

# BUSTED!

**Spanish soy sourcing linked  
to deforestation risk in the  
Amazon and the Cerrado**



MIGHTY EARTH

## **EXECUTIVE SUMMARY**

**4**

## **INTRODUCTION**

**8**

GROWING SOY TRADE BETWEEN SPAIN AND BRAZIL

SOY PRODUCTION AND DEFORESTATION IN BRAZIL

THE CERRADO UNDER THREAT

## **POLICIES AND COMMITMENTS RELATED TO SOY DEFORESTATION AND ZERO CONVERSION OF SEVEN SPANISH RETAILERS**

**14**

CARREFOUR

MERCADONA

ALCAMPO

LIDL SUPERMERCADOS

EL CORTE INGLÉS

GRUPO DIA

ALDI

## **CARREFOUR SPAIN: TRACEABILITY OF CARREFOUR'S PRIVATE LABEL MEAT SUPPLIERS TO SPANISH PORTS**

**25**

ELPOZO

CAMPOFRÍO AND VALL COMPANYS

COSTA FOOD

## **MAIN SOY OPERATORS IN SPAIN AND THEIR LINKS TO DEFORESTATION AND CONVERSION IN BRAZIL**

**36**

KEY PORTS IN SPAIN AND BRAZIL FOR SOY TRADE

TRADERS BUNGE AND CARGILL LINKED TO DEFORESTATION IN BRAZIL

<b>EUROPEAN DEFORESTATION REGULATION AND THE LACK OF TRANSPARENCY OF SOY OPERATORS ON ZERO DEFORESTATION AND CONVERSION</b>	<b>43</b>
---	-----------

---

<b>ALTERNATIVES TO THE IMPACT OF MEAT PRODUCTION AND CONSUMPTION. PLANT PROTEINS AS A SOLUTION</b>	<b>46</b>
--	-----------

---

THE ENVIRONMENTAL IMPACT OF MEAT PRODUCTION

THE HEALTH IMPACT OF MEAT CONSUMPTION

HOW MUCH MEAT DO WE CONSUME?

<b>CONCLUSION</b>	<b>50</b>
-------------------	-----------

---

<b>ANNEX I</b>	<b>53</b>
----------------	-----------

---

<b>REFERENCES</b>	<b>57</b>
-------------------	-----------

---

# EXECUTIVE SUMMARY

A new investigation by Mighty Earth finds that seven of Spain's top retailers –Carrefour, Mercadona, Alcampo, Lidl Supermercados, El Corte Inglés, Grupo Dia and Aldi–have inadequate commitments to stop deforestation linked to soy in the Amazon and Cerrado.

The report found almost 4 million tons of deforestation-risk soy was imported from the Amazon and Cerrado in Brazil into Spain last year for use as animal feed for livestock. These seven supermarkets risk being linked to cases of Brazilian deforestation via their direct and indirect soy supplies, which is used as animal feed, to produce meat products sold on their supermarkets' shelves. Only Aldi, Carrefour and Lidl were identified as having an adequate global deforestation and conversion-free (DCF) policy that includes soy, although little evidence was found of any practical steps or efforts to address this deforestation risk entering Spain. None of the seven retailers publish their data on their global soy footprint, nor the devastating deforestation and conversion impacts of this soy-based animal feed, even though supermarkets account for nearly 50% of processed meat sales in the country.

Spain is a leading producer of pigs and cattle animal feed in Europe, and meat production represents more than 2.5% of Spanish gross domestic product (GDP). We found that 5,049,168 tons of soy was imported into Spain in 2023, with 74% coming from Brazil, mainly from the threatened Amazon rainforest and Cerrado savanna biomes. In May 2023 alone, the deforestation alerts increased by 83%.

## CARREFOUR MEAT PRODUCTS POTENTIALLY LINKED TO DEFORESTATION IN BRAZIL

Since Carrefour has taken some steps globally to curb deforestation linked to its soy sourcing, we investigated the suppliers of Carrefour's private label meat products in Spain. We examined suppliers such as ElPozo, Campofrío, Vall Companys and Costa Food Group and found how their "vertical integration" model (the company's supply chain is integrated or owned by the company) links all of these companies to soy imports with a high risk of deforestation and conversion in Brazil. None of these four companies provide public information of the potential soy-related deforestation risk embedded in their products.

