

# THE ATLAS CHALLENGE



A Food Producers' Ranking towards progressive and sustainable food strategies pushing for an overall meat and fish reduction impact

Animal Welfare.  
Worldwide.





# 1. INTRODUCTION

Globally, over 74 billion farm animals are farmed for food each year, of which some 50 billion animals are reared in intensive farms.<sup>1</sup> The Food and Agriculture Organization of the United Nations (FAO) estimates that the demand for meat is going to increase by 70 % by 2050 with rising world population, which will put more pressure on crop-for-feed growth as well as breeding and raising livestock.<sup>2</sup> The intensification of animal farming, as well as the excessive consumption of meat and animal-based products, have grave impacts on our environment, climate, our health, and factory farmed animals.

It takes 9.500 litres of water, 5,5 kilograms of grain, 16 kilograms of topsoil and the energy equivalent of 3,8 litres of gasoline to produce not even half a kilogram of feedlot beef.<sup>3</sup> Industrial livestock production contributes heavily on both water and air pollution, especially by ammonia emissions and other greenhouse gases, which are the drivers for global warming.

Many recent studies underly the exploitation of natural resources by intensive agriculture and express the necessity for a more sustainable food system.

The EAT-Lancet report 2019, one of the latest scientific reports created by some of the world's leading scientists and health experts, estimates that the necessary dietary shift requires a dramatic reduction of consumption of unhealthy food, such as red meat, by at least 50 % and an overall increase in consumption of more than 100 % is needed for legumes, nuts, fruit and vegetables.<sup>4</sup>

With the current global natural disasters (Amazon fires, floods, heat waves, droughts, biodiversity loss) and the mistreatment of billions of farm animals in mind, it is imperative for key players in the food industry to take action and step up for our planet now!



<sup>1</sup> Compassion in World Farming assets.ciwf.org/media/7432824/ciwf\_strategic-plan-revise18-lr2.pdf

<sup>2</sup> Food and Agriculture Organization of the United Nations (FAO) 2017. The future of food and agriculture: Trends and Challenges. Rome.

<sup>3</sup> EarthSave Healthy People Healthy Planet. [www.earthsave.org/environment.htm](http://www.earthsave.org/environment.htm)

<sup>4</sup> Willet et al. 2019. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. The Lancet Commissions, 393(10170):447-492.

The negative implications that farming animals for human consumption has on the climate, our health and the animals have made people question their food choices now more than ever before, particularly due to the global COVID-19 pandemic. Due to the population increase and rising incomes, the global production of meat, eggs, dairy, and seafood from intensive farming systems is forecast to increase by 15 % by 2028. While COVID-19 did not start in factory farms or slaughterhouses, it has nonetheless found its way into them. With its multiple impacts, the current pandemic has shown the profound vulnerability and fragility of the animal agriculture industry as well as a host of serious ethical and economic implications for humans, animals and the food system.<sup>5</sup>

If we are to minimize the risk of potentially far more damaging outbreaks in the future, the production and offering of animal products must change.

Considering these developments, food producing companies have recognized the need to adapt their policies and strategies. Several companies started addressing these challenges in the main way that they can help consumers change the way they eat by offering and promoting a growing range of innovative plant-based options. Food companies have an influential role to play, and in this report, you will see how some companies are ahead of the game whilst others are falling behind.

## FACTS



Food systems contribute 21–37 % of global greenhouse gases (GHG), and are significant contributors to deforestation, biodiversity loss and declining water tables<sup>6</sup>



14.5 % of global GHG emissions are caused by livestock farming<sup>7</sup>



Beef production is the world's biggest driver of tropical deforestation<sup>8</sup>



77 % of agricultural land is used for livestock and 23 % for crops<sup>9</sup>



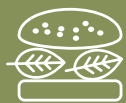
Meat products have larger carbon footprints per calorie than grain or vegetable products<sup>10</sup>



Most of the fish we eat will be farm-raised by 2030, which poses a huge risk to the environment<sup>11</sup>



Land use changes to gain cropland for feed production and grazing land are major reasons for deforestation<sup>12</sup>



The global plant-based meat market is currently valued at € 10.2 billion and is predicted to grow at a Compound Annual Growth Rate of 5 % over the next five years, reaching almost € 23.6 billion by 2025<sup>13</sup>

<sup>5</sup> [https://proveg.com/wp-content/uploads/2020/07/PV\\_Food\\_and\\_Pandemics\\_Report\\_Digital.pdf](https://proveg.com/wp-content/uploads/2020/07/PV_Food_and_Pandemics_Report_Digital.pdf)

<sup>6</sup> What we eat matters: To change climate crisis we need to reshape the food system [www.theguardian.com/commentisfree/2019/oct/08/climate-change-food-global-heating-livestock](http://www.theguardian.com/commentisfree/2019/oct/08/climate-change-food-global-heating-livestock)

