Table 3	Euromonitor market size data downloaded by country (Belgium, Ireland, Portugal) and by	y
industry se	ector1(	)
Table 4	Market share, by country, of supermarkets selected	1
Table 5	Market share, by country, of quick service restaurants selected	2
Table 6	Market share, by country, of companies in the non-alcoholic beverage manufactrers secto	r
	13	
Table 7	List of the selected companies in packaged food sector for three countries	1
Table 8	BIA-Obesity domains	7

Table 9

Table 10 BIA-Sustainability sample indicator and scoring......20 Table 11 Examples of best available practices in BIA-Sustainability domains from companies in Belgium 25 Table 12 Examples of best available practices in BIA-Obesity domains from companies in Belgium 28 Examples of best available practices in BIA-Sustainability domains from companies in Table 13 Belgium Table 14 Examples of best available practices in BIA-Obesity domains from companies in Ireland 34 Table 15 Examples of best available practices in BIA-Sustainability domains from companies in Portugal 37 Table 16 Table 17 Performance of Belgium-based the packaged food and non-alcoholic beverage manufacturers in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity 46 Performance of Belgium-based quick service restaurants in the domains of BIA-Table 18 Table 19 Performance of Belgium-based supermarkets in the domains of BIA-Sustainability Table 20 Performance of Ireland-based the packaged food and non-alcoholic beverage manufacturers in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity 48 Table 21 Performance of Ireland-based quick service restaurants in the domains of BIA-Table 22 Performance of Ireland-based supermarkets in the domains of BIA-Sustainability Table 23 Comparison of Portugal-based packaged food and non-alcoholic beverage manufacturers' Table 24 Comparison of Portugal-based quick service restaurants' total BIA-Obesity score with Comparison of Portugal-based supermarkets' total BIA-Obesity score with their scores in Table 25 

#### HISTORY OF CHANGES

#### Table 1 History of Changes

	HISTORY OF CHANGES			
Version	Publication Date	Changes		
1.0	22.12.2023	First version		

# **Key Facts**

Action Number: 101060536 Action Acronym: FEAST Action title: Food systems that support transitions to hEalthy And Sustainable dieTs Date: 22.12.2023 Report version: 1.0

# **ACRONYMS AND ABBREVIATIONS**

Access to Nutrition Index	
Business impact assessment	
Carbon Disclosure Project	
Dow Jones Sustainability Indices	
nvironmental, social and governance	
ood systems that support transitions to healthy and sustainable diets	
Food Loss and Waste	
Global Reporting Initiative	
International Food and Beverage Alliance	
International Network for Food and Obesity / Non-communicable Diseases (NCDs) Research, Monitoring and Action Support	
ey performance indicators	
Science Based Targets initiative	
Specific, Measurable, Achievable, Relevant, and Time-Bound	
Front-of-pack labelling	
ustainable Development Goals	

### Foreword

The goal of FEAST is that every person living in Europe can easily eat a healthier and more sustainable diet. This is not currently the case. Unhealthy and unsustainable food systems predominate, and the result is illness and suffering. Non-communicable diseases, especially cardiovascular diseases, now account for the biggest share of deaths and disability-adjusted life years in the WHO's Europe region (see Figure 1).

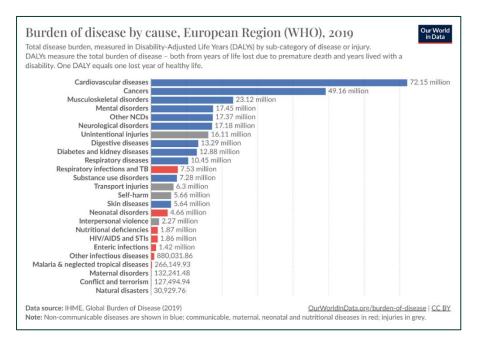


Figure 1 Total disease burden in WHO Europe region 2019, OurWorldInData.org.

Food systems contribute significantly to these diseases, particularly via unhealthy diets. Meanwhile, the same food systems that harm individuals' health also pose threats to planetary health. Globally, food systems are estimated to account for one third of anthropogenic greenhouse gas emissions (Crippa et al., 2021), while also posing a threat to water and biodiversity among others natural resources.

These food systems are dominated by private, for-profit enterprises, especially large transnational corporations. Current food systems provide a 'win' for these corporations, in that they yield large profits, but these profits come at a major 'loss' to population health (as seen above), as well as to the environment, and the public sector (Swinburn et al., 2019). It is a founding principle and guiding ideal of FEAST that better food systems must be win-win-win-win – that is, they must be beneficial, just and sustainable for health, environment and the public sector *as well as* for the private sector (Jani et al., 2022). Corporations express willingness to be part of the solution, to help move towards a healthier and more sustainable food system. In this task, our goal is to assess the details of their commitments, and to use this assessment as a benchmark against which we can compare their practices and their real-world impact.

The United Nations bodies, including the World Health Organization (WHO), have identified a range of actions that the private sector can take to help improve diets at the population level. The United Nations Sustainable Development Goals (SDGs) and associated targets provide a framework for all sectors of the community, including the private sector, to work towards improved economic, social, and environmental outcomes (United Nations, 2015). Nutrition has been considered as a component of all 17 SDGs and is part of, or linked to, performance targets of several SDGs including SDG 2 (zero hunger), SDG 3 (good health and wellbeing), and SDG 12 (responsible consumption and production).

In task 3.1 we used the Business Impact Assessment (BIA) on Obesity and BIA Sustainability to conduct a baseline assessment of how businesses affect food environments. Both the BIA-Obesity and the BIA-Sustainability were developed by the International Network for Food and Obesity/NCDs Research, Monitoring and Action Support (INFORMAS) for benchmarking food company policies and practices on population nutrition and sustainability at the national level (Mackay et al., 2022; Sacks et al., 2019).

In Europe, the BIA-Obesity has previously (2019-2020) been implemented in Belgium and France across four sectors (packaged food and beverage manufacturers, supermarkets and quick service restaurants) as part of the STOP Horizon2020 project (Van Dam, Guillon, et al., 2022; Van Dam, Reimes, et al., 2022). We built on this work in FEAST task 3.1 and applied the BIA-Sustainability and BIA-Obesity in Belgium, Portugal and Ireland.

# 1 Methodology

#### **1.1** Overview of the BIA process

To assess the impact of commercial actors on population nutrition and environmental sustainability, we used the Business Impact Assessment for Obesity and Population Health (BIA-Obesity), and the Business Impact Assessment for Sustainability (BIA-Sustainability). The BIA-Sustainability framework was developed by the International Network for Food and Obesity/NCDs Research Monitoring and Action Support (INFORMAS). This followed on from the BIA-Obesity which was initially developed and then implemented in a range of countries over the period 2018-2020. In this project, Sciensano, as part of the STOP Horizon 2020 project, investigated if and how the food industry was contributing to improving population nutrition and preventing obesity through the implementation of a BIA-Obesity approach in Belgium and in France. Generally, commitments were found weak and vague, and practices unhealthy (Van Dam, Guillon, et al., 2022; Van Dam, Reimes, et al., 2022). Then, it was decided to implement the same approach to investigate the commitments on environmental sustainability of food industry companies. The BIA processes were adapted from the Access to Nutrition Index (ATNI) that benchmarks the nutrition-related commitments, performance and disclosure practices of global food and beverage manufacturers.

Figure 2 gives a brief overview of the BIA process, which is common to both BIA-Obesity and BIA-Sustainability. In implementing the BIAs, we followed the protocol established by INFORMAS, with only minor adaptations to ensure relevance to each country and comparability between our three countries.

In the first phase of the process, companies are selected within each sector mainly based on market shares, and researchers gather and assess their publicly available commitments across a wide range of indicators according to a set of scoring criteria. In the second phase (currently still underway in the three countries), the companies are invited to review this preliminary assessment, and to bring our attention to any other commitments they think should be considered in the assessment, provided evidence is given for those. Then, researchers reassess each company in light of any new information. A company-specific scorecard and set of recommendations on how to improve their commitments is prepared and privately shared with the companies, before the final report on all companies is made public.

At the time of the final report, the companies will be named. However, as the assessment process is still ongoing, in the present report, the companies are anonymised, and only the results on the scoring of the publicly available commitments is presented.

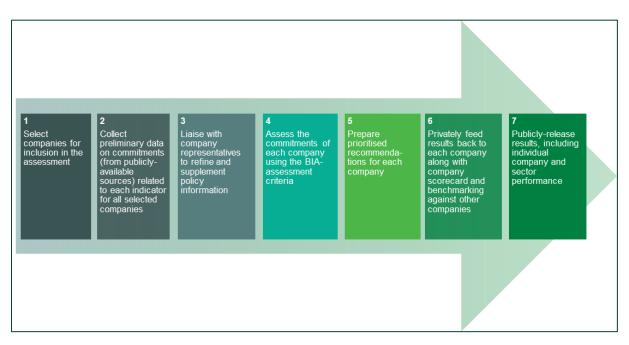


Figure 2 Diagram of the Business Impact Assessment process (https://www.informas.org/bia-obesity/)

#### **1.2** Company selection methodology

This study focused on the following industries: packaged food manufacturers, non-alcoholic beverage manufacturers, supermarkets, quick service restaurants, formula milk manufacturers and caterers. (In this report we focus on the results from packaged food and beverage manufacturers, quick service restaurants and supermarkets.) Where possible, company selection was based on market share data retreived from Euromonitor, accessed through the Passport database (*https://www.euromonitor.com*). Euromonitor collects data on markets from government departments and other official sources, as well as from trade organizations, trade and mainstream press, and companies themselves. We downloaded market share data by country, industry sector and company or by brand depending on the industry. Table 3 shows an overview of the datasets that were downloaded.

Industry	Type of data	Product categories	Date
Retailers	Brand Share – Global – Latest owner	All grocery retailers	18/3/22
Quick service restaurants	Brand Share – Global – Latest owner	All limited-service restaurants	18/3/22
Non-alcoholic beverage manufacturers	Company Share – Global – Latest owner	All manufacturers in the category of soft drinks	18/3/22
Packaged food manufacturers	Company Share – Global – Latest owner	All manufacturers of products in the categories (and subcategories) of:	18/3/22
		• Dairy products and alternatives	

Table 3 Euromonitor market size data downloaded by country (Belgium, Ireland, Portugal) and by industry sector

Industry	Type of data	Product categories	Date	
		Staple foods		
		Snacks		
		Cooking ingredients and meals		
Infant formula Company Share – Global manufacturers Latest owner		All infant formula manufacturers (sub category of Dairy Products and Alternatives in Euromonitor)	18/3/22	

Selection was based on market shares in 2021 as this was the most recent full-year data available at time of selection. In selecting companies, our goal was, where feasible, to select companies whose total combined market share would be at least 50%. This ensures that our final results will give a reasonable representation of the market as a whole.

#### 1.2.1 Company selection methodology for Retailers and Quick Service Restaurants

For these sectors, the companies were chosen solely on the basis of market share. The only exception was Dunnes Stores in Ireland, which was added because it is both Irish owned and highly recognisable. For quick service restaurants, we considered any brand with 3% or more market share in 2021. For grocery retailers, we considered any brand with 4% or greater market share in 2021. For feasability reasons, we then limited selection in each country to the top five brands. However, any brand that was selected in two out of three countries was also added to the selection in the third country even if its market share alone would not qualify for selection in the third country. Table 4 shows the market share of companies selected in the supermarket sector.

Company	2021 Market share Belgium	2021 Market share Ireland	2021 Market share Portugal
Aldi Group	8.7%	7.8%	1.6% (not selected)
Auchan Group SA	0	0	6.9%
Carrefour	6.7%	0	0
Colruyt	16.4%	0	0
Delhaize	12.9%	0	0
Dunnes Stores	0	2.3%	0
ITM Entreprises SA	1.5% (not selected)	0	6.1%
Jerónimo Martins	0	0	18.2%
Lidl (Schwarz Beteiligungs GmbH)	5.8%	11.5%	8.1%
Sonae SGPS SA	0	0	18.9%
Spar	2.5% (not selected)	4.7%	0.5% (not selected)
Supervalu	0	17.4%	0
Tesco	0	10.9%	0
Total (selected for assessment)	50.5%	54.6%	58.2%

Table 4 Market share, by country, of supermarkets selected

Table 5 shows the market share of the companies selected for quick service restaurants. In Ireland and Belgium it was not feasible to select a sufficient number of companies to add up to 50% of the market share. In each of these countries, the market is dominated by smaller companies and brands. In Portugal, by contrast, the market is dominated by larger companies, with McDonald's and Burger King alone adding up to almost 45% of the market share. In this sector as well, any brand that was selected in two out of three countries was also added to the selection in the third country even if its market share alone would not qualify for selection in the third country.

Company	2021 Market share Belgium	2021 Market share Ireland	2021 Market share Portugal
Burger King (Restaurant Brands Intl.)	1.8%	3.8%	11.0%
Domino's Pizza Inc.	1.7%	5.4%	1.6%
Eddie Rocket's (Eddie Rocket's City Diner Ltd)	0	3.7%	0
Exki	2.3%	0	0
Jerónimo Martins SGPS SA	0	0	0.1%
KFC (Yum! Brands Inc)	0.3%	3.5%	2.1%
McDonald's	6.8%	13.3%	33.0%
O'Brien's (Abrakebabra Ltd)	0	3.9%	0
Panos	3.3%	0	0
Pizza Hut (Yum! Brands Inc)	1.5%	0	0
Quick	5.0%	0	0
Sonae SGPS SA	0	0	0.4%
Supermac's Ltd.	0	5.2%	0
Tasty Bidco SL (Pizza Hut Portugal)	0	0	6.4%
Fotal (selected for assessment)	22.7%	38.8%	54.6%

 Table 5
 Market share, by country, of quick service restaurants selected

#### **1.2.2** Company selection methodology for non-alcoholic beverage manufacturers

Table 6 shows the market shares of the selected companies based on Euromonitor data for the nonalcoholic beverage (also referred to as soft drinks) product category. Some of the companies with significant market share in the soft drinks category, for example PepsiCo and Nestlé, were also selected for assessment as packaged food manufacturers. Indeed, the same happened with the selection of formula milks manufacturers where most of the companies with a large market share in this category also have a large market share in packaged food. In these cases, the company was only assessed once, on its entire portfolio, and using the collection template for packaged food, as this is the most comprehensive. Any manufacturer that was selected in two out of three countries was also added to the selection in the third country even if its market share alone would not qualify for selection in the third country.