The six-month investigation found that the feed mills owned by these meat companies are mainly supplied through the ports of Barcelona and Cartagena with soy imported by the two giant soy traders, Bunge and Cargill. Together, these two



companies control 90% of soy imports and milling of soy in Spain and are closely linked to the deforestation and conversion of native vegetation in the Amazon and the Cerrado. Our investigation confirmed that the companies of the meat holdings Grupo Fuertes, Campofrío, Vall Companys and Costa Food supply a wide range of meat products sold on Carrefour shelves in Spain, including pork and turkey meat, sausages, cold cuts such as turkey breast, cooked ham, turkey ham, braised ham, bacon, mortadella and cured meats such as: Iberian chorizo, salchichón and ham that may be at risk of being linked to embedded deforestation and conversion risk from Brazilian soy.

## **LACK OF COMMITMENT FROM SOY TRADERS TO TACKLE DEFORESTATION**

In a report published in March 2024, Mighty Earth, by combining deforestation alerts with satellite images and field research, warned of deforestation and conversion linked to soy cultivation—totaling 30,031 hectares in the Amazon and 26,901 hectares in the Cerrado. This study linked farms that produced soy in the 2022 harvest to the major global soy traders: Amaggi, ADM, ALZ Grãos, Bunge, Cargill, COFCO and LDC. The state of Bahia accounted for 23% of the deforestation alerts, the highest rate between September and December 2023 in the Cerrado biome, an area that exported soybeans to Spain that same year.

In a previous report published in June 2023, Mighty Earth found that Bunge was directly linked to the recent deforestation of 11,351 hectares in the Brazilian Cerrado—a tropical savanna frontier that is experiencing increased levels of deforestation and conversion. Furthermore, the same report included five other cases identifying an additional 14,578 hectares of deforestation that also occurred in the Cerrado in 2023 in the Brazilian state of Bahia, where Bunge is the leading soy exporter.

## **SAVE THE CERRADO**

During the COP28 UN climate conference held in Dubai in 2023, eight major global soybean traders—ADM, Amaggi, Bunge, Cargill, COFCO, LDC, Olam and Viterro—committed to stopping soy-linked deforestation in the Amazon, Cerrado and Chaco biomes by 2025 and the conversion of other native primary ecosystems, such lands known as “other wooded land,” by 2030. However, the fine print of this commitment allows these companies to continue converting and destroying native non-forest Cerrado savanna vegetation until 2030.

The EU Deforestation Regulation (EUDR) has confirmed that soy linked to deforestation and forest degradation that occurred after December 31, 2020, will not be accepted on the EU market. This regulation will take effect on December 31, 2024. With less than six months to go, there is a high risk of non-compliance by the seven supermarkets investigated in this report. However, this regulation does not currently include areas such as savannas, grasslands, freshwater wetlands, peat-

lands or coastal wetlands, known as “other wooded land” (OWL), which account for nearly one billion hectares worldwide. This classification precisely includes biomes such as the Cerrado, where deforestation and conversion rates have doubled in the last two years. To prevent further destruction of the Cerrado and other biomes classified as OWL, the EUDR should include them in the planned one-year review.

## **MEAT: A HIGH COST FOR THE PLANET AND OUR HEALTH**

Finally, 90% of the world’s soy is used to produce animal feed and its expansion is driving deforestation in pristine biomes across Latin America. Given the meat industry’s outsized emissions—representing 14% of global greenhouse gases—a significant reduction in our meat consumption will be necessary to meet our climate commitments and avoid the worst impacts of climate change. In addition, the World Health Organization has classified processed meat as “carcinogenic to humans.” In the case of Spain, the Spanish Agency for Food Safety and Nutrition (Agencia Española de Seguridad Alimentaria y Nutrición, AESAN) estimates the ideal meat consumption to be a maximum of three servings per week (one serving equals 100–125 g), or about 15 kg per year, while the average Spanish consumption currently exceeds 32 kg per inhabitant per year. Therefore, to achieve a sustainable and healthy food system, a shift towards a plant-based protein diet appears necessary.