<sup>7</sup> [www.fao.org/news/story/en/item/197623/icode/](http://www.fao.org/news/story/en/item/197623/icode/)

<sup>8</sup> [www.dw.com/en/beef-and-burger-king-still-eating-away-at-forests/a-39485275](http://www.dw.com/en/beef-and-burger-king-still-eating-away-at-forests/a-39485275)

<sup>9</sup> [www.ourworldindata.org](http://www.ourworldindata.org)

<sup>10</sup> Center for Sustainable Systems-University of Michigan <http://css.umich.edu/factsheets/carbon-footprint-factsheet>

<sup>11</sup> <https://techcrunch.com/2019/07/07/fish-replacement-may-be-the-next-big-wave-in-alternative-protein-development/>

<sup>12</sup> [www.fao.org/fileadmin/user\\_upload/fsn/docs/Wirseniuet\\_al\\_Agric\\_Syst\\_Land\\_use\\_in\\_2030.pdf](http://www.fao.org/fileadmin/user_upload/fsn/docs/Wirseniuet_al_Agric_Syst_Land_use_in_2030.pdf)

<sup>13</sup> [www.marketsandmarkets.com/Market-Reports/plant-based-meat-market-44922705.html](http://www.marketsandmarkets.com/Market-Reports/plant-based-meat-market-44922705.html)

## 2. THE FOUR PAWS ATLAS CHALLENGE

The Atlas Challenge by FOUR PAWS is a business benchmark, ranking the main global players within the food industry sector (with a primary focus on those operating within Germany, Switzerland, Austria and the United Kingdom) on their innovative and sustainable business strategies which push for meat and fish reduction and an increase of plant-based and innovative food\*. The name 'Atlas' was inspired by the Atlas Titan in Greek mythology, who was responsible for bearing the weight of the world on his shoulders and who personified endurance. As such, the Atlas Challenge ranking is one which ranks the companies in the various food industry sectors on their current and future plans of being able to carry the responsibility towards a sustainable world. What this entailed, was assessing the companies' product range, their marketing tactics, their Corporate Social Responsibility (CSR) report (and/or policies) and their commitment and progress towards making positive changes for the environment, factory farmed animals and the planet as a whole. FOUR PAWS expects action and progress from industry players within the following categories:

- Diversifying their product range to decrease their meat and fish\*\* offerings
- Implementing marketing strategies that encourage increased consumption of plant-based and innovative foods
- Setting concrete commitments towards reducing meat as part of their Corporate Social Responsibility, where the reduction of meat is not replaced with an increase of fish

Not only are over 74 billion farm animals farmed for food each year, but it is estimated that 120 billion fish are also farmed for food each year, which leads to immense animal suffering and damage to the environment.<sup>14</sup> By assessing the level of effort of industry players compared to their competitors, we would show companies where they stand and encourage them to reassess their policies.



It is no secret that the production of meat and other animal based products places a heavy burden on the environment – from crops and water required to feed farmed animals, to the transport and other processes involved from factory farms to our plates. In response to consumer demands for greater transparency about the health, environmental and ethical implications of the food they buy, food companies are stepping up their sustainability efforts, collaborating with their suppliers and fine-tuning their business models, however not many are doing enough to implement strategies to reduce and/or replace the amount of meat and fish in their portfolio, nor increasing their innovative plant-based meat and/or fish substitutes to encourage a more plant-based diet under animal welfare, climate and environmental policies.

In the first round, the FOUR PAWS Atlas Challenge compared leading food delivery services. The current second ranking included some of the well-known national and international food companies which offer convenience foods\*\*\* such as ready-made meals, canned food such as pasta and soup, noodles as well as frozen meals.

\* Innovative food such as the Beyond Meat, Just Egg or cultivated meat products once they hit the market.

\*\* Fish: includes all types of fish, shellfish and seafood

\*\*\* Convenience foods: or tertiary processed food, is food that is commercially prepared to optimize ease of consumption. Such food is usually ready to eat without further preparation. It may also be easily portable, has a long shelf life, or offers a combination of such convenient traits.

<sup>14</sup> [www.ciwf.org](http://www.ciwf.org)



# 3. THE FOOD PRODUCERS RANKING

FOUR PAWS asked 20 leading food companies in Austria, Germany, Switzerland, and the United Kingdom to take part in the Atlas Challenge by filling in a detailed questionnaire on their sustainable food strategies. Additionally, FOUR PAWS analysed the companies' CSR reports, if these were made available.

The questions were divided into four sections:

- How is meat and fish reduction involved in their CSR report or part of their corporate identity and strategy?
- How animal-friendly is their portfolio regarding the availability of products including vegan and vegetarian items, meat, and fish substitutes as well as innovative plant-based food products?
- What marketing tactics do they carry out to promote and highlight vegan / vegetarian products and meat / fish substitutes?
- Are they willing to proactively push for / and be the driver of a meat and fish reduction movement in the future?