Company	2021 Market share Belgium	2021 Market share (Ireland)	2021 Market share (Portugal)
Britvic Plc	0.1% (not selected)	13.4%	0
Coca-Cola Co, The	23.1%	24.3%	12.3%
Coca-Cola HBC	0	3.1%	0
Danone, Groupe	3.8%	3.6%	0
Nestlé SA	8.5%	0.6%	0.4%
PepsiCo Inc	4.9%	10.6%	4.2%
Spadel	8.7%	0	0
Sumol+Compal SA	0	0	13.1%
Suntory Holdings Ltd	2.8%	4.4%	2.3%
Unilever Group	1.6%	0.1%	3.0%
Total (selected for assessment)	53.4%	60.1%	35.3%

Table 6 Market share, by country, of companies in the non-alcoholic beverage manufactrers sector

#### **1.2.3** Company selection for packaged food manufacturers

The market share data on the packaged food manufacturers is according to the food categories in Euromonitor, as overall market share data for packaged food manufacturers is not currently available. For this reason, we based our selection on the companies' market share in the main food categories and subcategories. We excluded the subcategories of "edible oils, sauces and dressings" and "butter and spreads", because they have less relevance for these assessments. We selected the top three companies in each category (main and sub category), then we sorted them according to the market share, which gave us a primary list of the companies. We removed all the companies which had less than 6% share of the relevant market, to make the selection more feasible. A few companies were removed from the list due to limited product range (for example, Hello Fresh was removed despite their highest market share because they deliver fresh ingredients and we concluded that they cannot be among packaged food category) which in the end gave us around 15-18 companies for the assessment in each of the countries.

As in the other industry sectors, any company that was selected in two out of three countries was also added to the selection in the third country even if its market share alone would not qualify for selection in the third country.

Based on the market shares by food category as derived from Euromonitor, we estimated what the total market size for packaged food would be if it was a standalone Euromonitor industry, and then estimated different companies' share of this hypothetical market size. Box number 1 shows an example of how we performed this validation calculation.

Using this method, we were able to estimate the total size of the packaged food market and using that information we could then replicate the selection method used in other categories for packaged food. This method yielded the same list of companies, although the order was slightly different in some cases. This verified that our Packaged Food company selection is consistent with our selection in the other categories, and that we can reasonably make comparisons across and between categories.

Table 7 shows the list of companies selected for assessment, and which BIAs they were assessed for.

Company	<b>BIA-Sustainability</b>	BIA-Obesity
Baronie De Heer BV	Yes	Yes
Bel Group	Yes	Yes
Britivic	Yes	Yes
Boyne Valley	Yes	Yes
Casa Tarradellas SA	Yes	Yes
Danone Group	Yes	Yes
Ferreo & related parties	Yes	Yes
Grupo Bimbo SAB de CV	Yes	Yes
Glanbia Plc	Yes	No
Нірр	Yes	No
Hain	Yes	Yes
Haribo	Yes	Yes
Intersnack	Yes	Yes
Kellogg Co	Yes	Yes
Kerry Group Plc	Yes	No
Lactalis group	Yes	Yes
Mars Inc	Yes	Yes
McCain Foods Ltd	Yes	Yes
Mondelez	Yes	Yes
Monde Nissin Corp	Yes	Yes
Nestle SA	Yes	Yes
Nomad Food Ltd (Igloo)	Yes	Yes
Nutrinveste SGPS SA	Yes	No
Oetker-Gruppe	Yes	Yes
Pepso co	Yes	Yes
Roger & Roger	Yes	Yes

 Table 7
 List of the selected companies in packaged food sector for three countries

Report on BIA-Obesity/Sustainability assessments

Company	<b>BIA-Sustainability</b>	BIA-Obesity
Royal Friesland Campina	Yes	Yes
Sigma Alimentos SA de CV	Yes	Yes
Sodiaal SA	Yes	Yes
Sumol+ Compal	Yes	Yes
Ter Beke NV-What's cooking	Yes	Yes
Unilever group	Yes	Yes
Upfield Holdings BV	Yes	Yes
Valeo Foods Ltd	Yes	Yes

#### BOX Nr. 1 – Validating company selection: Mondelēz example

- Mondelez had 16.4% of the market for Snacks.
- The total value of the Snacks market in Ireland in 2021 was €2326 million.
- So Mondelēz's market share in Snacks was 16.4% of €2326 million, which equals €381.46 million.
- This calculation was then repeated for each of the four main packaged food categories (Dairy, Staple Foods, Cooking Ingredients and meals, and Snacks).

Based on these calculations, in total, Mondelez had:

Main packaged food category	Total size of the market for this category (€m)	Mondelēz Market Share (%)	Mondelēz Market Share (€m)
Dairy and Dairy Alternatives	1757.0	1.4%	24.60
Staple Foods	2806.6	0.8%	22.45
Cooking Ingredients and Meals	909.6	0.2%	1.82
Snacks	2326.0	16.4%	381.46
Total (€m)	7799.2		430.33

- The total value of Mondelēz's shares of the different packaged food markets in Ireland 2021 was €430.33 million.
- The total value of the packaged food market in Ireland in 2021 (all categories) was calculated as €7799.2 million.
- 430.33 is 5.52% of 7799.2 so Mondelēz's share of the total packaged food market across all four categories is 5.52%.

#### **1.2.4** Company selection for Catering companies

Due to the lack of Euromonitor data for this industry sector, we instead accessed the Open Data platform of the Netherlands' Centraal Bureau voor de Statistiek (CBS) (*https://opendata.cbs.nl/statline#/CBS/nl/*) to identify the top three biggest catering companies in Europe according to their market share. According to CBS data from 2017, Sodexo, Compass group and Elior group were the biggest ones.

Therefore, we did the assessment for these three companies in Belgium and Portugal. In Ireland, we also assessed Sodexo and Compass Group, however, we were advised by a colleague with relevant expertise that Elior has only a very small market share, so instead we assessed Aramark, which has a more significant share in the Irish market.

#### 1.2.5 Exclusions

- In all countries, as noted above, manufacturers of bottled water only (for example Spadel in Belgium) were assessed for BIA-Sustainability but not for BIA-Obesity.
- In the case of Portugal, two companies were omitted in the final selection for BIA-Obesity: two
  soft drink companies SD01 and SD02 and two packaged food companies PFB26 and PFB27.
  These companies would score 0 in every category as they are highly product-specific.
  However, they were assessed for BIA-Sustainability due to their large market shares and
  because the BIA-Sustainability focuses on the entire food system.
- In Ireland, two packaged food manufacturers were excluded from BIA-Obesity because they do not market any brands or products directly to consumers. However, they were assessed for BIA-Sustainability due to their large market shares and because the BIA-Sustainability focuses on the entire food system while BIA-Obesity focuses on food environments.

#### **1.3** Initial assessment of publicly available data on commitments

In the first phase of the BIA process, researchers collect publicly available data. Annexes 1 and 2 list the domains and indicators in BIA-Obesity and BIA-Sustainability respectively, while Annexes 3 and 4 show the full list of sources from which commitments were sought. Across both BIAs and all industry sectors, the key criteria assessed for the commitments were:

- Transparency/disclosure
- Commitment relevance to the national context
- Comprehensiveness
- Specificity

#### 1.3.1 BIA-Obesity

The BIA-Obesity considers commitments across six key policy domains related to population nutrition (see Annex 1). These policy domains are: "corporate strategy" (overall commitment to addressing obesity and nutrition as part of corporate strategy), "product formulation" (including development of new products, reformulation of existing products, and package sizes), "nutrition labelling" (including the disclosure and presentation of nutrition information on product packaging, online and on menus, where relevant), "product and brand promotion" (including efforts to reduce the exposure of children and adults to promotion of "less healthy" foods and brands), "product accessibility" (including availability and affordability of healthy compared with "less healthy" foods), and "relationships with other organisations" (focused on corporate relationships with, and support provided to, organisations external to the supply chain, such as professional associations, research organisations, community, and industry groups).

Table 8 shows an example of an indicator from each BIA domain together with the criteria used to score company commitments on this indicator. All the examples come from the data collection template used for packaged food manufacturers (indicators from this template are preceded by M for 'manufacturers'). The example scoring also illustrates the key assessment criteria mentioned above. For example, note that in product formulation indicators, such as M-FORM 3.1, commitments are scored higher if they

are publicly available, since this is a step towards improving transparency. Also note that countryspecific targets are scored higher than global-level ones (relevance), and SMART commitments are scored higher than non-SMART ones (specificity). An example of the comprehensiveness criterion can be seen in the sample indicator M-LABEL3, where higher scores are awarded to companies that provide more details about the nutritional profile of their products.

In BIA-Obesity (unlike in BIA-Sustainability) the domains are weighted differently depending on which industry sector is being assessed. Also, within BIA-Obesity, companies are only assessed on indicators that are relevant to their specific product profile. For example, a company that only makes drinks with low or no fat content would not be assessed on their commitments to reduce saturated fats. There are also different versions of the data collection tool with sector-specific indicators, for example, confectionery-free checkouts for supermarkets or free drink refills for quick service restaurants. The tool is further adapted to reflect the legislative and policy background in the relevant country. For example, in EU countries, we do not assess companies' commitments to display the sugar content of their products on packaging, since this is already required by EU regulation (*EUR-Lex - 02011R1169-20180101 - EN - EUR-Lex (europa.eu*)).

Domain	Sample indicator	Scoring of sample indicator
Corporate population nutrition strategy (STRAT)	M-STRAT1: Does the company have an overarching commitment to improving population nutrition and health articulated in strategic documents (e.g., corporate strategy document, corporate responsibility reports)?	<ul> <li>10 points: Yes, a specific national-level (country-specific) commitment to improving population nutrition and health, publicly available in strategic documents</li> <li>7.5 points: Yes, a specific global- or European level (not country -specific) commitment to improving population nutrition and health, publicly available in strategic documents</li> <li>5 points: Yes, a national-, European- or global-level commitment, but not publicly-available, OR general reference to nutrition and health as part of general corporate strategy</li> <li>0 points: No clear commitments to improving population nutrition and health</li> </ul>
Product formulation (FORM)	M-FORM3.1: Has the company set a target/targets or provided detailed evidence of having taken significant action to reduce/reach lower levels of salt/sodium in products, and is it applicable to the country in question?	<ul> <li>10: Set SMART targets or provided detailed evidence of having taken significant action in all key categories/subcategories, published</li> <li>5: Targets (not necessarily SMART) set or significant action taken in some key products/sub-categories/not published</li> <li>2.5: General or vague commitment to reducing levels of salt/sodium in products, published or disclosed to INFORMAS team</li> <li>0: No target / no information</li> </ul>
Nutrition labelling (LABEL)	M-LABEL3 Does the company provide nutrition information online for food products within its portfolio?	10: Yes, comprehensive nutrition information (calories, sodium, saturated fat, total fat, sugar) for most (>80%) products, including on a per 100g/100ml basis

Table 8 BIA-Obesity domains

Domain	Sample indicator	Scoring of sample indicator
		<ul> <li>7.5: Yes, comprehensive nutrition information (calories, sodium, saturated fat, total fat, sugar) for most (&gt;80%) products, or comprehensive nutrition information for all products per serving only</li> <li>5: Comprehensive nutrition information for some (&gt;50%) products</li> <li>2.5: Limited nutrition information (i.e. does not include calories, sodium, saturated fat, total fat or sugar) for some (&gt;50%) products</li> </ul>
		0: <50% of products or no information
Product and brand promotion (PROMO)	M-PROMO2.1 Does the company have an explicit policy to reduce the exposure of children to unhealthy food marketing on non-broadcast media (including websites, DVDs/games, social media, print media, product placement, outdoor marketing (school zones excluded - under PROMO4), in store marketing / point of sales marketing)?	<ul> <li>10: Yes, national policy and noted on company website / annual reports</li> <li>7.5: Yes, global policy and noted on company website / annual reports</li> <li>5: Yes, national policy but not noted on company website / annual reports OR</li> <li>national policy and noted on industry association website</li> <li>2.5: Yes, global policy but not noted on company website / annual reports</li> <li>0: No policy/ no information available to the research team</li> </ul>
Product accessibility (ACCESS)	M-ACCESS5.1 What system / criteria (e.g., product classification system or nutrient profiling system) does the company use to classify the healthiness of products for the purposes of food pricing, distribution and/or availability?	<ul> <li>10: Adopted an official classification system (developed by WHO, national government, etc.)</li> <li>5: Developed own system that has been validated and shows strong alignment with official classification systems / dietary guidelines, published in peer-reviewed literature</li> <li>2.5: Developed own system that has been validated and shows alignment with official classification systems / dietary guidelines, not published in peer-reviewed literature</li> <li>0: No information / poor alignment / does not have a system</li> </ul>
Relationships with other organizations (RELAT)	M-RELAT8 Does the company publish its membership / support for / ownership of industry associations, think tanks, interest groups, community organisations or other organisations that lobby in relation to population nutrition and/or obesity and NCD issues?	<ul> <li>10: Yes, information on national-level activity is publicly available (website or document) in a consolidated and cumulative form</li> <li>5: Yes, information is available, but is not consolidated and easy to locate OR information is available at the global level only OR comprehensive information about their activities in the area provided to the project team</li> </ul>

Domain	Sample indicator	Scoring of sample indicator
		0: No information available / provided
		n/a: Active declaration stating no activity in this area (either publicly available or disclosed to research team)

As noted above, in BIA-Obesity, weightings are used to enable comparison across the entire company selection. Table 9 shows the different weightings of the BIA-Obesity domains. The weightings have been derived from scientific evidence and discussions with international food policy experts within INFORMAS (Sacks et al., 2019). These weightings reflect the relative importance of the domain for the sector, for example, the product accessibility weighting is 20% for supermarkets and quick service restaurants but only 5% for food and non-alcoholic beverage manufacturers since different actions are possible for the companies in this domain. The scoring system enables each company assessed using the BIA-Obesity tool to be allocated an overall score out of 100, as well as by policy domain.