**Mighty Earth urges Spanish traders, retailers and meatpackers to act quickly to eliminate deforestation from their supply chains to comply with the law.**

### **THE SPANISH GOVERNMENT SHOULD**

- Ensure rigorous implementation of the EUDR to be applicable from 30 December 2024.
- Promote a national commitment to zero deforestation and conversion, that goes beyond the applicable legislation.
- Take the necessary political, economic and social measures to guarantee a healthy diet in line with the sustainable and healthy intake recommendations.

**AS PART OF THIS INVESTIGATION MIGHTY EARTH REACHED OUT TO CARREFOUR, MERCADONA, ALCAMPO, LIDL SUPERMERCADOS, EL CORTE INGLÉS, GRUPO DIA AND ALDI IN OCTOBER 2023, INVITING THEM TO FILL OUT THE FOLLOWING QUESTIONNAIRE**

Does your company have any type of initiative to combat deforestation and conversion and what steps are being taken in this regard in relation to soy?

Would your company be willing to work on measures and/or commitments that end the use of soy from deforestation in your supply chain?

Does your company have any transparency tool that allows you to know your suppliers and traders related to soy (and its origin) used in the feeding of meat products marketed by your company?

As of today, does your company have information on the level of relationship between traders who operate in Spain as direct or indirect suppliers of soy intended for animal feed to their meat product suppliers?

Does your company have public information about its meat suppliers?

Ahead publication of this report, Mighty Earth informed the seven supermarkets and the three companies supplying meat products to Carrefour, of the outcome of our investigation asking to confirm their relationship with traders Bunge and Cargill.

To date of publication, Carrefour replied reporting that as part of the Consumer Goods Forum forestry coalition, Carrefour supports the introduction of stronger requirements for soy traders. It further states that by 2021, 100% of key soy importers linked to Carrefour supplies have been assessed and engaged through the Soy Transparency Coalition, webinars and bilateral exchanges.

Aldi Spain also sent us a letter explaining that it is a subsidiary of Aldi Nord and informing of its global commitments regarding deforestation. Also, it indicates the actions of Aldi Nord in Europe in relation to the traceability of commodities used in animal feed, in particular soy.

(See Annex I).

# INTRODUCTION

## GROWING SOY TRADE BETWEEN SPAIN AND BRAZIL

With an 18% market share and boasting a total production of 7.55 million tons last year, Spain is a major force in meat production in the EU.<sup>1</sup> Soy is an essential commodity for feeding livestock in Spain, especially in the case of intensive meat production.<sup>2</sup> Imports of soybeans are higher than that of soybean cake because the country's main importing companies have their own processing plants close to the key Spanish ports, where soybeans are transformed into by-products such as soybean cake or oil.

The report on Brazil by the Economic and Commercial Office of Spain in Brasilia states that in 2021, soy accounted for 46% of Brazil's total agricultural production.<sup>3</sup> Today, two thirds of the soy imported into Spain originates from Brazil and there is a very high probability that Brazilian soy with deforestation-risk feeds Spanish livestock.

According to United Nations Comtrade data, Spain imported a total of 5,049,168 tons of soy in 2023, of which 72% were soybeans, and 27.6% soybean cake.<sup>4</sup> <sup>5</sup> Brazil was the largest exporter of soybeans to Spain (75%), followed by the United States (22%).<sup>6</sup>

PHOTO 1

SOY PLANT  
IN CAMPO  
VERDE, MATO  
GROSSO STATE,  
BRAZILIAN  
CERRADO

February 2024

© Marcus Mesquita



In 2023, Brazil became the largest exporter of soybean cake to Spain (58%), when it traditionally came from Argentina. By comparison, in 2022, 53% of soybean cake imported by Spain came from Argentina and 39% from Brazil.<sup>7</sup>

SOYBEAN IMPORTS TO SPAIN  
(TOTAL AND MAIN COUNTRIES OF ORIGIN)

	SOYBEANS (HS 1201)			SOYBEAN CAKE (HS 2304)			
	Total	Brazil	United States	Total	Argentina	Brazil	United States
2023	3.652.859t	2.732.475t 75%	801.917t 22%	1.917.310t	489.700t 25%	120.389t 58%	85.854t 4%
2022	4.016.273t	3.307.393t 82%	906.826t 22%	2.791.835t	1.478.930t 53%	1.092.795t 39%	1.588t 0,5%