A reduction of meat products does not automatically equate to an increase of plant-based products and vice versa, nor does reducing one type of animal meat to increase another constitute change towards helping farmed animals. Hence the questions included in the questionnaire were focused on assessing their level of meat and fish reduction as well as the status and increase of plant-based and innovative meat and fish substitutes.

All the targeted food producers of convenience foods, where specific brands were looked into, offered products containing meat

as the main ingredient or sub-ingredient. Out of the 20 included in the ranking, 2 companies were not evaluated under the fish questions, as it was not applicable to them since they do not have fish in their product line that we could find in the allocated research time frame. Others stated they do not offer fish as raw materials or that fish only makes up a very small percentage of their product range. However, FOUR PAWS still included this in the overall assessment, even if they were products like fish stock, sauce or paste. Dr. Oetker (DACH), who stated fish only makes up 0,0001 % of their products, answered the related questions about fish, hence FOUR PAWS accounted all fish type ingredients and products, irrespective of amount, from all the relevant targeted food companies into the final assessment.

Out of the 20 contacted companies, 8 responded cooperatively, 2 let us know they did not want to participate, and the rest did not respond at all. For the 12 non-responsive companies, FOUR PAWS evaluated them through an analysis and research based on publicly accessible information online, which took place from December 2019 to June 2020 within a set number of allocated research hours. (Please refer to the indicators overview on page 9/10 for more information).

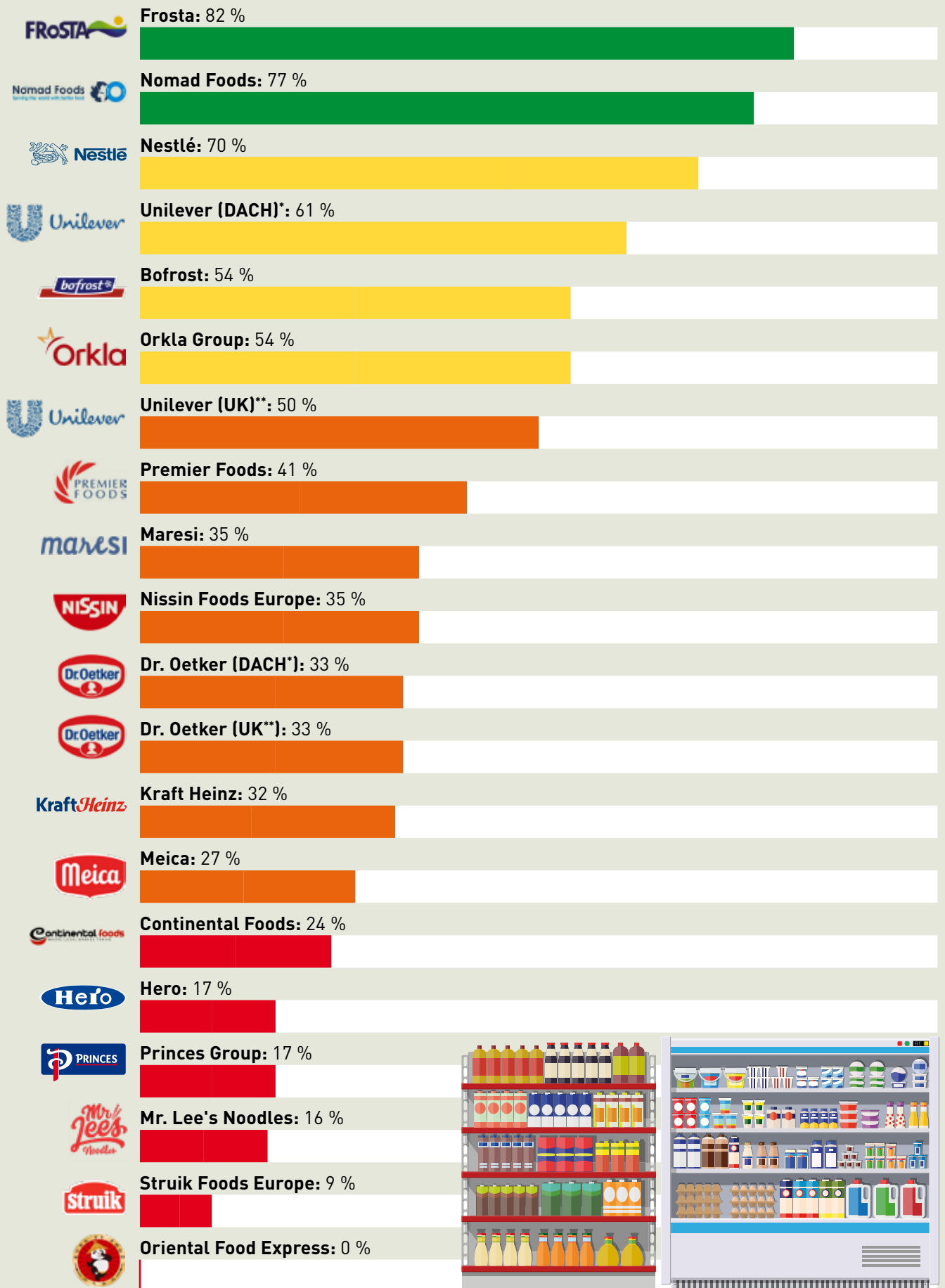
Each of the questions in the questionnaire was scored with allocated points between 1 to 3, (with the highest points awarded to the key questions that supported the tactics towards meat and fish reduction and the strategies involved to create and promote sustainable diets by offering innovative plant-based alternatives). Additional points were given for open communication and transparency with an added 10 points if they were explicitly committed to meat reduction approaches and strategies and thus implementing the positive changes requested in the Atlas Challenge. The total points were then converted into a final percentage.