Table 9	BIA-Obesity domain	weightings for	each industry sector
---------	--------------------	----------------	----------------------

BIA-Obesity Domain	Packaged food and non-alcoholic beverage manufacturers	Quick service restaurants	Supermarkets
Corporate population nutrition strategy (STRAT)	10%	10%	10%
Product formulation (FORM)	30%	25%	25%
Nutrition labelling (LABEL)	20%	15%	15%
Product and brand promotion (PROMO)	30%	25%	25%
Product accessibility (ACCESS)	5%	20%	20%
Relationships with other organizations (RELAT)	5%	5%	5%

#### 1.3.2 BIA-Sustainability

The BIA-Sustainability is comprised of ten different domains. Table 10 shows the domains, together with an example of an indicator and its associated scoring criteria. For the BIA-Sustainability, the domains are not weighted, as the relative importance of the domains would likely vary from country to country. For example, in a country which has both areas of water stress (UN Water, 2021) and industries that use a lot of water, the water and discharge domain might carry more weight than in other countries. However, similar to the BIA-Obesity, the tool is, of course, adapted to reflect the legislative and policy background in the relevant country. For example, in EU countries, companies do not get a score for commitments that merely comply with EU regulation such as regulation of single-use plastics (*EUR-Lex - 32019L0904 - EN - EUR-Lex (europa.eu)*). The scoring system enables each company assessed using the BIA-Sustainability tool to be allocated a score out of 100 by policy domain. Unlike for the BIA-Obesity, no overall score is calculated for the BIA-Sustainability.

Table 10	) BIA-Sustainability sample indica	tor and scoring
----------	------------------------------------	-----------------

Domain	Sample indicator	Scoring of sample indicator
Corporate sustainability strategy	Indicator 1: Does the company have an overarching commitment to reducing environmental impact articulated in strategic documents (e.g., mission statement, strategies, or overarching policies)?	<ul> <li>Maximum of 8 points, broken down as follows:</li> <li>Publicly available commitment (2 points)</li> <li>Does the company participate in the UN Global Compact OR does it disclose alignment with the SDGs? (2 points)</li> <li>The commitment includes specific objectives (2 points)</li> <li>The commitment includes measurable targets (2 points)</li> </ul>
Packaging	Indicator 7: Does the company and its suppliers have a commitment to locally relevant recovery pathways for packaging (Systems for reuse, recycling, composting or energy recovery, for instance waste recycling, local valorization, production of biogas,)?	<ul> <li>Maximum of 13 points, broken down as follows:</li> <li>Does the company make a commitment? (1 point)</li> <li>Does the company make at least one commitment in relation to its suppliers' packaging recovery practices? (4 points)</li> <li>Is the commitment publicly available? (2 points)</li> <li>Is the commitment: <ul> <li>specific? (2 points)</li> <li>measurable? (2 points)</li> <li>time-bound? (2 points)</li> </ul> </li> </ul>
Emissions	Indicator 8: Does the company and its suppliers measure their greenhouse gas emissions?	<ul> <li>Maximum of 15 points, broken down as follows:</li> <li>Does the company measure its own GHG emissions? (1 points)</li> <li>Does the company measure GHG emissions from at least one of its suppliers? (4 points)</li> <li>Are the results of the measurements reported at least once per year? (2 points)</li> <li>Is the report publicly available? (2 points)</li> <li>Does the company report its emissions using an external reporting system such as the Global Reporting Initiative (GRI)? (2 points)</li> <li>Is the report audited externally? (2 points)</li> <li>Does the company participate in a relevant thematic benchmarking system such as the Science Based Targets Initiative or the Carbon Disclosure Project? (2 points)</li> </ul>
Energy Use	Indicator 12: Does the company and its suppliers have a commitment to reducing energy consumption?	<ul> <li>Maximum of 30 points, broken down as follows:</li> <li>Does the company make a commitment to reduce its energy consumption? (2 point)</li> <li>Does the company make at least one commitment in relation to its suppliers' use of energy? (8 points)</li> <li>Is the commitment publicly available? (4 points)</li> <li>Is the commitment:</li> </ul>

Domain	Sample indicator	Scoring of sample indicator
		<ul> <li>specific? (4 points)</li> <li>measurable? (4 points)</li> <li>time-bound? (4 points)</li> <li>expressed relative to an absolute value? (4 points)</li> </ul>
Water and discharge	Indicator 23: Does the company and its suppliers measure the quality of their water discharge?	<ul> <li>Maximum of 13 points, broken down as follows:</li> <li>Does the company measure the quality of its water discharge? (1 point)</li> <li>Does the company measure the quality of the water discharge from at least one of its suppliers? (4 points)</li> <li>Are the results of the measurements reported at least once per year? (2 points)</li> <li>Is the report publicly available? (2 points)</li> <li>Does the company report its emissions using an external reporting system such as the Global Reporting Initiative (GRI)? (2 points)</li> <li>Is the report audited externally? (2 points)</li> </ul>
Biodiversity	Indicator 27: Does the company and its suppliers have a commitment to protecting habitats?	<ul> <li>Maximum of 15 points, broken down as follows:</li> <li>Does the company make a commitment to protect habitats? (1 point)</li> <li>Does the company make at least one commitment in relation to its suppliers' impact on habitats? (4 points)</li> <li>Is the commitment publicly available? (2 points)</li> <li>Is the commitment: <ul> <li>specific? (2 points)</li> <li>measurable? (2 points)</li> <li>time-bound? (2 points)</li> </ul> </li> <li>Does the company participate in a relevant thematic benchmarking system such as the Science Based Targets Initiative or the Carbon Disclosure Project? (2 points)</li> </ul>
Food loss and waste	Indicator 29: Does the company have a commitment to reducing food loss and waste in their supply chain?	<ul> <li>Maximum of 17 points, broken down as follows:</li> <li>Does the company make a commitment to reduce food loss and waste in ist supply chain? (1 point)</li> <li>Does the company make at least one commitment to reduce food loss and waste in its ? (8 points)</li> <li>Is the commitment publicly available? (4 points)</li> <li>Is the commitment: <ul> <li>specific? (4 points)</li> <li>measurable? (4 points)</li> <li>time-bound? (4 points)</li> </ul> </li> </ul>

Domain	Sample indicator	Scoring of sample indicator
		<ul> <li>expressed relative to an absolute value?</li> <li>(4 points)</li> </ul>
Environmental Compliance	Indicator 31: Has the company disclosed significant fines or non-monetary sanctions for non-compliance with environmental laws and regulations? (Publicly available document)	Maximum of 4 points: Does the company make a publicly-available declaration that it has not received any fines or sanctions for non-compliance with environmental laws and regulations? (4 points)
Reducing animal- based products	Indicator 32: Does the company measure the percentage of animal-based products in their product range?	<ul> <li>Maximum of 8 points, broken down as follows:</li> <li>Does the company measure the percentage of animal-based products in its range? (1 point)</li> <li>Are the results of the measurements reported at least once per year? (2 points)</li> <li>Is the report publicly available? (2 points)</li> <li>Is the report audited externally? (2 points)</li> </ul>
Increasing the proportion of sustainable products	Indicator 42: Does the company commit to increase the amount of local and or seasonal food in the product range?	<ul> <li>Maximum of 10 points, broken down as follows:</li> <li>Does the company make a commitment to increase the amount of local and or seasonal food in the product range? (2 points)</li> <li>Is the commitment publicly available? (2 points)</li> <li>Is the commitment: <ul> <li>specific? (2 points)</li> <li>measurable? (2 points)</li> <li>time-bound? (2 points)</li> </ul> </li> </ul>

The BIA-tools and related processes thus provide a robust and adaptable means of assessing companies' commitments on both human and planetary health. In the following sectionss, we describe the results from the preliminary assessments based on publicly available information in Belgium, Ireland, and Portugal.

# 2 Results by country

In this section, we describe the results on the comprehensivenss, specificity and transparency of company commitments related to population nutrition and environmental sustainability based on the publicly available commitments by country.

#### 2.1 Results from Belgium

#### 2.1.1 BIA-Sustainability Belgium

In Belgium, we assessed a total of 37 companies across packaged food manufacturers, non-alcoholic beverage manufactureres, supermarkets and quick service restaurants, infant formula manufacturers and caterers. The preliminary results based on publically available commitments are described below.

#### Packaged food and non-alcoholic beverage manufacturers

Figure 3 shows the median scores and the maximum scores for each BIA-sustainability domain for packaged food and non-alcoholic beverage manufacturers. The highest median scores in this sector were found for the domains of corporate sustainability strategy (70%) and emissions (71%). The lowest median scores for this sector were found for the sustainable products domain (20%), followed by the food loss and waste domain (26%). In the environmental compliance domain, only one packaged food manufacturer received a score of 70%, while all the other companies scored zero in this domain, since researchers were unable to find any publicly available information on relevant commitments.

Most of the information assessed in this study comes from companies' own sustainability reports. However, there were additional documents that affected the scores such as Carbon Disclosure Project (CDP) or the Plastic Economy Global Commitment (PEGC). Many of the weakest-scoring indicators related to measurement of the company's impact and/or measurement of its suppliers' impact. Commitments relating to suppliers were also relatively difficult to find.

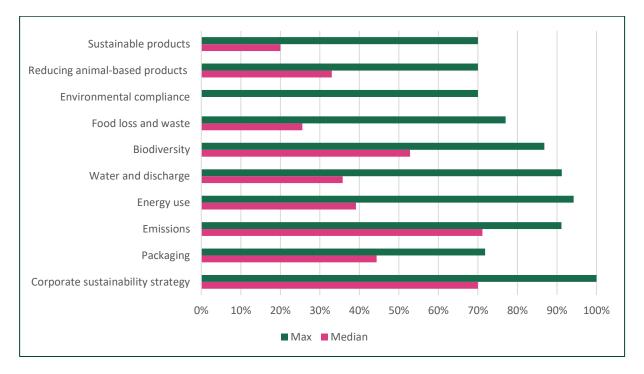


Figure 3 Maximum (Max) scores and median scores in BIA-Sustainability domains for packaged food and non-alcoholic beverage manufacturers in Belgium

#### **Quick Service Restaurants**

Figure 4 shows the BIA-Sustainability results for Quick Service Restaurants in Belgium. The highest median score for this sector was found for the corporate sustainability strategy domain (80%). None of the selected companies had been scored for environmental compliance, due to the lack of information or approval documents on disclosing significant fines or non-monetary sanctions for non-compliance with environmental laws and regulations. The lowest median score for this sector was found for the water and discharge domain (5%), followed by the domain of reducing animal-based products (6%).

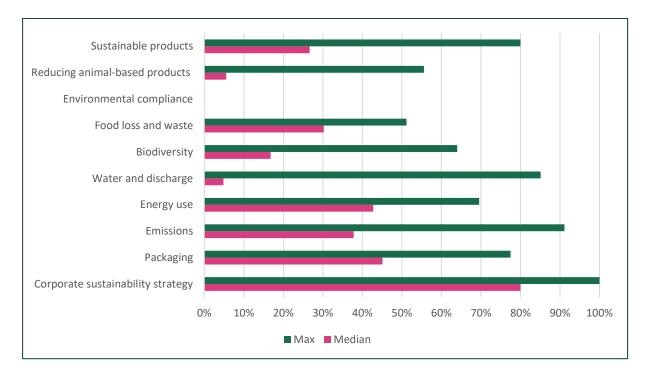


Figure 4 Maximum (Max) scores and median scores for BIA-Sustainability domains in the quick service restaurants sector in Belgium

#### **Supermarkets**

Figure 5 shows the overall results for BIA-sustainability of retailers in Belgium. The highest median score in this sector belongs to the emissions domain (96%). The lowest median score of the sector belongs to water and discharge (28%), the energy use (49%) and the food loss and waste (49%) domains. It is interesting to see the median score for all the other sustainability domains are 50% and more for supermarkets.

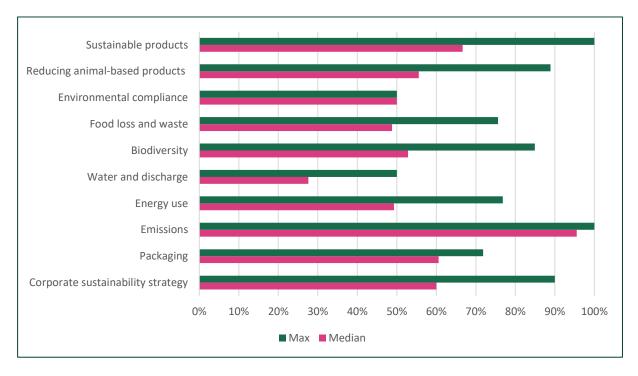


Figure 5 Maximum (Max) scores and median scores in the domains of BIA-Sustainability for supermarkets in Belgium

Table 11 below shows some of the best available commitments found in Belgium across the BIA-Sustainability policy domains and across sectors.

Company	Sector	Domain	Commitment
Unilever	Packaged food and soft drink manufacturers	Corporate strategy	Unilever's commitment on sustainability materiality assessment to identify priority sustainability issues across their value chain and updating/monitoring the assessments every two years to make sure it reflects changes in their business and the external context
EXK values's kalledan	Quick service retaurants	Sustainable products	Exki has multiple commitments on using/increasing fresh/ local/ seasonal and organic products within their portfolio.
BARONIE	Packaged food and soft drink manufacturers	Sustainable products	Their coffee and cacao products are 100% Organic or Fairtrade or with rainforest alliance certificate
	Supermarkets	Reducing animal- based products	Aldi is committed to expand their vegetarian and vegan assortment in Belgium, with the respective national goal of 30% increase in vegetarian products compared to the previous year.

Table 11 Examples of best available practices in BIA-Sustainability domains from companies in Belgium

#### 2.1.2 BIA-Obesity Belgium

Belgian food companies demonstrated some commitment to improving population nutrition, but overall they show better scores in environmental sustainability commitments, as described in the previous section (2.1.1). In the following graph the ranking of food companies by sector based on specificity, comprehensiveness and transparency of their commitments related to obesity prevention and population nutrition in Belgium 2023 are shown.

#### Packaged food and non-alcoholic beverage manufactures

As can be seen in Figure 6, none of the packaged food or non-alcoholic beverage manufacturers obtained a maximum score for any of the policy domains. The best performing company had an overall score of 54% while the worst performing companies had an overall score of 0%. More than half of the companies scored 0% in product accessibility and there were two companies that had no commitments in all of the policy domains. The highest median score for the commitments of packaged food and non-alcoholic beverage manufacturers belongs to corporate strategy (60%) and the lowest median score was 0% for the product accessibility domain (data not shown).