Trade volumes for the years 2022 and 2023; some countries may not have reported yet their trade volumes for 2023. Source: UN Comtrade (2024)

The amounts shown above are in line with data from the Annual Agri-Food and Fisheries Foreign Trade Report 2022 published by the Spanish Ministry of Agriculture, Fisheries and Food, which points out that soybeans (the third imported product by value) and soybean cake are the two products with the highest concentration of origin of their imports, with 66.6% of the total value of soybeans imports originating from Brazil and 27% from the US.<sup>8</sup>

PHOTO 2

SOY  
PLANTATION  
IN PRIMAVERA  
DO LESTE,  
MATO GROSSO  
STATE,  
BRAZILIAN  
CERRADO

February 2024  
© Marcus Mesquita





## SOY PRODUCTION AND DEFORESTATION IN BRAZIL

The soy imported into Spain comes mainly from two biomes: the Amazon rainforest and the Cerrado savanna. According to the latest data from Cesfac, the Spanish Confederation of Compound Animal Feed Manufacturers, on soy imports from Brazil, 2.4 million tons of soy was purchased for feed in 2018, of which 41% came from the Cerrado biome, 31% from the Amazon, 10% from the Atlantic Forest, and the rest from various Brazilian regions.<sup>9</sup>

According to Trase (see below), both the Amazon and Cerrado biomes are the source of virtually all the Brazilian soy used by the Spanish feed industry. Both areas are at high risk of deforestation.

GRAPHIC 1

VOLUME  
OF SOY  
EXPORTED  
TO SPAIN  
BY BIOME  
OF ORIGIN

Source:  
Trase Brazil soy  
flows (2020)

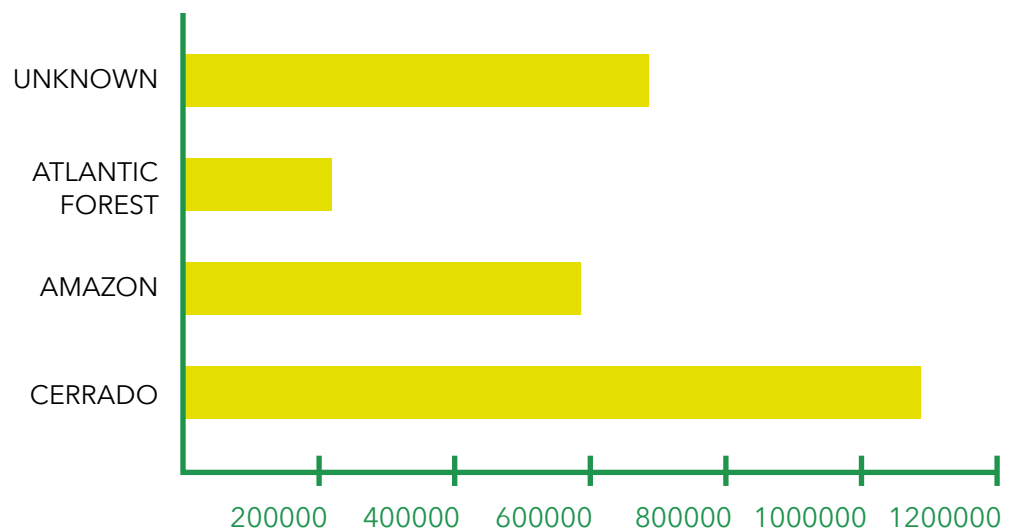


PHOTO 3

FIRES BURN NEAR  
LARGE FARMS IN  
THE CERRADO  
SAVANNA NEAR  
THE CITY OF  
URUÇUÍ, PIAUÍ,  
BRAZIL

August 2023

© Maria Magdalena  
Arrellaga / FARPA

GRAPHIC 2

EXPOSURE TO  
DEFORESTATION  
OF SOY EXPORTED  
TO SPAIN BY BIOME  
OF ORIGIN

Fuente: Trase Brazil  
soy flows (2020)