## BEST PRACTICE



**Frosta Aktiengesellschaft** is a frozen food company headquartered in Bremerhaven, Bremen, Germany. The corporation owns production facilities in Germany and Poland, with sales and distribution subsidiaries in Austria, the Czech Republic, Germany, Hungary, Italy, Poland, Romania, Russia, and Slovakia.

Frosta values transparency, is eco-friendly, does not use additives and artificial ingredients and is the only one amongst the targeted food producers in the FOUR PAWS Atlas Challenge to have a meat reduction goal in place as stated in their sustainability report. Their former goal to increase sales of vegan and vegetable products from 30 % to 40 % by 2020 has been expanded with the aim to reduce the total meat content of all ingredients of all Frosta products by 20 % by 2022. They want to reduce the proportion of meat out of all ingredients used, as they are aware that meat has a high carbon footprint. This demonstrates an understanding, that increasing veggie products like many other companies, does not equate reducing meat ingredients. Not only is Frosta taking responsibility towards meat reduction, but they stated they are not planning to replace this reduction with an increase of fish. Rather, they are planning to launch their first plant-based fish substitutes by the end of this year. Frosta scored the highest in the Atlas Challenge ranking and are the first to have signed the commitment letter to incorporate sustainable strategies supporting meat and fish reduction.



\* DACH: Abbreviation for Austria (AT), Germany (DE) + Switzerland (CH)

\*\* UK = United Kingdom

low average good very good



## 4. RESULTS

The ranking results have indicated that positive initiatives for the environment are implemented by some of the national and globally leading food companies, where some were more transparent than others, but none except Frosta, had a clear statement on meat reduction. Since 2010, Frosta also calculates the carbon footprint of every product. Frosta are the first champions of the FOUR PAWS Atlas Challenge ranking in this food sector, to have signed the commitment letter to incorporate sustainable strategies supporting meat and fish reduction.

Companies like Nestlé highlight the importance of the environmental and climate impact and other companies like Unilever promote healthy food choices by removing their trans-fat and reducing their saturated fat from products as part of their Sustainable Living Plan<sup>15</sup>, but none are as concrete as Frosta in their reduction and replacement goals concerning meat, fish and plant-based alternatives. Premier Foods highlight the importance of healthy nutrition, but for some like Princes Group, Mr. Lee's Noodles and Oriental Food Express, no information was acquired on their CSR reports or the like, which depicts a lack of transparency of their CSR and/or sustainability reports.

Out of the 20 food producers assessed, Frosta scored the highest with Nomad Foods coming in second, which makes them the only ones ranked in the 'Very Good' category. Nestlé, Unilever (within the DACH region), Bofrost and Orkla Group ranked as 'Good'. Unilever (United Kingdom), Premier Foods, Maresi, Nissin Foods Europe, Dr. Oetker (DACH & UK), Kraft Heinz and Meica scored within the 'Average' range and the rest

fall into the 'Low' category. The results are due to a number of factors, as those who fell in the low category either didn't respond giving FOUR PAWS the requested information and/or very little to no information was available online regarding their business practices, CSR reports and policies, and/or because the information that was available didn't meet the criteria used to assess their effort and performance.

In summary, the results show that there is much needed room for improvement. It is clear some food producers have positive initiatives in place, dependent on varying factors such as being affiliated with innovation or factor in consumer trends and demands, whilst others are falling behind. While some rely on marketing their plant-based, meat and fish substitute products, others focus heavily on their meat products without signs of promoting meat and fish reduction. With some very promising business strategies that the higher ranked companies scored, it is evident that positive change is not only do-able, but also measurable in a fast paced and ever-changing world. Consumers are becoming more conscious of not only ingredients, but also the animal welfare implications and sustainable production systems of the products they buy, particularly in relation to convenience foods which are highly accessible goods. Transparency and being open about sustainability are becoming the currency of trust for consumers.<sup>16</sup>

FOUR PAWS is hopeful that with the already existing positive initiatives in place by some companies, most evidently like Frosta, others will follow suit and that all commit to a reduction of meat and fish, and an increase of plant-based products for a better planet.