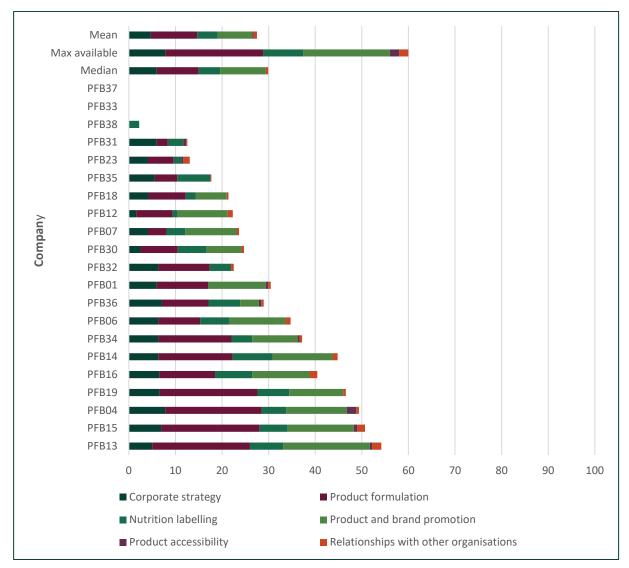


Figure 6 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for packaged food and beverage companies selected in Belgium

#### **Quick service restaurants**

As Figure 7 shows, the best performing company had an overall score of 27% while the worst performing company had an overall score of 2%. One of the six selected companies had no commitments on either of the domains except product accessibility and two of the selected companies had no commitments in product and brand promotion. The highest median score for the commitments of quick service restaurant belongs to corporate strategy (29%) and the lowest median score was 2% for the product accessibility domain (data not shown).

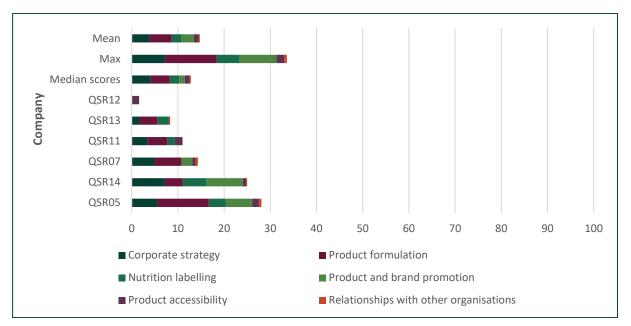


Figure 7 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for quick service restaurants selected in Belgium

#### **Supermarkets**

The scores for supermarkets assess them both as retailer and as manufacturer (of their private-label or "own-brand" products). As can be seen in Figure 8, the best performing company had an overall score of 51% while the worst performing company had an overall score of 30%. The highest median score for the commitments of the retailers belongs to corporate strategy (87%) followed by product reformulation (57%) and the lowest median score was the product accessibility (8%) domain (data not shown).



Figure 8 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for retailers selected in Belgium

Below in Table 12 are some examples of best available commitments for the BIA-Obesity in Belgium based on publicly available information.

Company	Sector	Domain	Commitment
DELHAIZE	Supermarkets	Nutrition labeling	Delhaize commits to label all their own-brand packaged food products with Nutri-Score and to label all products (own-brand and other products) in-store and online with Nutri-Score.
EXK/ nature's kitchen	Quick service restaurants	Product and brand promotion	Exki specifically commits to not advertise at all.
colruyt <sup>4</sup>	Supermarkets	Product accessibility	Colruyt has a commitment that checkouts are free from unhealthy items (including confectionery, chocolate and soft drinks).
	Packaged food and non- alcoholic beverages	Product accessibility	Danone discloses its policy position on sugar taxes on its website and supports some forms of taxation on unhealthy food products by government

Table 12 Examples of best available practices in BIA-Obesity domains from companies in Belgium

#### 2.2 Results from Ireland

This is the first time either Business Impact Assessment has been conducted in Ireland. Below are the preliminary results based on researchers' gathering of publicly available commitments. On average, the performance of companies operating in Ireland is poorer than that of their counterparts operating in Belgium and Portugal.

#### 2.2.1 BIA-Sustainability Ireland

In Ireland, we assessed a total of 36 companies, selected from the industries of packaged food manufacture (n = 17), non-alcoholic beverage manufacture (n = 4), quick service restaurants (n = 9), and supermarkets (n = 6). Catering companies (n = 3) and infant formulat manufacturers (n = 1) were also assessed, and the data collected is currently being analysed. Results for manufacturers of both food and beverage are presented together as these are assessed using the same version of the BIA-Sustainability tool.

#### Packaged food and non-alcoholic beverage manufactures

Figure 9 shows the median scores in each domain of BIA-Sustainability, together with the highest score ("max") in each domain. The best scoring domains are corporate sustainability strategy (median score 70%; maximum score 100%) and greenhouse gas emissions (median score 73%; maximum 100%). However, the overall scores are still quite low, with median scores of 0% in the domains of environmental compliance, decreasing animal products and increasing sustainable products. In the environmental compliance domain, researchers could not find relevant information for any of the companies assessed.

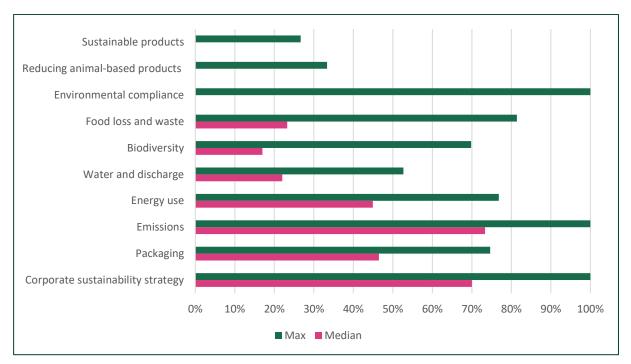


Figure 9 Maximum (max) and median scores for each domain of BIA-Sustainability among packaged food and beverage manufacturers selected in Ireland.

Although BIA-Sustainability only assesses the impact on the environment and not population health, it is also notable that, in Ireland, only one manufacturing company was found to make any public commitment to reduce the proportion of animal-based products in its range, since this could also have implications for population health as well as for the environment (Willett et al., 2019).

#### **Quick Service Restaurants**

Figure 10 shows both the median and the best scores in each domain for quick service restaurants. Again, the highest scoring domains are corporate sustainability strategy (median score 55%; maximum score 100%), packaging (median score 18%; maximum score 62%), and greenhouse gas emissions (median score 37%; maximum score 71%). But in this sector too, scores are generally quite low. As with packaged food and beverage manufacturers (see figure 9 above), the median scores in the domains of sustainable products, animal-based products, and environmental compliance are all 0%, but in this sector the median in the water and discharge domain is also 0%. Indeed, there are two companies in this sector for whom no commitments in any domain were found, while for another two of our selected companies, commitments were found in only one or two domains.

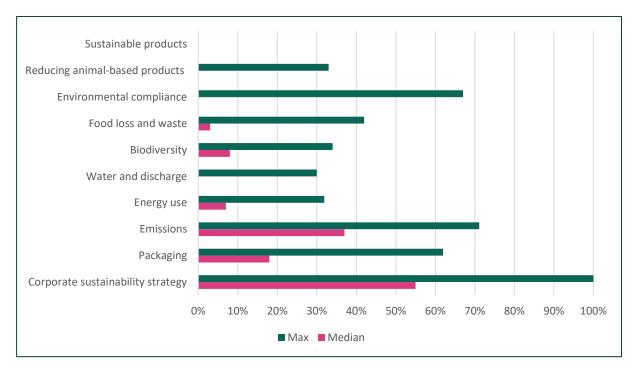


Figure 10 Maximum (max) and median scores for each domain of BIA-Sustainability among quick service restaurants selected in Ireland.

#### Supermarkets

As Figure 11 shows, the supermarket sector, like the quick service restaurant sector, has median scores of 0% in the domains of sustainable products, animal-based products, environmental compliance, and water and discharge. In the supermarkets sector, the medians are also zero in the domains of energy use, and food loss and waste. As in the quick service restaurants sector, the highest maximum score is found in the domain of corporate sustainability strategy (100%), followed by emissions (87%).

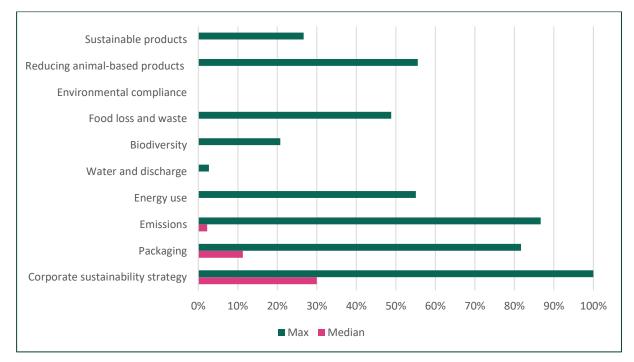


Figure 11 Maximum (max) scores and median scores for each domain of BIA-Sustainability among supermarkets selected in Ireland

Based on this preliminary analysis, companies' sustainability-related commitments fall well short of best practice. However, some examples of the best available commitments in Ireland can be seen in Table 13. Again, it must be noted that these are examples of some of the better commitments found by researchers, but these may still fall short of actual best practice.

Company	Sector	Domain	Commitment
KFC	Quick service restaurants	Water and discharge	"Our expectation is that water withdrawals will hopefully decrease overtime as we continue to invest in conservation measures and strive to reduce our water footprint."
	Grocery retailers	Food loss and waste	"We have committed to reduce food waste by 50% by 2030 (relative to 2016 baseline). We also work with our suppliers to minimise waste and support a range of industry initiatives."
Kelloggis	Packaged food manufacturers	Greenhouse gas emissions	"Reducing absolute Scope 1 & 2 greenhouse gas (GHG) emissions by 45% by the end of 2030 (from a 2015 baseline). This includes direct emissions from our Kellogg-owned sources (Scope 1) and indirect emissions from the generation of purchased electricity, steam, heating or cooling (Scope 2). Scope 3 GHG emissions by 15% by the end of 2030 (from a 2015 baseline). This includes indirect emissions not included in Scope 2 that occur in the value chain, including both upstream and downstream emissions."
BRITVIČ	Soft drinks manufacturers	Packaging	"All bottles in Great Britain and Ireland to be made from 100% rPET and/or sustainably sourced PET."

Table 13 Examples of best available practices in BIA-Sustainability domains from companies in Belgium

#### 2.2.2 BIA-Obesity Ireland

#### Packaged food and non-alcoholic beverage manufactures

Figure 12 shows the the total scores in BIA-Obesity as well as the domain scores that make up that total. The median score in this sector in Ireland is 34%. The highest scoring sector is corporate nutrition strategy, with a median score of 60%, followed by product formulation with a median score 37% (data not shown).

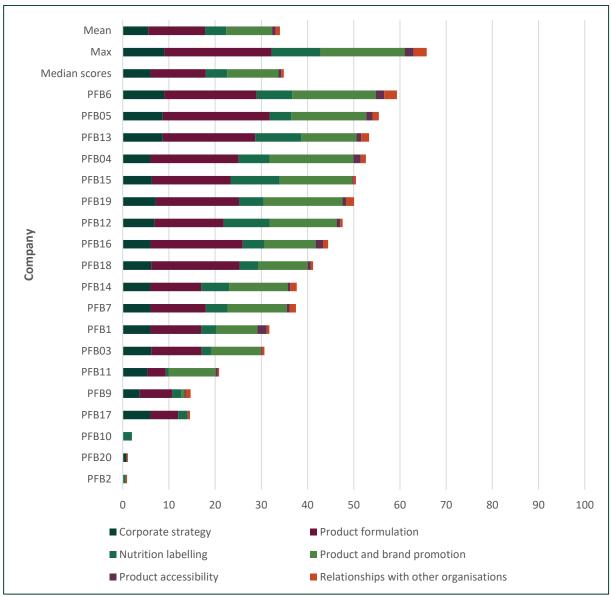


Figure 12 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for packaged food and beverage companies selected in Ireland

#### **Quick Service Restaurants**

As can be seen in Figure 13, the median scores for Irish companies in the quick service restaurant sector are very low, and even an imaginary 'maximum available' company that combined all the strongest commitments we found in this sector would fall below 50% of best practice. For half of the companies assessed in this sector in Ireland, the only relevant information found was in the domain of relationships with other organisations, where companies disclosed (some of) their philanthropic activities (this yielded a score of 0.28 out of a possible 5, or 5.6%; but note that the percentage score is not shown). In other words, even where a company's score is not zero, this does not mean we were able to find commitments relating to their core products and practices.

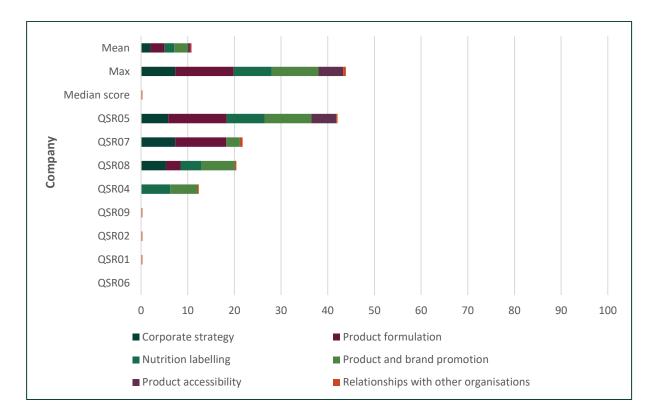


Figure 13 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for quick service restaurants in Ireland

#### Supermarkets

As Figure 14 shows, supermarkets assessed in Ireland showed a slightly better performance than quick service restaurants, though the overall scores remain low. In the domain of corporate nutrition strategy, the median score is 60% (percentage data not shown in figure), with all but one company stating at least some commitment to improving population health and/or nutrition. The next best domain is product formulation with a median score of 28% (percentage data not shown). The lowest scoring domain is product and brand promotion, with a median score of 0%. Commitments in this domain were only found for two out of the six companies assessed.