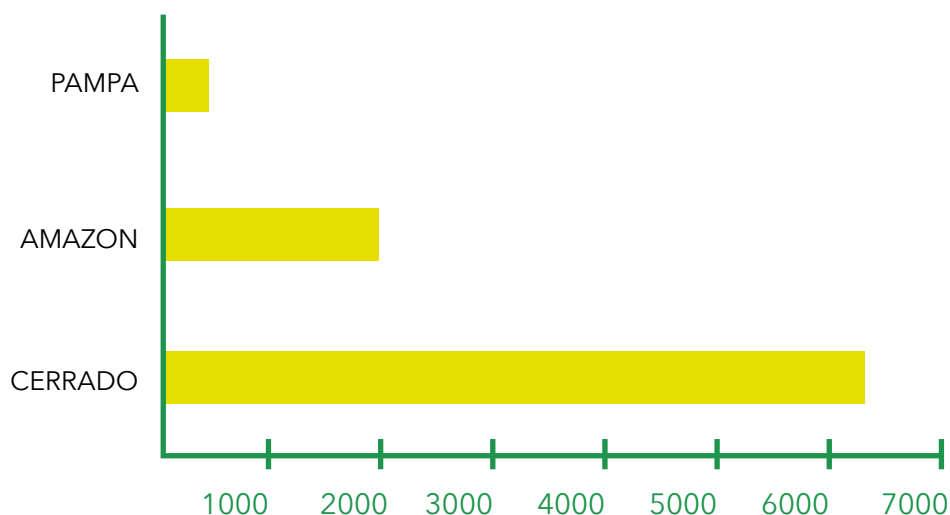


PHOTO 4

DEFORESTATION  
FIRES BURN  
AROUND FARMS  
LOCATED NEAR  
THE CITY OF  
ITAITUBA, PARÁ,  
IN THE BRAZILIAN  
AMAZON

September 2023

© Maria Magdalena  
Arrellaga / FARPA

## THE CERRADO UNDER THREAT

Although less well known in Europe, the Cerrado savanna, in central Brazil, covers more than 200 million hectares, an area the size of France, Italy, Germany, Spain and the United Kingdom combined.<sup>10</sup> This threatened savanna is home to 5% of the planet's biodiversity, including some 12,000 plant and 1,600 animal species, including the jaguar and the maned wolf, which are classified as a "Near Threatened" species by the International Union for Conservation of Nature (IUCN), as well as the giant anteater which is classified as "Vulnerable."<sup>11</sup>

The Cerrado and the Amazon biomes are deeply interconnected, and Brazil depends on water from the Cerrado for its survival, whether for human and agricultural use or for energy production. Eight of Brazil's 12 major river basins, which

provide 40% of the country's freshwater, originate in the Cerrado, whose soil absorbs rainwater arriving from the Amazon and percolates through the deep roots of trees, before being stored in aquifers.<sup>12</sup> The Cerrado has been subject to widespread deforestation in recent decades. By 2022, deforestation in the Cerrado had already increased by 25% compared with the previous year.<sup>13</sup> This largely unprotected jewel of biodiversity is now home to 52% of Brazil's soybean plantation.<sup>14</sup>

PHOTO 5  
WATERWAY  
THROUGH THE  
URUCUI PRETO  
RIVER VALLEY  
IN THE AKROÁ  
GAMELLA  
INDIGENOUS  
TERRITORY.  
THE RIVER  
SYSTEMS OF  
THE BRAZILIAN  
CERRADO,  
KNOWN AS THE  
COUNTRY'S  
"WATER TANK"

August, 2023

©Arrellaga / FARPA



Soy is one of the main drivers of the destruction of the Cerrado, displacing pastures from what has become the front line of advancing deforestation. According to the Brazilian Vegetable Oil Association (Abiove), soy cultivation nearly tripled in Brazil between 2000 and 2021, expanding from 7.4 to 21.4 million hectares.<sup>15</sup> Soy fields now account for nearly 11% of the biome and 52% of Brazil's current soy plantations, according to a survey by the National Supply Company (CONAB), and 50%, according to a survey by Agrosatélite based on satellite images.<sup>16</sup>