<sup>15</sup> [www.unilever.com/Images/nutrition-info-graphic\\_tcm244-521744\\_en.pdf](http://www.unilever.com/Images/nutrition-info-graphic_tcm244-521744_en.pdf)

<sup>16</sup> [www.ift.org/news-and-publications/food-technology-magazine/issues/2018/august/features/sustainability-at-food-companies](http://www.ift.org/news-and-publications/food-technology-magazine/issues/2018/august/features/sustainability-at-food-companies)

# Indicator overview: The FOUR PAWS Atlas Challenge

Poll of meat and fish reduction as an approach to a sustainable and innovative strategy

This overview shows the markets, in which the assessed food producers have a presence. (HQ) is added next to the country the company is headquartered in.



Food producers		Markets (HQ = headquarter)
Unilever		Austria, Germany, Switzerland, United Kingdom (HQ); worldwide
Nestlé		Austria, Germany, Switzerland (HQ), United Kingdom; worldwide
Dr. Oetker		Austria, Germany (HQ), Switzerland, United Kingdom; 40 countries worldwide
Kraft Heinz		Austria, Germany, Switzerland, United Kingdom; United States of America (HQ); worldwide
Nomad Foods		Austria, Belgium, Denmark, Germany, Finland, France, Greece, Hungary, Italy, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom (HQ)
Continental Foods		Germany, Belgium (HQ), Finland, France, Sweden
Nissin Foods		Austria, Germany, Switzerland, United Kingdom; Japan (HQ); worldwide
Bofrost		Austria, Germany (HQ), Switzerland, Belgium, Croatia, France, Greece, Italy, Luxembourg, Netherlands, Slovenia, Spain
Frosta		Austria, Germany (HQ), Czech Republic, Hungary, Italy, Poland, Romania, Russia, Slovakia
Struik Foods Europe		Germany, Netherlands (HQ), United Kingdom; Europe
Premier Foods		Australia, Austria, Germany, Ireland, United Kingdom (HQ), United States of America
Princes Group		Austria, United Kingdom (HQ); growing presence in continental Europe
Oriental Food Express		United Kingdom (HQ); Europe
Mr. Lee's Noodles		United Kingdom (HQ); worldwide
Orkla Group		Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, India, Latvia, Lithuania, Norway (HQ), Romania, Russia, Slovakia, Sweden, Switzerland, United Kingdom
Maresi		Austria (HQ), Czech Republic, Hungary, Romania, Slovakia
Hero		Germany, Switzerland (HQ), United Kingdom; worldwide
Meica		Austria, Germany (HQ), Switzerland, United Kingdom; worldwide

The table on the following two pages provides an overview of the indicators for each food producer which the ranking is based on. For the assessment, the indicators were divided into four different sections. Please note that although a company could fulfill the majority of the criteria, it does not deem them as the highest scoring company due to the specific scoring system of the questionnaire.



## Name of Company



## Brand examples

Knorr, Pfanni	DACH*		Unilever
Pot Noodle	UK*		
Maggi, Wagner, Findus			Nestlé
Ristorante Pizza	DACH*		Dr. Oetker
Chicago Town	UK*		
WW, Heinz Beanz			Kraft Heinz
Iglo, BirdsEye			Nomad Foods
Erasco, Heisse Tasse			Continental Foods
Cup Noodles			Nissin Foods Europe
			Bofrost
			Frosta
Sonnen Bassermann			Struik Foods Europe
Aah!Bistro, Batchelors			Premier Foods
Hunger Breaks, Crosse & Blackwell			Princes Group
Kung Fu Food			Oriental Food Express
			Mr. Lee's Noodles
Felix			Orkla Group
Inzersdorfer			Maresi
			Hero
			Meica