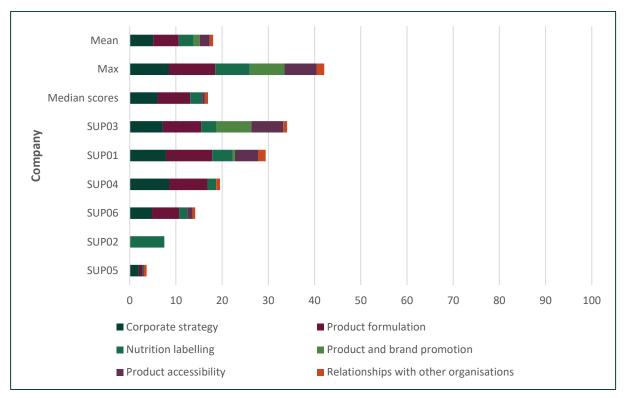


Figure 14 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for supermarkets in Ireland

Examples of some of the best available commitments found in Ireland can be seen in Table 14. Some of these commitments are significant outliers in their industry sector. For example, Tesco is the only supermarket to make any commitments in relation to sweet-free checkouts.

Company	Sector	Domain	Commitment
M	Quick service restaurants	Nutrition labelling	Nutritonal information in-store and online: "you can find all of our calorie information for our food and drink on the menu boards in our restaurants, on our website You can also find nutrition and allergen information for all our standard products on the reverse of our trayliners, and a summary of the nutrition information on some of our packaging."
TESCO	Grocery retailers	Accessibility	Sweet-free checkouts: "We were the first retailer [in Ireland] to remove sweets and chocolate from our checkouts and will continue to maintain this initiative."
DANONE OHE FRANCE. CHE HEATH	Packaged food manufacturers	Product formulation	"Danone UK & Ireland has committed: That at least 90% of its product portfolio by sales volume will not be high in sugar, salt or fat (HFSS) as defined by current UK policy and legislation and referred to by relevant authorities in Ireland"

 Table 14
 Examples of best available practices in BIA-Obesity domains from companies in Ireland

Company	Sector	Domain	Commitment
SUNTORY	Soft drinks manufacturers	Product and brand promotion	"Suntory commits not to market products categorised as high in fat, sugar and salt ("HFSS") to consumers who are under the age of 18 in Ireland."

#### 2.3 Results from Portugal

#### 2.3.1 BIA-Sustainability Portugal

In Portugal, we assessed a total of 36 companies across packaged food manufacturers (n=13), nonalcoholic beverage manufacturers (n=6), supermarkets (n=5) and quick service restaurants (n=6), infant formula manufacturers (n=3) and caterers (n=3). The preliminary results based on publically available commitments are described below.

#### Packaged food and non-alcoholic beverage manufacturers

Figure 15 shows the results for packaged food manufacturers in Portugal for BIA-Sustainability. Regarding the packaged foods manufacturers, the highest median score was seen for corporate sustainability strategy (95%), followed by emissions (median score 91%), packaging (median score 86%), and energy use (58%). The lowest median score of 0% was for sustainable products and environmental compliance. In the water and discharge domain, the median score is 41%. Regarding biodiversity, almost no companies disclose specific measurements, nor do they make any visible commitments.

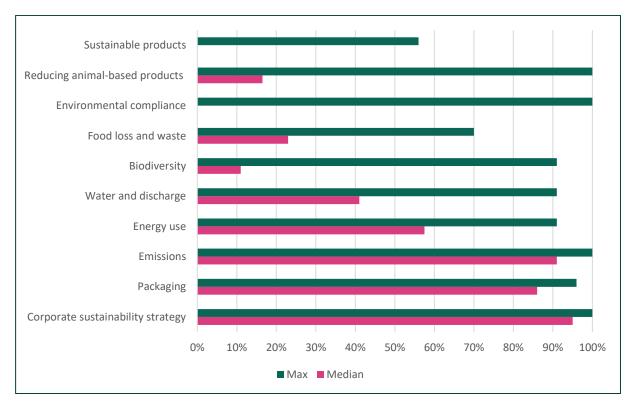


Figure 15 Maximum (Max) scores and median scores in BIA-Sustainability domains for packaged food and non-alcoholic beverage manufacturers in Portugal

The quick service restaurants analysed in Figure 16 are being encouraged to make choices that have a positive impact on the environment throughout the supply chain. All six companies publicly state a commitment to environmental issues in corporate sustainability strategy (median score 100%), followed by energy use (71%), packaging (68%) and biodiversity (62%). Efforts and research carried out in recent years have centred on packaging and energy use. In the domain of reducing animal-based products, the median score is 56%. Assessing and reducing food waste is a concern, with a median score of 39%. Water discharge is a domain in which companies have very poor commitment with median score 18%. Sustainable products presents a median score of 7% and the lowest median score is in the environmental compliance domain with a score of 0%.

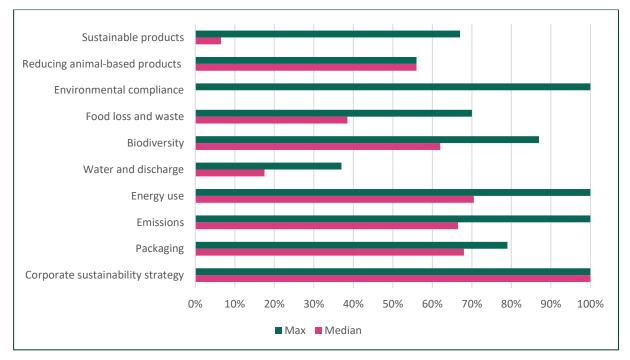


Figure 16 Maximum (Max) scores and median scores for BIA-Sustainability domains in the quick service restaurants sector in Portugal

#### Supermarkets

Figure 17 shows the results for supermarkets in each domain of BIA-Sustainability for Portugal. Among the five companies under analysis, the highest median score is seen in the domain of corporate sustainability strategy domain (90%), followed by emissions (median score of 62%), packaging (76%) and energy use (64%). Sustainable products (median score of 47%), food loss and waste (30%), biodiversity (23%), animal-based products (22%) and water and discharge (12%), are domains with relatively low median scores. As was the case in the quick service restaurants sector, environmental compliance is the lowest scoring domain with a median of 0%.

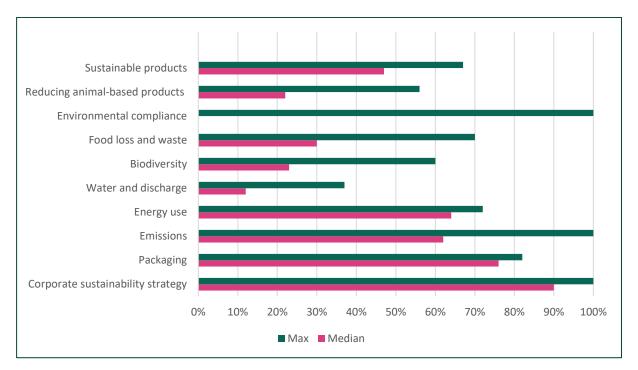


Figure 17 Maximum (Max) scores and median scores in the domains of BIA-Sustainability for supermarkets in Portugal

Examples of best available commitments found in Portugal are shown below in Table 15 taken from different industry sectors and different domains of the BIA-Sustainability.

Company	Sector	Domain	Commitment
Unilever	Packaged food and soft drink manufacturers	Packaging	Unilever in Portugal is committed to halving the use of virgin plastic in its packaging by 2025, ensuring that its product formulas are biodegradable by 2030.
(RUNG)	Quick service restaurants	Energy use	Burger King is committed to making its fleet 100% electric for deliveries by the end of 2024. To this end, Burger King Portugal has invested 1.8 million euros.
	Supermarkets	Packaging	It is committed by 2025 (ahead of the EU target by 5 years) to reduce or eliminate the use of fossil- based plastic materials in own-brand products and ensuring reusable, recyclable or compostable packaging.
Nestlē	Infant Formula	Reducing animal- based products	Nestlé is exploring the development of products using animal-free dairy proteins, satisfying the growing consumer demand for more environmentally friendly diets, while maintaining the flavour and nutrition they desire.

 Table 15
 Examples of best available practices in BIA-Sustainability domains from companies in Portugal

Company	Sector	Domain	Commitment
DANONE DIR FLANET. DIR IRZEN	Infant Formula	Emissions	Danone has a global action plan to reduce methane emissions in the production of milk and dairy products by 30% by 2030. The commitment should remove 1.2 million tonnes of carbon dioxide equivalent over the next seven years. It is the first company in the food sector to adopt a target for methane emissions, as part of the Global Methane Pledge.

#### 2.3.2 BIA-Obesity Portugal

Twenty-eight companies operating in Portugal were assessed, including the largest packaged food manufacturers (n=13), soft drink producers (n = 4), supermarkets (n = 5) and quick-service restaurants (n = 6).

#### Packaged food and non-alcoholic beverage manufacturers

Figure 18 shows the results for the packaged food and non-alcoholic beverage manufacturers. Notably, six companies made no commitments in the product and brand promotion domain, and none achieved a maximum score in any policy domain. The top-performing company attained an overall score of 45%, while the worst performing companies scored 5.6%. Corporate strategy received the highest mean score (62%), while the product accessibility domain scored the lowest with a mean of 11% (data not shown).

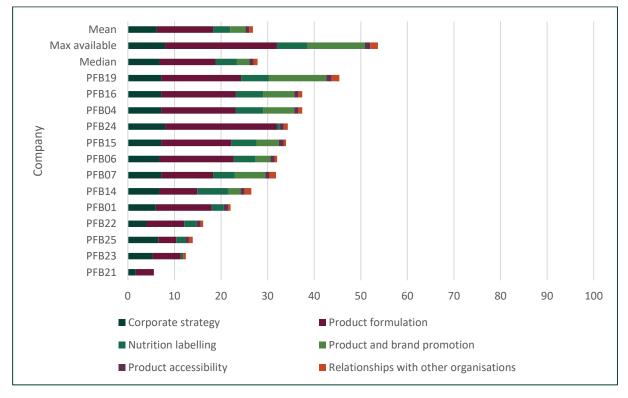


Figure 18 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for packaged food and beverage companies selected in Portugal

#### **Quick Service Restaurants**

Figure 19 shows the results for the quick-service restaurants. The best performing company had an overall score of 45% while the worst performing company had an overall score of 41%. All four selected companies scored in the analysed domains. The highest mean score for the commitments of quick service restaurant belongs to nutrition labelling (87%) and the lowest mean score was 10% for the product accessibility domain (data not shown).

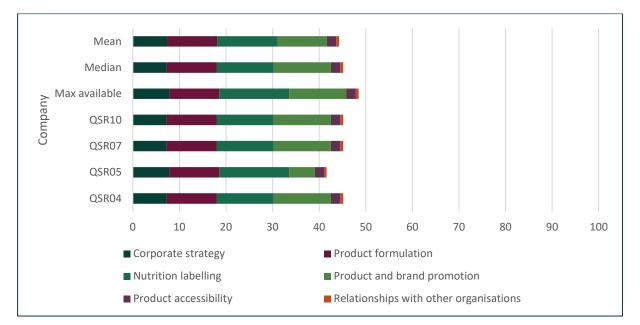


Figure 19 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for quick service restaurants selected in Portugal

#### **Supermarkets**

Figure 20 shows the scores of supermarkets selected in Portugal. The best performing company had an overall score of 33% while the worst performing company had an overall score of 15%. Among the five companies under analysis, two received the maximum weight score in the corporate nutrition strategy domain. The highest mean score for the commitments of the retailers belongs to corporate strategy (82%) followed by product reformulation (49%) and the lowest median score was the product and brand promotion (8%) domain (data not shown).

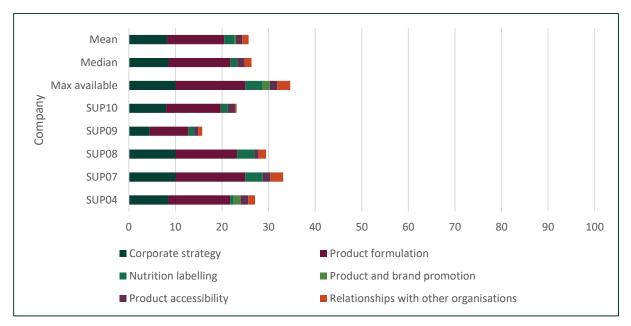


Figure 20 Total BIA-Obesity score by company, as well as the contributions of the BIA-Obesity domains to the overall score (out of 100) for supermarkets selected in Portugal

The product and brand promotion domain performed notably low across all type of companies. In Portugal, legislation on the marketing of unhealthy products is more restrictive than in other European countries, as stipulated in Law No. 30/2019 dated April 23 (Lei n.° 330/90, 2019). This law imposes restrictions on advertising targeting children under 16 for food and beverages. Several companies, including PFB04, QSR07, PFB14, PFB15, QSR10, and PFB19, explicitly declared that their marketing policies apply to all forms of media or marketing communications. However, other companies, while expressing commitments in this domain, provided limited specifics, often mentioning television, radio, print, cinema, and third-party internet sites. Some packaged food and beverage manufacturers and quick-service restaurants did not detail the specific media covered by their policies.

Table 16 shows examples of the best health and nutrition related commitments and practices found in Portugal.

Company	Sector	Domain	Commitment
Unilever	and soft drink manufacturers	Reduced sugar by 23% in all sweetened tea-based drinks, with Pepsi-Lipton achieving a 29% reduction—equivalent to 170 billion sugar cubes and about 2700 billion calories. Commitments: 70% of our portfolio aligns with WHO nutritional standards by 2022. Packaged ice cream aims for: No more than 22g total sugar per serving (95% target by 2025); no more than 250 kcal per serving (95% target by 2025).	
	Packaged food and soft drink manufacturers	Labelling	Danone has proactively adopted the Nutri-Score across its product range, emphasizing its commitment to improving nutritional transparency. The company worked towards

 Table 16
 Examples of best available practice – BIA-Obesity – Portugal

Company	Sector	Domain	Commitment
			implementing this labeling system throughout its entire product portfolio, with a targeted completion date of the end of 2021.
KFC	Quick service restaurants	Product and brand promotion	Under the "Viva bem" programme, this brand is committed to helping consumers make more conscious, healthy and tasty food choices. "Viva Bem" continues to explore its communication component through Social Media about healthy lifestyles and balanced menu options.
	Supermarkets	Promotion	Lidl fulfilled its commitment to removing cartoon characters from all cereal packaging by 2020. This initiative was aimed at aiding parents in managing pester power and promoting healthier choices.