Data from Brazil's National Institute for Space Research (INPE), covering the period from January to November 2023, show that deforestation in the Amazon reached 4,977 square kilometers, a decrease of 51% compared to the same period the year before.<sup>17</sup> Meanwhile, deforestation and conversion in the Cerrado reached 7,594 square kilometers, an increase of more than 21% compared to the previous year and the highest level recorded since INPE introduced its current alert system for the region in 2018.<sup>18</sup> In May 2023 alone, there was an 83% explosion in deforestation alerts in the Cerrado compared to the same month in 2002, reaching 1,326 square kilometers.<sup>19</sup>

Land use conversion associated with soybean production in the Cerrado is more significant in the Matopiba region (an acronym that refers to the region covering the Brazilian states of Maranhão, Tocantins, Piauí and Bahia) than in the rest of the Brazilian states. While the conversion of native vegetation in other states was recorded at 0.8% (i.e., 0.12 million ha) between in 2013 and 2021, it rose to 10.5% (i.e., 0.5 million ha) in the Matopiba.<sup>20</sup>

Spain imports Brazilian soy mostly from areas with very high levels of deforestation and conversion. This means that the animal feed industry in Spain faces an extremely high risk that a large proportion of its soy comes from properties that have been subject to deforestation or conversion of native vegetation. It is essential that these major soy companies, as well as meatpackers and retailers, conduct thorough audits of their soy supply chains and urgently implement policies and action plans to ensure that they are using DCF soy.



# **POLICIES AND COMMITMENTS RELATED TO SOY DEFORESTATION AND ZERO CONVERSION OF SEVEN SPANISH RETAILERS**

This investigation conducted by Mighty Earth found that only three of the seven largest retailers in Spain have adequate policies on deforestation and conversion related to their global soy supply chain, and none of them publicly disclose information on their soy footprint, nor on the deforestation and conversion impacts of the animal feed associated with their meat products. In 2023, Spain imported a total of 5,049,168 tons of soy, 74% of which came from Brazil,<sup>21</sup> mainly from the Cerrado and the Amazon biomes. In 2020 Spanish soy imports from Brazil had a deforestation exposure of 8,600 hectares, which means that Spain's soy supply pattern would be responsible for the deforestation of these hectares due to soy agriculture.<sup>22</sup>

According to statistical sources and to the meat and retail industries in Spain, consumers buy meat mainly in supermarkets (49.6%), and private labels represent a share of more than 40 points.<sup>23</sup> Mighty Earth contacted seven of the supermarket chains with the largest presence in Spain—Carrefour España, Mercadona, Alcampo, Lidl Supermercados, El Corte Inglés, Grupo Dia and Aldi—to assess their soy and DCF policies. Soy, in its various forms—such as soybeans, flour, oil, cake—is indirectly present via animal feed in the industrial production of dairy, poultry, eggs, pork, beef and farmed fish.<sup>24</sup> More broadly, soy is responsible for 32.8% of consumption-related deforestation in the European Union (EU).<sup>25</sup> In 2021, the EU imported 31,138,952 tons of soybeans and soybean cake. Spain was the second-largest EU importer of soybeans with 3,577,970 tons (24% of the EU imports) and the largest importer of soybean cake with 2,577,471 tons (or 16% of the EU imports).<sup>26</sup> Soybeans enter Spain mainly through three ports where global soy traders operate: Barcelona, Cartagena and Bilbao.

Only two companies—Grupo Dia and Mercadona—responded to the letter sent by Mighty Earth to the Spanish retailers in October 2023. However, both retailers only expressed their concern about the issue of deforestation: in neither case did they indicate any specific actions or policies to stop or prevent deforestation or conversion in their supply chains, nor did they provide any information about their meat



suppliers and the soy used in animal feed. Mighty Earth also approached two national retailer associations—ASEDAS and ACES—but neither provided any data or information for this study. (See Annex I.)<sup>27 28</sup>

Below is an overview of the seven Spanish retailers' policies on soy and deforestation and conversion based on public documents.