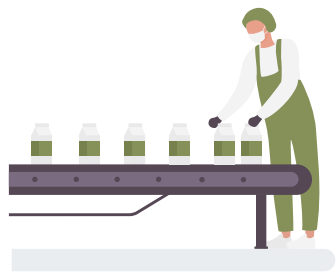
## CSR / Annual Report / Philosophy

1. Accessibility of annual report / CSR	✓	✓	✓	✓	⊘	✓	✓	⊘	✓	✗	✓	⊘	✓	✓	⊘	⊘	✓	✓	✓	⊘
2. Sustainable diet / nutrition is part of annual report	✓	✓	✓	✗	⊘	✓	✓	⊘	✓	✗	✓	⊘	✓	✓	⊘	⊘	✓	⊘	⊘	⊘
3. Sustainability seen as business responsibility to reduce impact on the planet	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘	⊘	✓	✓	✓	✓
4. Statement / policy on environmental sustainability	✓	✓	✓	✓	⊘	✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘	⊘	✓	✓	✓	⊘
5. Statement / policy on plant-based foods / proteins	✓	✓	✓	✗	⊘	⊘	✓	⊘	✓	✗	✓	⊘	✗	✗	⊘	⊘	✓	✓	⊘	⊘
6. Statement / policy on meat reduction	✗	✗	✗	✗	⊘	⊘	✗	⊘	✗	✗	✓	⊘	✗	✗	⊘	⊘	✗	✗	✗	⊘
7. Statement / policy on fish / seafood	—	—	✓	✓	⊘	✓	✓	✓	⊘	✓	✓	—	✓	✓	⊘	⊘	⊘	⊘	—	—
8. Statement / policy on food innovation / meat substitutes	✓	⊘	✓	✓	⊘	⊘	✓	⊘	⊘	✗	✓	⊘	✗	✗	⊘	⊘	✓	✓	⊘	✓

## Product Range

1. Offer plant-based foods	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗
2. Offer vegetarian foods	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
3. Offer meat substitutes / innovative products	✓	✓	✓	✗	✓	✓	✓	⊘	✓	✓	✗	✗	✓	✗	✗	✗	✓	⊘	⊘	✓
4. Offer fish / seafood substitutes	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
5. Replace or remove meat-based with plant-based ingredients	✗	⊘	✓	✗	⊘	⊘	✗	⊘	⊘	✓	✓	⊘	✓	⊘	⊘	⊘	⊘	⊘	⊘	⊘
6. Reduce fish / seafood-based products	—	—	⊘	✗	⊘	⊘	✓	⊘	⊘	✗	✓	—	⊘	⊘	⊘	⊘	⊘	⊘	—	—

## Name of Company



## Brand examples

Name of Company	Unilever		Nestlé	Dr. Oetker		Kraft Heinz	Nomad Foods	Continental Foods	Nissin Foods Europe	Bofrost	Frosta	Struik Foods Europe	Premier Foods	Princes Group	Oriental Food Express	Mr. Lee's Noodles	Orkla Group	Maresi	Hero	Meica
	DACH*	UK*		DACH*	UK*															
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Hunger Breaks, Crosse & Blackwell																				
Kung Fu Food																				
Felix																				
Inzersdorfer																				

## Marketing

1. Highlight plant-based foods	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✗	✗
2. Focus on plant-based foods & meat substitutes on website	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗	✓	✗	✗	✓	✓	✗	✗	✗
3. Highlight plant-based foods & meat substitutes under certain criteria	✓	✓	✓	✗	⊖	✓	✓	⊖	⊖	✓	✓	✗	✗	✗	✗	✗	✓	✗	✗	✗
4. Mention benefits and importance of meat reduction	✓	✓	✓	✗	✗	✓	✗	⊖	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗

## Future Commitment

1. Be part of initiatives / initial programs that promote / highlight meat reduction and/or plant-based products	✓	✓	✗	✗	⊖	✓	✓	⊖	⊖	✗	✓	⊖	✓	⊖	⊖	✓	✓	✗	⊖	⊖
2. Committing to meat reduction approaches and strategies	⊖	⊖	⊖	⊖	⊖	⊖	✗	⊖	⊖	✗	✓	⊖	✗	⊖	⊖	⊖	⊖	⊖	⊖	⊖
3. Committing to fish / seafood reduction approaches and strategies	—	—	✓	✗	⊖	⊖	✓	⊖	⊖	✗	✓	—	⊖	⊖	⊖	⊖	⊖	⊖	—	—
4. Expansion / development of plant-based foods and/or meat substitutes	✓	✓	✓	✓	⊖	⊖	✓	⊖	✓	✓	✓	⊖	✓	⊖	⊖	⊖	✓	✓	⊖	⊖

## Additional

i Response	✓	✗	✓	✓	✗	✗	✓	✗	✗	✓	✓	✗	✓	✗	✗	✗	✗	✓	✗	✗
ii Transparency	✓	✓	✓	✓	✗	✗	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✗

Key: ✓ = Yes ✗ = No — = Not applicable / Not part of product portfolio  
 ⊖ = No information could be publicly found within the allocated research time

\* DACH: Abbreviation for Austria [AT], Germany [DE] + Switzerland [CH]

\*\* UK = United Kingdom

**Disclaimer:** December 2019 till the 30th of June 2020 reflects the careful research effort of FOUR PAWS. Any changes in the assessed companies which took place after the 30th of June 2020 and which may affect the ranking results, have not been taken into account. For more information please don't hesitate to contact: [TheAtlasChallenge@vier-pfoten.org](mailto:TheAtlasChallenge@vier-pfoten.org)