## 3 Comparison between the countries

A key aspect of this task is that we are not only conducting both BIAs in each country, but we are also conducting the same study in three countries. This will enable us to draw some strong conclusions about certain aspects of the food environment not just in our countries but also in Europe more broadly. A further comparison between countries will be conducted after the commitments are verified by the companies, but in the meantime we can make a comparison based on the researchers' assessments of the publically available commitments. We will also be able to make comparisons of the commitments of the same companies across the three countries.

### 3.1 BIA-Sustainability

#### 3.1.1 Packaged Food Manufacturers

In all three countries analysed, the median scores in the domains of environmental compliance, reducing animal products and increasing the supply of sustainable products are all very low (see Figure 21). Indeed, Irish companies make no commitments at all in these areas. Companies in Portugal have the highest median scores for packaging (86%), emissions (91%), energy use (58%) and food loss and waste (23%). Companies in Ireland and Belgium have similar scores in the domain of emissions. Companies in Belgium score higher than those in the other countries in the areas of water and discharge (54%) and biodiversity (28%). Not counting corporate sustainability strategy, in Ireland the highest scoring domain is emissions, with a median score of (32%).

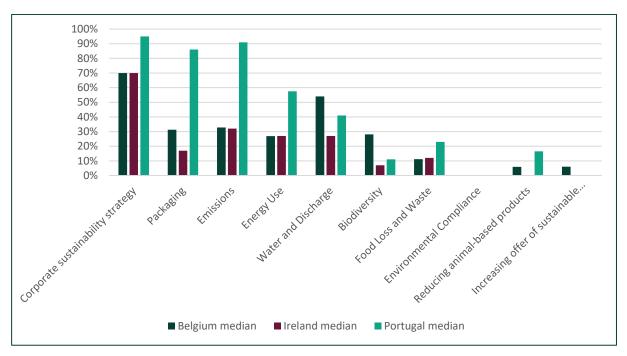


Figure 21 Comparison of median scores of packaged food and non-alcoholic beverage manufacturers in each domain of BIA-Sustainability (publicly available information only)

#### 3.1.2 Quick Service Restaurants

Figure 22 shows the median scores of quick service restaurants in each domain by country. In general, Portuguese companies seem to score best across a range of domains, with a median score of 100% in the domain of corporate sustainability strategy, and the highest scores in packaging (68%), emissions 67%), energy use (71%) and biodiversity (62%). Companies in Belgium have the next best scores, though corporate sustainability strategy is the only domain in which the median is greater than 50%. As with the manufacturers, the median score of companies in Ireland is notably lower in almost all domains, and 0% in a number of domains.

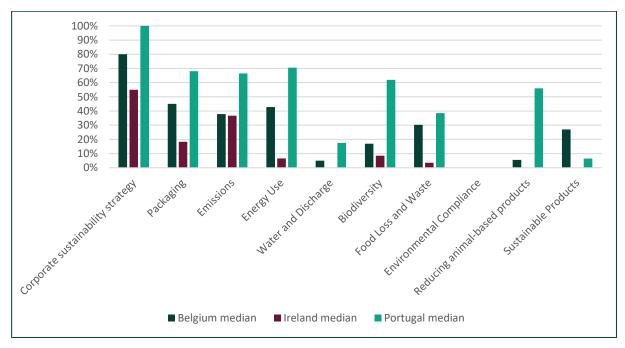


Figure 22 Comparison of median scores of Quick Service Restaurants in each domain of BIA-Sustainability (publicly available information only)

#### 3.1.3 Supermarkets

Figure 23 shows the comparison of the median scores in the supermarkets category. Companies in Belgium have highest median scores in the domain of greenhouse gas emissions (96%) and sustainable products (67%). Companies in Portugal have the highest scores in the domains of packaging (76%) and energy use (64%). Irish companies have a much lower median score in packaging and emissions, and they have median scores of 0% in all but three domains.

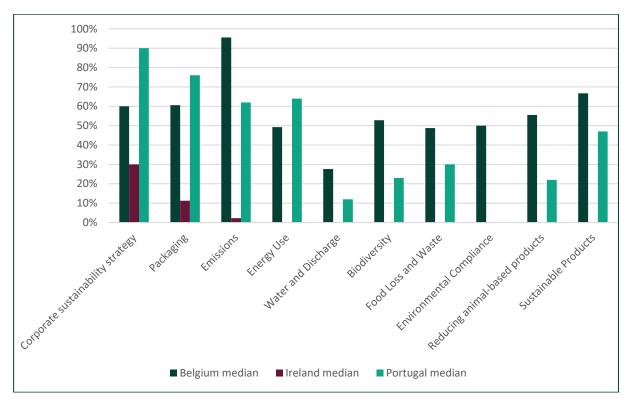


Figure 23 Comparison of median scores of Supermarkets in each domain of BIA-Sustainability (publicly available information only)

#### 3.2 BIA-Obesity

#### 3.2.1 Packaged food manufacturers

Figure 24 shows the median BIA-Obesity scores of packaged food and non-alcoholic beverage manufacturers in the three countries. The highest median scores in all three countries are in the corporate nutrition strategy domain. Companies in Ireland have the best median scores in the domains of product formulation (50%) and product and brand promotion (42)%. All countries have the same median score in the nutrition labelling domain. The lowest scoring domains are product accessibility and relationships with other organisations. In product accessibility, no commitments were found for companies in Belgium, and the median scores in Ireland and Portugal were low at 12% and 18% respectively.

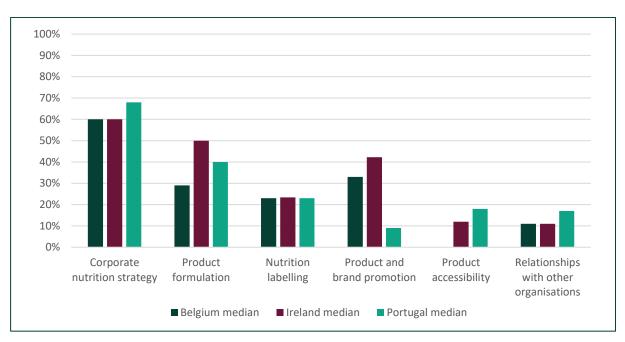


Figure 24 Comparison of median scores of Packaged Food Manufacturers in each domain of BIA-Obesity (publicly available information only)

#### 3.2.2 Quick Service Restaurants

When we look at the quick service restaurant sector (Figure 25), companies in Portugal have the highest median scores in every domain, with the highest being 82% in the nutrition labelling domain. Companies in Ireland have the lowest scores in this sector by quite some margin, with median scores of 0% in every domain other than relationships with other organisations (median score 5.6%).

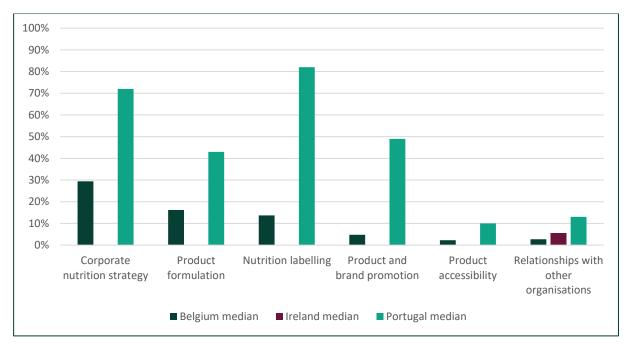


Figure 25 Comparison of median scores of Quick Service Restaurants in each domain of BIA-Obesity (publicly available information only)

#### 3.2.3 Supermarkets

Figure 26 shows the comparison of the median scores of the supermarkets selected in each country. Again, the Irish companies lag behind, with the lowest median scores in every domain. Belgian supermarkets have the highest scores in every domain, including 57% in product formulation and 33% in nutrition labelling as well as product and brand promotion. As in other industry sectors, Portuguese companies' lower scores in product and brand promotion is largely accounted for by the more stringent marketing legislation.

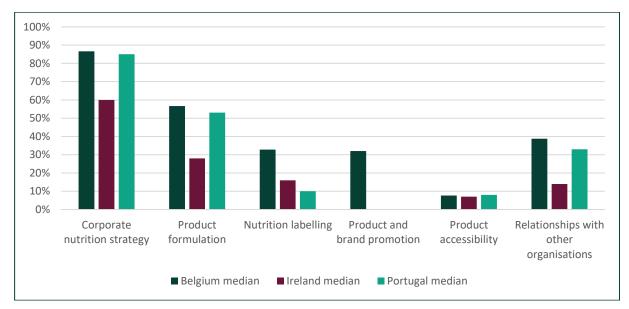


Figure 26 Comparison of median weighted scores of Supermarkets in each domain of BIA-Obesity (publicly available information only)

It is also notable that no country shows a high median score for product accessibility. Companies in Belgium and Portugal have a median score of 8% and companies in Ireland a median of 7%. This domain assesses fiscal and other measures to make healthy foods easier to buy, and/or measures to reduce the accessibility of unhealthy items. Examples include sweet-free checkouts and applying price promotions only to healthy foods. As this graph shows, these measures remain rare in the countries under assessment.

## 4 Comparison of the two BIAs

It is not possible to make an accurate comparison between the scores in BIA-Sustainability and BIA-Obesity, since the domains and scoring are very different. However, tables 15 to 23 give a visual representation of the performance of companies in the domains of BIA-Sustainability relative to their total BIA-Obesity score. On the whole, the relationship is not consistent. The higher scoring companies in BIA-Obesity often do not get the highest scores in the sustainability domains. In Ireland and Belgium, the scores at the bottom of the table are somewhat more consistent, however, with the poorest scores in BIA-Obesity often correlating to low scores in the sustainability domains.

#### 4.1 Belgium

Table 17 illustrates the comparison between the performance in BIA-Obesity versus BIA-Sustainability of packaged food and non-alcoholic beverage manufacturers in Belgium. In this sector, the highest scores in the two assessments are not necessarily correlated. PFB13, for example, has the highest BIA-Obesity score, but has low scores in three out of the ten BIA-Sustainability domains. On the other hand, the three lowest scoring companies also have the lowest scores in all or most of the BIA-Sustainability domains.

Table 17 Performance of Belgium-based the packaged food and non-alcoholic beverage manufacturers in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity

						BIA-Sustai	nability Doma	ins			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal- based products	Increasing sustainable products
PFB13	54%	12	27	39	27	82	42	0	0	0	6
PFB15	51%	16	43	41	31	88	32	33	0	6	10
PFB04	49%	18	47	41	65	95	30	7	0	n/a	12
PFB19	47%	20	20	41	61	70	32	33	0	6	0
PFB16	40%	14	43	41	27	96	32	20	0	6	0
PFB14	39%	14	31	37	41	96	40	23	0	0	10
PFB34	37%	18	19	32	43	15	44	0	0	0	8
PFB06	35%	14	39	39	36	62	37	29	0	6	12
PFB01	30%	18	41	41	49	52	46	22	0	6	14
PFB36	29%	18	51	32	65	26	28	20	0	10	10
PFB30	25%	14	21	28	9	10	18	11	0	6	0
PFB07	24%	16	23	39	23	15	24	7	0	0	6
PFB32	23%	10	29	26	26	0	26	25	0	8	14
PFB12	22%	14	31	34	27	36	26	31	0	4	6
PFB18	21%	20	41	28	48	76	28	31	0	n/a	0
PFB35	18%	0	41	9	7	1	0	1	0	10	4
PFB23	13%	12	21	33	17	26	16	0	0	0	0
PFB31	13%	10	23	32	17	0	0	7	0	16	6
PFB38	2%	0	5	0	13	0	0	0	0	0	0
PFB33	0%	4	0	3	0	1	0	0	0	0	0
PFB37	0%	8	32	3	15	0	0	0	0	0	20
				High	n score	Low	score				

As Table 18 shows, among quick service restaurants in Belgium, there is no clear correlation between BIA-Obesity and BIA-Sustainability scores. For example, QSR14 has the second highest score in the obesity assessment, but has scores of 0 in every domain of BIA-Sustainability.

Table 18 Performance of Belgium-based quick service restaurants in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity

						BIA-Sustainal	oility Domains	;			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
QSR05	51%	20	53	41	46	25	32	12	0	2	0
QSR14	43%	0	0	0	0	0	0	0	0	0	0
QSR07	24%	0	0	0	0	0	0	3	0	2	6
QSR11	19%	18	36	17	34	0	5	18	4	0	26
QSR13	15%	18	55	39	48	97	34	22	0	0	0
QSR12	3%	0	1	11	3	11	0	16	0	8	24
				Hig	High score Low score		core				

Finally, among Belgian supermarkets assessed, there is again little correlation. For example, SUP14 has one of the highest BIA-Obesity scores in any sector (93%), but has very low scores in some sustainability domains. Meanwhile, SUP12 has a much lower score in the obesity assessment, but scores significantly better on sustainability.

Table 19 Performance of Belgium-based supermarkets in the domains of BIA-Sustainability compared with their overall scorein BIA-Obesity

						BIA-Sustain	ability Domair	ıs			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
SUP14	93%	10	39	45	34	9	30	31	2	6	10
SUP04	75%	18	47	43	16	0	21	19	0	10	30
SUP13	64%	12	33	18	41	29	17	21	0	0	14
SUP12	57%	12	51	45	53	18	45	20	0	10	24
SUP01	52%	12	43	37	24	16	28	18	0	16	20
		-		Hig	High score		core				

#### 4.2 Ireland

In Ireland, there is a slightly clearer correlation between the two assessments. In particular, the ranking of companies in the BIA-Sustainability domain of greenhouse gas emissions is similar to their ranking in BIA-Obesity. On the other hand, the four lowest-scoring companies in BIA-Obesity (PFB17, PFB10, PFB20 and PFB02) also have lowest scores in every BIA-Sustainability domain.