	National or global (DCF) policy	Commitment to eliminate soy from deforestation and conversion in animal feed	KPIs of its commitment to eliminate soy from deforestation and conversion in animal feed	Soy footprint in animal feed in Spain	Public grievance mechanism
Carrefour	<b>YES</b>	<b>YES</b>	NO	NO	<b>YES</b> , global not specific to Spain
Mercadona	NO	NO	NO	NO	NO
Alcampo	NO published	NO	NO	NO	NO
Lidl	<b>YES</b>	NO	NO	NO	NO
El Corte Inglés	NO	NO	NO	NO	NO
Grupo Día	NO	NO	NO	NO	NO
Aldi	<b>YES</b>	<b>YES</b>	NO	NO	NO

Source: Author's own, with information extracted from documents published by the companies analyzed

## CARREFOUR

The French-based Carrefour Group is the second-largest retailer in Spain with a revenue of €10,437 million in 2022 and more than 1,400 supermarkets in the country.<sup>29</sup> In 2010, Carrefour committed to moving towards zero deforestation associated with its supply chains (palm oil, soy, wood and paper, Brazilian beef and cocoa) as part of the Consumer Goods Forum (CGF), a target the retailer failed to achieve, and which was subsequently delayed.<sup>30</sup>

In November 2018, the French government issued a National Strategy to Combat Imported Deforestation (Stratégie nationale de lutte contre la déforestation importée, SNDI) which aims to end imports of unsustainable forest or agricultural

products that contribute to deforestation, including soy, by 2030.<sup>31</sup> In 2020, Carrefour France signed the French Soy Manifesto (Manifeste soja), together with other retailers, to end deforestation associated with soy imports into France.<sup>32</sup>

In 2022, Carrefour presented its “Global Strategy to Protect Forests and Combat Deforestation and Conversion,” which includes a specific section on soy.<sup>33</sup> As part of this strategy, Carrefour globally committed a 2025 DCF soy deadline for foods sold under its private label. This would include raw and frozen products containing chicken, turkey, pork, beef, lamb, salmon, eggs, milk and ground beef. The cut-off date—the date after which deforestation soy would no longer be accepted—was set for January 1, 2020.

Carrefour also indicated that in 2022, the group had a global footprint of 147,584 tons of soybeans.<sup>34</sup> The proportion of soy of “unknown” origin was 73%, while 15% of soy was considered to be at high risk of deforestation, with countries of origin including Brazil, Paraguay, Argentina and Bolivia.<sup>35</sup> Moreover, the analysis carried out by the retailer differentiates the proportion of soy according to the different products at a global level and at a country level, but only for France. Although this is a global policy, there is no information for any country other than France where the supermarket chain operates. Nor was any information provided on the identity of its suppliers, and the volumes or the origin of the soy it uses in its supply chain in France or in any other country. At the end of 2023, in response to the alerts—or grievances—on deforestation and human rights violations in Brazil published by Mighty Earth, among other organizations, the Carrefour Group published its Forest Transparency Platform, a step forward in transparency.<sup>36</sup> On this platform, Carrefour provides information on the deforestation alerts received, as well as information on the actions taken in relation to each alert. While the platform is a welcome step forward in Carrefour’s transparency on specific grievances, the lack of disclosure of Carrefour’s global soy footprint, the origin of soy and of the identity of its suppliers made it impossible to verify any progress on the commitments of its global strategy to protect forests and combat deforestation related to soy.

Regarding the actions mentioned in Carrefour’s Forest Transparency Platform, the following stand out:<sup>37</sup>

Developing at least one “Zero Deforestation” animal product line per country by the end of 2020 (20 channels in total).<sup>38</sup>

In 2021, Carrefour defined sourcing criteria for zero-deforestation soy and published for the first time the percentage of its key products that use zero deforestation soy in France. In 2022, Carrefour committed to expanding the same measure in 2022 to Spain, Belgium, Poland and Romania and to include of the remaining integrated countries in 2023.<sup>39</sup>

However, the company failed to disclose any details that would allow us to know if these actions have been carried out and completed. In the case of Carrefour Spain, which in March 2023 was recognized for the third consecutive year as the only National Ambassador of Forests awarded by the certification body Forest Stewardship Council (FSC),<sup>40</sup> its actions to combat deforestation are limited to a reforestation program in different areas of Spain together with FSC and Mahou.<sup>41</sup> Carrefour Spain has yet to disclose the origin of the soy used to feed its private label meat products sold or outline the work it is doing with its national meat suppliers to meet its global 2025 DCF deadline. While Carrefour has committed to a 2025 DCF deadline through its Forest Transparency Platform and its Strategy to Protect Forest, the company does not appear to have implemented this commitment outside of its French operations and certainly not in Spain.