## 5. THE RISE OF PLANT-BASED ALTERNATIVES

Plant-based foods are a booming business. It is not only those following a vegan diet who opt for plant-based products, but also meat eaters, who are driving the increase of meat substitutes. In fact, 95 % of the people who bought a plant-based burger in 2019 were meat eaters.<sup>17</sup> The plant-based meat market is predicted to be worth € 23.6 billion by 2025, according to a new report. Researchers at MarketsandMarkets state the plant-based meat market is currently estimated at € 10.2 billion and is projected to grow at a compound annual growth rate (CAGR) of 15 % in the next 5 years – nearly reaching € 24 billion.<sup>18</sup> Food manufacturers whether start-ups, leading CPG\* companies or the world's largest meat companies, are innovating rapidly in this sector. These next-generation plant-based meat, egg and dairy products are increasingly competitive with animal products on the key drivers of consumer

choice: taste, price, and accessibility. As a result, a growing number of mainstream consumers are opting for plant-based options.<sup>19</sup>

This comes as no surprise since we are seeing an increase of consumers asking for diverse, sustainable, and innovative foods, which offer the same taste and texture without the damaging effects on health and the environment that conventional animal products typically entail. A lot of effort in research and development by plant-based meat manufacturers, in terms of better aroma, texture, longer shelf life and better nutritious profiles, is projected to rapidly expand the growth of global plant-based meat market in the coming years. Companies are entering this high growth market owing to the growing preference for plant-based diets among consumers at a global level.<sup>20</sup>

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\* Consumer Packaged Goods

<sup>17</sup> [www.huffpost.com/entry/eat-less-meat-environmental-effect\\_l\\_5d39d84fe4b020cd99501f2d](https://www.huffpost.com/entry/eat-less-meat-environmental-effect_l_5d39d84fe4b020cd99501f2d)

<sup>18</sup> [www.marketsandmarkets.com/Market-Reports/plant-based-meat-market-44922705.html](https://www.marketsandmarkets.com/Market-Reports/plant-based-meat-market-44922705.html)

<sup>19</sup> [www.gfi.org/marketresearch](https://www.gfi.org/marketresearch)

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At first glance, the concept of meat made from plants is contradictory. Meat comes from animals, so how could it be created by plants? This lies in the advancement of food production, which involves a breakthrough in using certain ingredients. Impossible Foods for example created a bleeding burger by using the iron-containing molecule haemoglobin and the Beyond Burger offers a similar experience using beets. Improved versions of seitan, which is made from wheat gluten, can also create convincing “chicken” products.<sup>21</sup>

It is becoming noticeable that frequently used raw materials are no longer being confined to a specific product category. For example, oats have long been used for milk and are accepted in this category but are now being used in plant-based meat from Finnish brand Gold & Green. Pea Protein, on the other hand, has mainly been used in meat alternatives thus far (e.g. in Beyond Meat burgers), but is now increasingly finding its way into plant-based dairy applications. Only an estimated 10 % of plant protein sources are currently being utilised. With the rise in demand for plant protein, along with the move towards allergen-friendly ingredients, it is likely that a greater variety of plant sources will be used. This could be hemp, algae, fonio, okara\*, duckweed or chickpeas, for example.<sup>22</sup>

If a food product is just as tasty, as affordable and as accessible, whether at a supermarket or at a restaurant, and easy to cook or use in your cuisine, a lot of people are going to buy it.<sup>23</sup>

From our targeted stakeholders, Nestlé offers meat substitutes through their Garden Gourmet range and Unilever, who now owns The Vegetarian Butcher, has a range of meat substitutes as well. Though some of the assessed food producers in the Atlas Challenge offer plant-based ready-made meals containing vegetables and falafel for example, not expanding their product range to include meat substitutes is seen as a missed opportunity in this rapidly expanding market share. Food producers like Nomad Foods, with their Green Cuisine line by Iglo, and Nestlé are on track with jumping on this market share by having both meat substitutes in addition to plant-based products. An increase and expansion of both plant-based products, meat as well as fish substitutes is a positive move in the right direction, however a reduction of animal meat protein will also need to tie in the equation for sustainable success.

It is not just plant-based meat that is increasing in the market. Fish substitutes, although still in infancy stages, are also entering the market steadily. Fish make up 17 % of animal protein consumed globally, and demand is predicted to rise, according to the United Nations Food and Agriculture Organi-



zation, mainly due to rising disposable incomes.<sup>24</sup> Supplying fish sustainably, without exploiting natural resources and harming the aquatic environment, is an ongoing challenge. While in some countries fish farms have humane slaughter guidelines in place, there are no standards for wild fishing.<sup>25</sup>

“Fish killed for human consumption are so numerous and poorly documented that it is impossible to place an exact figure on the number of deaths,” says Eurogroup for Animals. “Non-target animals such as other fish, marine mammals and other living creatures can be caught in vast numbers. These animals are considered ‘bycatch’, with no commercial value, and are often simply cast back into the sea, dead or dying. Their living environments are destroyed, polluted, and encroached upon not only by fishing but by shipping, extractive industries and increasingly, windmills at sea.[...] While the welfare of farmed fish is covered by the EU legislation on rearing, transport and slaughter, the welfare of wild-caught fish is not. However, effective and humane fish slaughter methods are available not only for fish farmers but also for fishermen”.<sup>26</sup>

High-profile investors from the meat industry are betting on plant-based fish and seafood substitutes: German poultry producer PHW has invested in Good Catch, Tyson Foods has invested in New Wave Foods, both signalling their conviction that this category will be the next big thing.<sup>27</sup> From the food producers which were included in the Atlas Challenge ranking, Frosta and Nestlé are also launching plant-based fish products, realizing that this is the next promising food innovation that will infiltrate the market fast.