						BIA-Sustain	ability Domai	ins			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal- based products	Increasing sustainable products
PFB05	55%	20	53	43	33	75	0	3	0	0	0
PFB04	53%	8	37	41	53	74	36	17	0	0	4
PFB18	41%	20	37	43	27	67	33	3	0	0	0
PFB03	31%	8	53	43	33	77	18	0	0	0	0
PFB06	59%	20	45	41	33	71	28	10	4	0	8
PFB13	53%	20	45	41	33	71	28	10	0	0	0
PFB19	50%	18	14	41	53	56	37	35	0	6	0
PFB15	50%	20	17	41	25	27	9	18	0	0	0
PFB12	48%	20	24	45	31	62	26	14	0	0	0
PFB16	44%	14	49	32	31	79	0	20	0	0	0
PFB14	38%	10	36	29	27	33	13	14	0	0	0
PFB07	37%	20	27	30	39	12	7	20	0	0	0
PFB01	32%	14	39	31	10	3	0	0	0	0	0
PFB11	21%	20	33	16	43	14	11	19	0	0	0
PFB09	15%	8	3	33	15	16	0	12	0	0	0
PFB17	15%	0	0	0	0	0	0	0	0	0	0
PFB10	2%	1	12	6	4	0	0	0	0	0	0
PFB20	1%	12	10	6	0	0	0	0	0	0	0
PFB02	1%	0	0	0	0	0	0	0	0	0	0
	High score				h score	Low so	core				

Table 20 Performance of Ireland-based the packaged food and non-alcoholic beverage manufacturers in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity

Table 21 illustrates the comparison between Ireland-based quick service restaurants' performances in the two assessments. Again, the correlation is stronger than in the other countries. The highest-scoring company in BIA-Obesity, QSR05, is also among the highest scorers in eight out of ten sustainability domains.

Table 21 Performance of Ireland-based quick service restaurants in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity

						BIA-Sustain	ability Domair	ıs			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
QSR05	42%	16	26	14	21	28	47	43	4	16	0
QSR07	22%	20	44	2	0	45	0	18	0	4	0
QSR08	20%	14	16	32	22	14	8	6	0	0	0
QSR04	12%	16	5	26	19	5	8	0	0	4	0
QSR01	0.3%	0	0	0	0	0	0	0	0	0	0
QSR02	0.3%	4	0	0	0	0	2	0	0	0	0
QSR09	0.3%	0	0	0	0	0	0	0	0	0	0
QSR03	0%	0	7	0	0	0	0	0	0	0	0
QSR06	0%	2	14	0	10	0	7	0	0	0	0
				Hig	h score	Low score					

Finally, in the supermarkets sector, the correlation between the two assessments is less clear. As Table 22 shows, in general, this is the lowest scoring industry sector, with the best performing company, SUP03, having a BIA-Obesity score of only 33%. SUP03 does also have among the highest scores in five out of ten domains of BIA-Sustainability, however it also has scores of 0% in three domains.

Table 22 Performance of Ireland-based supermarkets in the domains of BIA-Sustainability compared with their overall score in BIA-Obesity

						BIA-Sustain	ability Domain	IS			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
SUP03	33%	20	58	39	38	0	9	16	0	10	0
SUP01	28%	20	39	33	0	2	11	21	0	0	8
SUP04	20%	14	17	30	15	4	11	3	0	2	0
SUP06	14%	8	8	1	0	0	0	0	0	0	0
SUP02	8%	0	0	0	0	0	0	0	0	0	0
SUP05	3%	6	9	3	9	0	0	0	0	0	0
				Hia	High score		ore				

#### 4.3 Portugal

As Table 23 shows, among manufacturers in Portugal assessed for BIA-Obesity, the companies with the highest scores also generally have the highest BIA-Sustainability scores. For example, the company with the highest BIA-Obesity score (PFB19) is among the top scorers in six of the ten BIA-Sustainability domains, while PFB21 has the lowest score in BIA-Obesity and also in BIA-Sustainability.

Table 23 Comparison of Portugal-based packaged food and non-alcoholic beverage manufacturers' total BIA-Obesity score with their scores in the domains of BIA-Sustainability

						BIA-Sustain	ability Dom	ains			
	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal- based products	Increasing sustainable products
PFB19	45%	20	59	41	57	62	41	41	4	6	0
PFB16	37%	16	61	41	39	84	28	71	4	6	0
PFB04	37%	14	58	45	39	125	25	30	0	0	0
PFB24	34%	20	59	41	57	62	5	41	4	6	0
PFB15	34%	20	68	41	63	125	43	41	4	18	0
PFB06	32%	20	61	41	63	84	27	39	0	6	0
PFB07	32%	16	61	26	39	35	5	30	4	0	0
PFB14	27%	20	67	43	57	136	39	41	4	0	0
PFB01	22%	16	61	41	39	136	5	30	4	0	8
PFB22	16%	18	40	11	40	16	0	9	0	0	0
PFB25	14%	20	61	11	42	22	5	41	4	18	10
PFB23	12%	20	40	11	26	16	41	30	0	0	0
PFB21	6%	18	40	11	40	16	0	9	4	0	0
				Hig	gh score	Low s	core				

Table 24 shows the comparison for quick service restaurants in Portugal. In this sector, again, companies with higher scores in BIA-Obesity do not always score higher in BIA-Sustainability. For

example, QSR10 is one of the three join-highest scorers in BIA-Obesity, but it has the lowest score in five out of ten sustainability domains.

Table 24 Comparison of Portugal-based quick service restaurants' total BIA-Obesity score with their scores in the domains of BIA-Sustainability

					BIA-Sustain	ability Domair	ns				
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
QSR04	45%	20	52	42	69	0	41	20	4	10	4
QSR10	45%	16	25	11	42	22	0	9	0	0	0
QSR07	45%	18	54	17	69	67	30	13	0	10	0
QSR05	42%	20	45	19	53	30	32	26	0	10	8
				Hig	h score	Low so	core				

As can be seen in Table 25, the supermarket sector is similar to the quick service restaurant sector in that companies with the highest BIA-Obesity scores don't always have the highest BIA-Sustainability scores. For example, SUP07 has the highest overall BIA-Obesity score, but has the lowest scores in three of the ten BIA-Sustainability domains.

Table 25 Comparison of Portugal-based supermarkets' total BIA-Obesity score with their scores in the domains of BIA-Sustainability

						BIA-Sustain	ability Domair	IS			
Company	BIA-Obesity total score	Strategy	Packaging	Emissions	Energy use	Water and discharge	Biodiversity	Food loss and waste	Compliance	Reducing animal-based products	Increasing sustainable products
SUP07	33%	20	45	41	26	37	0	13	4	0	0
SUP08	29%	20	56	45	44	55	28	30	0	10	20
SUP04	27%	18	58	24	50	7	11	13	0	10	20
SUP10	23%	8	24	9	10	0	0	8	0	0	14
SUP09	16%	16	54	28	48	18	16	15	0	4	10
				Hig	h score	Low so	core				

## 5 Discussion and conclusions

#### 5.1 Key points emerging from analysis of publicly available information

As noted in the previous section of this report, our preliminary assessment of publicly available information on company commitments suggests that there is no consistent relationship between companies' scores in BIA-Obesity and BIA-Sustainability. Some companies score relatively high in one BIA but lower in the other. Therefore we can consider emerging patterns for each BIA separately.

#### 5.1.1 BIA-Sustainability

The criteria assessed in BIA-Sustainability are of major concern to consumers now and, as a result, companies are increasingly focusing on these areas as well. Indeed, whether companies address these

issues has an impact not only on their relative success in a market, but even on whether they can stay in that market at all (European Commission, 2001).

In our assessments, it appears that companies have the fewest commitments in the domains of water and discharge, biodiversity, food loss and waste, environmental compliance, reducing animal-based products and increasing sustainable products.

In water and discharge, companies must consider a sustainable water cycle management that requires optimized energy and process efficiency, connections with other sectors for greater circularity, decarbonization incentives, and community engagement (Romano et al., 2023). The high quality and quantity conservation of water is the key to true water stewardship and efficient resource use, right across the water cycle.

Companies are aware that biodiversity loss is a major threat to society and business activities. However, our evidence suggests companies are not doing enough to slow down biodiversity loss. Companies must make specific adjustments to their operations, and they must do so quickly, both to halt biodiversity loss, and to protect themselves from threats that will affect their markets.

Food loss and food waste refer to a decrease in the quantity and quality of edible food intended for human consumption. Food loss tends to occur in the early stages of the process, either in food production and distribution systems, while food waste involves the disgarding, typically by retailers or consumers, of food that could still be useful for human consumption. In general, the various companies in the different sectors analysed express concerns around food loss and food waste, but based on our preliminary analysis, this concern is not yet reflected in, for example, detailed and transparent measurements of food lost by suppliers in transport, or food wasted in retail outlets.

In relation to transparency, we also found that very few companies in any country or sector had public statements about their environmental compliance. This domain is important because it captures their relationships to objectives and requires compliance with different legislation for different aspects of the environment. It reduces pollution, protects wildlife and improves green cover so that we can bequeath a greener world to posterity, while pursuing economic development. This is a commitment that must always be aligned with a company's corporate strategy.

Reducing animal-based products is a critical issue for all sectors of activity. Few companies have made commitments in this area and very little information is available. The sustainable products domain shows a similar picture. Sustainable products here refers to, for example, products made exclusively from sustainably-sourced ingredients, or products that are seasonal, local or organic. Again, in this domain, commitments are very rare.

Sustainability is a key issue for the soft drinks industry, in particular. Innovations in packaging, efficiency in transport and savings in the use of energy and water in the production of soft drinks are the areas where they have the most commitments overall. However, no company in this industry has any commitments around sustainable products.

Based on our preliminary data collection, it seems that large companies have more publicly available commitments than small and medium-sized companies in the areas of energy, materials, and recycling. Larger companies are also more likely to offer more environmentally-friendly products and services and have an environmental management system. In this respect, our preliminary results are in line with other international studies (EU Directorate-General for Communication, 2016). Also, companies differ in how the practices are related to management values and sustainability commitment, with some but not all having relevant KPIs.

#### 5.1.2 BIA-Obesity

On average, companies' performance in BIA-Obesity is weaker than that in BIA-Sustainability. Across countries and industries, the domain of corporate nutrition strategy is consistently the highest scoring, with median scores over 50% in most countries and sectors, ranging as high as 87% among supermarkets in Belgium. The quick service restaurant sectors in Ireland and Belgium, however, score low in this domain, with medians of 0% and 29% respectively.

The assessed companies performed comparatively better in the product formulation field, with a number of companies committing to reductions in sugar content in particular. The reformulation domain assesses both companies' own commitments and also whether they are transparent in stating their policy positions, either directly or through industry bodies. In most cases, clear statements of policy were not found. The medians in this domain range from 57% (supermarkets in Belgium) to 0% (quick service restaurants in Ireland). However, it is notable that, even when companies do have reformulation commitments, these are sometimes vague.

In the nutrition labeling domain, which evaluates policies on disclosing nutrition information, the median score for manufacturers is the same in all three countries, standing at 23%. Here, again, quick service restaurants in Ireland score the lowest, with a median score of 0%, while quick service restaurants in Portugal show the best performance at a median of 82%. The product and brand promotion domain is hard to assess across countries due to the differing legislative backgrounds discussed above, but the medians range from 49% (quick service restaurants in Portugal) to 0% (quick service restaurants and supermarkets in Ireland). Ireland-based manufacturers fare somewhat better in this domain, with a median score of 42%. Again it must be noted that these domains assess not just the companies' own commitments, but their transparency in relation to policy.

The product accessibility domain, examining policies to restrict access to unhealthy products and improve access to healthier foods, sees limited commitments across sectors and countries, with the highest median standing at only 18% (manufacturers in Portugal). This domain also assesses companies' responses to fiscal and other interventions by governments, e.g. levies on sugar-sweetened beverages. As with other domains, the broad trend is that companies are not transparent about their policies. Where they do disclose policies, they generally favour voluntary and self-regulatory measures rather than government-led initiatives.

In the final domain, relationships with other organisations, again, the scores are low across countries and sectors. Here, transparency is an even greater focus than in the other domains, with indicators focused on membership of industry organisations, funding of research, political donations, and Page 52 of 62 philanthropic activity. Some companies, for example PFB19, do disclose a ban on political donations, but overall scores are low. The highest median score is 39% (supermarkets in Belgium), followed by 33% for supermarkets in Portugal. Although there are no medians of 0% in this domain, this is largely because almost all companies disclose at least some of their philanthropic, charitable or sponsorship activities. In order to show a real commitment to improving the food environment, companies should, for example, be more transparent about their funding of external research.

#### 5.2 Strengths and Limitations

This report benefits from a highly standardised approach to collecting, processing and evaluating data over time. Moreover, the company selection is, to our knoweldge, significantly larger than that for previous BIA analyses, and encompasses significant shares of each market (see tables 2, 3, and 4 above). The selection also includes both large transnational corporations as well as smaller companies, making it representative of the industry sectors.

Nonetheless, this report must be interpreted in the light of some limitations. Although the data is representative of the information available to the public, e.g. on the companies' websites and reports, the commitments outlined in the analysis may not represent the reality of practices. We have identified sources of data that can be used to assess the practices of companies in each country in relation to some of the BIA-Obesity indicators so the final report on this task will also contextualise company commitments in light of what can be verified about their practices.

It must also be borne in mind that, while we are in the process of contacting and interviewing company representatives in each country, data have not been revised to reflect these interviews, and so this report draws solely on publicly-available information. A full list of the sources we have used can be seen in Annexes 3 and 4.

Specific to BIA-Sustainability, it should be noted that social domains such as gender equality and labour rights, as well as animal welfare, are not included in the current assessment. It might be argued that these domains are essential to a full assessment of a company's sustainability impact. It is also noteworthy that, unlike BIA-Obesity, it is much more difficult to access independent data to verify the practices of companies in the domains of BIA-Sustainability.

#### 5.3 Next steps

#### 5.3.1 Assessing practices

BIA-Obesity and BIA-Sustainability are used to establish a benchmark of self-declared company commitments. While it is not possible to independently verify the commitments assessed in BIA-Sustainability, it is possible to verify some indicators in BIA-Obesity based on independent data. After we have completed the consultations with the companies, we will seek where possible to make these verifications, and compare actual practices to the commitments. Of course, even in BIA-Obesity, it is not possible to independently verify certain domains beyond what has already been done as part of the initial BIA Assessment. For example, any publicly available information on companies' relationships with outside organisations will already have been included. But in domains such as product formulation, third-party/independent data on practices may be available. Depending on available data, this may be done at the company level (for example, where food composition database information is available for specific brands) or at sector level (for example, it might be possible to access data on the actual sales of more healthy versus less healthy products sold in supermarkets in a particular country during a specified time period).

Report on BIA-Obesity/Sustainability assessments

#### 5.3.2 Preparing scorecards by company

Each company will receive a scorecard comparing them with the best in sector and giving them specific, tailored recommenations on how to improve their commitments and practices to bring them closer to best practice. It is hoped that companies will see their scorecard as a benchmark to maintain and improve upon, and that they will take on board the evidence-based recommendations.

#### 5.3.3 Preparing country-specific reports

Country-specific reports will be prepared and launched in 2024. These will include the results of both BIAs in the country, as well as the ranking of the companies in each sector, and general recommendations for improving commitments and practices in each sector and in the country's food environment as a whole. These reports are intended to provide a useful 'snapshot' of a country's current commercial food environment, as well as a benchmark against which progress (or lack of it) can be measured in future.

#### 5.3.4 Comparison over time

In Belgium, BIA-Obesity was previously carried out over 2019 and 2020 (Van Dam, Reimes, et al., 2022). Thus, once the current BIA-Obesity process (including assessment of practices where possible), is completed in Belgium, it will be possible to report on whether companies have improved in the intervening time. We envisage that BIA-Obesity will also be repeated in Ireland and Portugal in years to come, and that BIA-Sustainability can also be carried out in each country in the future as well.

#### 5.4 Conclusion

Across the three countries, our analysis shows that companies' commitments by and large fall well short of best practice in BIA-Sustainability and, especially, in BIA-Obesity. The examples of best available practice that we have identified (see tables 9 - 14) are, with very few exceptions, not widely adopted within the sector, and even these best available practices still fall short of best practice as defined by WHO and/or by scientists in the relevant fields. It remains to be seen whether practices, particularly in relation to population health, nutrition, and obesity, will measure up to these commitments.

## Annex

## Annex 1 - BIA-Obesity domains and indicators

Domain	Policy area	Examples of key indicators
Corporate population nutrition strategy	Overarching policies and commitments to improving population nutrition and addressing obesity	<ul> <li>Commitment to nutrition and health in corporate strategy</li> <li>Reporting against nutrition and health objectives and targets</li> <li>Key Performance Indicators of senior managers linked to nutrition targets</li> </ul>
Product formulation	Policies and commitments regarding product development and reformulation related to nutrients of concern (i.e. sodium, saturated fat, trans fat, added sugar) and energy content	<ul> <li>Targets and actions related to the reduction of sodium, saturated fat, trans fat, sugar and portion size/energy content across portfolio</li> <li>Engagement with government-led initiatives related to product formulation (e.g., the Convention for a Balanced Diet)</li> </ul>
Nutrition labeling	Policies and commitments regarding disclosure and presentation of nutrition information on product packaging and online	<ul> <li>Commitment to implement the Nutri- Score across the product portfolio</li> <li>Provide online nutrition information</li> <li>Use of nutrition and health claims on healthy products only</li> </ul>
Product and brand promotion	Policies and commitments for reducing the exposure of children and adolescents to promotion of 'less healthy' foods	<ul> <li>Broadcast and non-broadcast media policy</li> <li>Use of marketing techniques that appeal to children and adolescents</li> <li>Sponsorships, in-store promotion practices, and products featured in catalogs</li> <li>Only advertise or display 'healthy' sides and 'healthy' drinks in (children's) combination meals</li> </ul>
Product accessibility	Policies and commitments related to the accessibility (including availability and affordability) of healthy compared to 'less healthy' foods	<ul> <li>Increasing the proportion of healthy products in the product portfolio</li> <li>Support of fiscal policies (e.g. a tax on sugar-sweetened beverages)</li> <li>Pricing and discounting strategies</li> <li>Check-outs free from unhealthy items</li> <li>Not provide free refills for sugary drinks</li> </ul>
Relationships with other organizations	Policies and commitments related to support provided to external groups (e.g., professional organisations, research organisations, community and industry groups) related to health and nutrition	<ul> <li>Disclosure and transparency of relevant relationships</li> <li>Accessibility of relevant information</li> <li>No political donations or declaration of those in real-time</li> </ul>

Domain	Examples of key indicators
Corporate sustainability strategy	• Does the company have an overarching commitment to reducing environmental impact articulated in strategic documents (e.g., mission statement, strategies, or overarching policies)?
Packaging	<ul> <li>Measurement of the amount of materials used, including by suppliers, and by source (e.g. renewable or not)</li> <li>Commitment to reduce the amount of packaging used</li> </ul>
Greenhouse gas emissions	<ul> <li>Measurement of amount and type of greenhouse gas (GHG) emissions, including by suppliers</li> <li>Measurement of emissions by type of GHG</li> <li>Commitment to reduce emissions</li> </ul>
Energy Use	<ul> <li>Measurement of energy used, including by suppliers, and by source (e.g. renewable or not)</li> <li>Commitment to reduce energy use</li> </ul>
Water and discharge	<ul> <li>Measurement of water consumption, water withdrawal and water footprint, including by suppliers, especially in areas of water stress</li> <li>Measurement of quantity and type of discharge</li> <li>Commitment to reduce water consumption, water withdrawal, and water footprint, including by suppliers, especially in areas of water stress</li> <li>Commitment to improve the amount and quality of discharge, including by suppliers</li> </ul>
Biodiversity	<ul> <li>Measurement of impact on habitats, pollution, overexploitation, including by suppliers</li> <li>Commitment to improve impact on habitats and reduce pollution, exploitation and other harmful impacts, including by suppliers</li> </ul>
Food loss and waste	<ul> <li>Measurement of food loss and waste including by suppliers</li> <li>Commitment to reduce food loss and waste including by suppliers</li> <li>Commitment to dispose of waste food responsibly</li> </ul>
Environmental Compliance	<ul> <li>Public disclosure of significant fines or non-monetary sanctions for non- compliance with environmental laws and regulations</li> </ul>
Reducing animal-based products	<ul> <li>Measurement of the proportion of animal-based products in the company's range</li> <li>Commitment to reduce the proportion of animal-based products</li> </ul>
Increasing the proportion of sustainable products	<ul> <li>Measurement of the proportion of local, seasonal, or organic products in the company's range</li> <li>Commitment to reduce the proportion of local, seasonal, or organic products in the company's range</li> </ul>

## Annex 2 - BIA-Sustainability domains and indicators

## Annex 3 - Table of Sources used for BIA-Sustainability

framework v3			
General Comment:	Sources can refer to country level or to Group level In case sources are referring to Group level, comm cover the assessed country.		level must
Category	Source of information	Organizations or level analyzed	Suggested frequency
All categories	Company Annual report Company Sustainability report Company thematic document on sustainability strategy Company website Company press release on sustainability Company country presentation	National or Group level	Yearly
Specific to some categories			
Corporate sustainability strategy	Company vigilance plan Company responsible purchasing charter www.unglobalcompact.org	National or Group level	Yearly
Packaging	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en Ellen McArthur foundation website: www.ellenmacarthurfoundation.org National plastic pact or national packaging organizations Group level thematic strategy website (example: Schwartz group strategy on plastic)	National or Group level	Yearly

<u>framework v3</u> Emissions	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en Carbon Disclosure Project website: https://www.cdp.net/ (Emissions questionnaire) Science Based Target Initiative website https://sciencebasedtargets.org/companies- taking-action	National or Group level	Yearly
Energy use	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en Carbon Disclosure Project website: https://www.cdp.net/ (Emissions questionnaire)	National or Group level	Yearly
Water use	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en Carbon Disclosure Project website: https://www.cdp.net/ (Water questionnaire)	National or Group level	Yearly
Biodiversity	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en Carbon Disclosure Project website: https://www.cdp.net/ (Forest questionnaire)	National or Group level	Yearly
Food Loss and wastes	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en	National or Group level	Yearly

# Sources of information to systematically monitor the 11 categories of BIA Sustainability framework v3

framework v3	1	1	
Environmental compliance	Web search Information disclosed by company itself	National or Group level	Yearly
Reducing animal based products	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en	National or Group level	Yearly
Relationship with other organization	-	National or Group level	Yearly
Sustainable products	EU Code of good conduct website: https://food.ec.europa.eu/horizontal- topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en	National or Group level	Yearly
Additional sources	FoodDrinkEurope - https://www.fooddrinkeurope.eu/ UNESDA - https://www.unesda.eu/ The Consumer Goods Forum - https://www.theconsumergoodsforum.com/ The International Food and Beverage Alliance (IFBA) - https://ifballiance.org/commitments/healthy- sustainable-living/ EuroCommerce - https://www.eurocommerce.eu/ Serving Europe - https://servingeurope.com/en/ The European Brands Association (AIM) - https://www.aim.be/sustainability/	National or Group level	Yearly

## Sources of information to systematically monitor the 11 categories of BIA Sustainability framework v3

## Annex 4 - Table of Sources used for BIA-Obesity

Category	Source of information				
All categories:	Company Annual report Company website Company press release on Health and nutrition				
	Company country presentation				
Specific to some categories					
Corporate nutrition strategy	Company vigilance plan Company responsible purchasing charter www.unglobalcompact.org				
Product formulation	EU Code of good conduct website:				
	https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/sustainable-food-processing/code-conduct_en				
	The International Food and Beverage Alliance (IFBA) - https://ifballiance.org/commitments/healthy-sustainable-living/				
Nutrition labelling	EU Code of good conduct website:				
	https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en				
	The International Food and Beverage Alliance (IFBA) - https://ifballiance.org/commitments/healthy-sustainable-living/				
Product and brand	EU Code of good conduct website:				
promotion	https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/sustainable-food-processing/code-conduct_en				
	https://eu-pledge.eu/				
Product accessibility	EU Code of good conduct website:				
	https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en				
Relationships with other	EU Code of good conduct website:				
organisations	https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy/sustainable-food- processing/code-conduct_en				
Additional sources	FoodDrinkEurope - https://www.fooddrinkeurope.eu/				
	UNESDA - https://www.unesda.eu/				
	The Consumer Goods Forum - https://www.theconsumergoodsforum.com/				
	EuroCommerce - https://www.eurocommerce.eu/				
	Serving Europe - https://servingeurope.com/en/				

### References

- Crippa, M., Solazzo, E., Guizzardi, D., Monforti-Ferrario, F., Tubiello, F. N., & Leip, A. (2021). Food systems are responsible for a third of global anthropogenic GHG emissions. *Nature Food*, *2*(3), 198–209. https://doi.org/10.1038/s43016-021-00225-9
- EU Directorate-General for Communication. (2016). *Flash Eurobarometer 441: European SMEs and the Circular Economy*. EU Directorate-General for Communication. http://data.europa.eu/euodp/en/data/dataset/S2110 441 ENG
- European Commission. (2001). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the sixth environment action programme of the European Community 'Environment 2010: Our future, Our choice'—The Sixth Environment Action Programme. https://op.europa.eu/en/publicationdetail/-/publication/ff0d1c73-021f-4ae1-8350-ec5cf681c353
- Jani, A., Exner, A., Braun, R., Braun, B., Torri, L., Verhoeven, S., Murante, A. M., Van Devijvere, S., Harrington, J., Ochoa, A., Marchiori, G. D. L., Defranceschi, P., Bunker, A., Bärnighausen, T., Sanz Sanz, E., Napoléone, C., Verger, E. O., Schader, C., Röklov, J., ... Woollhead, C. (2022). Transitions to food democracy through multilevel governance. *Frontiers in Sustainable Food Systems*, *6*, 1039127. https://doi.org/10.3389/fsufs.2022.1039127

Lei n.º 330/90, (2019). https://files.diariodarepublica.pt/1s/2019/04/07900/0225702258.pdf?lang=EN

- Mackay, S., Renker-Darby, A., Robinson, E., Shaw, G., & Sacks, G. (2022). Development of a Proposed
  Set of Indicators for Assessing Food Company Commitments and Practices Regarding
  Environmental Sustainability. Sustainability, 14(16), 10315.
  https://doi.org/10.3390/su141610315
- Romano, G., Baiani, S., Mancini, F., & Tucci, F. (2023). Reducing CO2 Emissions and Improving Water Resource Circularity by Optimizing Energy Efficiency in Buildings. *Sustainability*, *15*(17), 13050. https://doi.org/10.3390/su151713050
- Sacks, G., Vanderlee, L., Robinson, E., Vandevijvere, S., Cameron, A. J., Ni Mhurchu, C., Lee, A., Ng, S. H., Karupaiah, T., Vergeer, L., L'Abbé, M., & Swinburn, B. (2019). BIA-Obesity (Business Impact Assessment—Obesity and population-level nutrition): A tool and process to assess food

company policies and commitments related to obesity prevention and population nutrition at the national level. *Obesity Reviews*, *20*(S2), 78–89. https://doi.org/10.1111/obr.12878

- Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., Brinsden, H., Calvillo, A., De Schutter, O., Devarajan, R., Ezzati, M., Friel, S., Goenka, S., Hammond, R. A., Hastings, G., Hawkes, C., Herrero, M., Hovmand, P. S., Howden, M., ... Dietz, W. H. (2019). The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. *The Lancet*, 393(10173), 791–846. https://doi.org/10.1016/S0140-6736(18)32822-8
- UN Water. (2021). *Progress on the level of water stress*. FAO and UN Water. https://doi.org/10.4060/cb6241en
- United Nations. (2015). *Transforming our World: The 2030 Agenda for Sustainable Development* (p. 41). United Nations. https://sdgs.un.org/publications/transforming-our-world-2030-agendasustainable-development-17981
- Van Dam, I., Guillon, E., Robinson, E., Allais, O., Sacks, G., & Vandevijvere, S. (2022). Assessment of the Commitments and Performance of the European Food Industry to Improve Population Nutrition. *International Journal of Public Health*, 67, 1604116. https://doi.org/10.3389/ijph.2022.1604116
- Van Dam, I., Reimes, N., & Vandevijvere, S. (2022). Benchmarking the nutrition-related commitments and practices of major Belgian food companies. *International Journal of Behavioral Nutrition and Physical Activity*, *19*(1), 43. https://doi.org/10.1186/s12966-022-01269-1
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L. J., Fanzo, J., Hawkes, C., Zurayk, R., Rivera, J. A., De Vries, W., Majele Sibanda, L., ... Murray, C. J. L. (2019). Food in the Anthropocene: The EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, 393(10170), 447–492. https://doi.org/10.1016/S0140-6736(18)31788-4

## www.feast2030.eu



Co-funded by the European Union

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Education, Research and Innovation SERI



Innovate UK