\* Soy residue is a byproduct of soymilk and tofu production process

<sup>21</sup> [www.globalcitizen.org/en/content/plant-based-meats-trends-list/](https://www.globalcitizen.org/en/content/plant-based-meats-trends-list/)

<sup>22</sup> [https://assets.website-files.com/5d823789d06ccc3a4ca208f6/5e67bccddcb917655aa2ed7\\_Plant-based%20Market%20Data%20Compilation.pdf](https://assets.website-files.com/5d823789d06ccc3a4ca208f6/5e67bccddcb917655aa2ed7_Plant-based%20Market%20Data%20Compilation.pdf)

<sup>23</sup> [www.globalcitizen.org/en/content/plant-based-meats-trends-list/](https://www.globalcitizen.org/en/content/plant-based-meats-trends-list/)

<sup>24</sup> [www.fao.org/3/ca9231en/CA9231EN.pdf](http://www.fao.org/3/ca9231en/CA9231EN.pdf)

<sup>25</sup> <https://techcrunch.com/2019/07/07/fish-replacement-may-be-the-next-big-wave-in-alternative-protein-development/>

<sup>26</sup> [www.eurogroupforanimals.org/what-we-do/areas-of-concern/wild-caught-fish](http://www.eurogroupforanimals.org/what-we-do/areas-of-concern/wild-caught-fish)

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## 6. WHAT'S NEXT?

FOUR PAWS is looking forward to a positive exchange with the food producers who are willing to support the integration of more sustainable food strategies to reduce the amount of meat and fish and increase vegan and plant-based innovative products by signing the commitment letter along the following scopes by 2023:

- Implementing concrete measures on promoting meat and fish reduction in the CSR or separate policy, which includes a clear statement highlighting the environmental and animal welfare benefits of meat and fish reduction\*
- Making sure that one kind of meat or fish is not increased as compensation for reducing another
- Diversify the product range with plant-based meat and fish substitutes and / or vegetarian alternatives and vegan products
- Work on innovative, plant-based products which will replace or remove current meat and fish products and / or ingredients
- Promoting plant-based meat and fish alternatives and plant-based products / dishes amongst consumers to highlight animal- and environmentally friendly food, through platform specific marketing\*\*
- Spreading awareness on the importance of meat and fish reduction, which benefits the planet, through at least two health / environmental / animal welfare initiatives per year\*\*\*



### CONTACT DETAILS

**For further information about The Atlas Challenge or if you wish to be a pioneer in the food industry by reducing meat and fish and increasing innovative plant-based offerings, please get in touch at: [TheAtlasChallenge@vier-pfoten.org](mailto:TheAtlasChallenge@vier-pfoten.org)**

\* For Example: Reduction of total meat and fish content of all ingredients of products by 20% by 2022.

\*\* Depending on existing marketing tools the company utilizes, plant-based / meat substitutes are highlighted using different marketing tools (website, advertisement, Social Media etc.)

\*\*\* Initiatives such as Meatless Mondays, Health / Green week, Veganuary, participating on Earth Day, climate awareness etc.

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# ABOUT FOUR PAWS

FOUR PAWS is the global animal welfare organisation for animals under direct human influence, which reveals suffering, rescues animals in need and protects them. Founded in 1988 in Vienna by Heli Dungler, the organisation advocates for a world where humans treat animals with respect, empathy and understanding. FOUR PAWS' sustainable campaigns and projects focus on farm animals, companion animals and wild animals – such as bears, big cats, orangutans and elephants – kept in inappropriate conditions, as well as in disaster and conflict zones. With offices in Australia, Austria, Belgium, Bulgaria, Germany, Kosovo, the Netherlands, Switzerland, South Africa, Thailand, Ukraine, Hungary, the UK, the USA and Vietnam, as well as sanctuaries for rescued animals in twelve countries, FOUR PAWS provides rapid help and long-term solutions. The work of FOUR PAWS is based on substantiated research and scientific expertise, as well as intensive national and international lobbying. The goal of FOUR PAWS' campaigns, projects and educational work is to inform the general public about animal suffering and to bring about long-term improvements – enshrined in legislation.



FOUR PAWS | Animal Rescue Cambodia



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