## ACTION

The Carrefour Group should make a public commitment to eliminate deforestation and conversion from its global group operations by 2025 and make this commitment explicit and clear, leaving no room for ambiguity.

## MERCADONA

Mercadona is the leading retailer in Spain in terms of market share, with more than 1,630 stores across the country and a turnover of €31,041 million in 2022.<sup>42</sup> In its response to Mighty Earth (see Annex I), Mercadona did not provide any information on its direct or indirect sourcing of soy for the feed used in its private label meat products. The supermarket refers to an Environmental Management System.<sup>43</sup> However, this system is based on three pillars: logistics optimization, energy efficiency and waste reduction, without any reference to direct or indirect soy sourcing, or deforestation and conversion of natural vegetation.

Mercadona's website also states that the company is a partner of the Sustainable Development Goals (SDGs), which were adopted by all United Nations member states in 2015, and that it is making "*constant efforts to promote more sustainable practices specifically with SDGs 9, 11, 12, 13, 14, 15 and 17*".<sup>44</sup> However, it does not specify what actions are undertaken to achieve these goals. Of particular interest is the mention of SDG 15—which aims to promote the sustainable use of terrestrial ecosystems, mainly by combating deforestation and soil degradation—is particularly noteworthy. However, in none of the spaces that Mercadona dedicates to environmental information, either on its website or in its 2022 Activity Report,<sup>45</sup> is there any mention of the care of ecosystems, the fight against deforestation or the conservation of biodiversity.



Source: United Nations Development Programme

The section on sustainable production and animal welfare is limited to stating that its animal welfare policy, in relation to food, is intended to ensure that animals are well fed, with no further details on what constitutes an adequate diet, its cost or its environmental impact.

Conócenos ▾ Consejos ▾ Actualidad Atención al Cliente Cuidemos el Planeta ▴ Mercadona IT

Nuestros Hechos Aprende Más Compromiso Sostenible

### 1. GARANTIZAR 'LAS 5 LIBERTADES' DE LOS ANIMALES

El propósito principal de la Política de Bienestar Animal es asegurar que los animales sean criados en unas buenas condiciones que aseguren el cumplimiento de las 5 libertades (5F):

- ✓ **Bien alimentados.** Que los animales no pasen ni hambre ni sed, teniendo siempre acceso a agua potable y a una dieta adecuada para su buena salud y fortaleza.
- ✓ **Entorno confortable.** Que los animales siempre se encuentren en un ambiente adecuado y en un alojamiento cómodo, con zonas de descanso y refugios, con sombras y con una buena calidad del aire.
- ✓ **Sanos y fuertes.** Que los animales gocen de salud y reciban las medidas de atención correctas, basadas en la prevención (cuidando su postura, evitándoles dolores, enfermedades o lesiones), en diagnósticos ágiles y en tratamientos adecuados, en caso de necesitarlo.
- ✓ **Comportamiento natural.** Garantizar que los animales puedan expresar y expresen un comportamiento normal y adecuado; proporcionándoles espacio suficiente en unas buenas instalaciones y en compañía de animales de su misma especie.

Source: Mercadona corporate website

In response to our inquiry, Mercadona stated:

*"As a company we assume our responsibility and work to achieve a sustainable supply chain that allows the conservation of forests and biodiversity."*

However, given that Mercadona currently has no DCF policy, strategy or commitment to ensure that its soy supply chain is free from deforestation or land conversion, we consider its response as merely a statement of intention.

## ACTION

Mercadona should urgently develop a 2025 zero deforestation and conversion policy, including a 2020 deforestation cut-off date, and an action plan applicable to its entire soy supply chain. To improve transparency, Mercadona should publish a full list of its direct and indirect soy and meat suppliers and establish a public grievance mechanism to investigate allegations of deforestation, conversion and human rights violations in its supply chain.

## ALCAMPO

Alcampo achieved a gross turnover of €4,771 million in 2022 and ranks seventh among Spanish retailers in terms of market share. It operates 539 stores, including 80 hypermarkets and small hypermarkets and 459 supermarkets (of which 131 are franchised) as well as 53 gas stations.<sup>46</sup>

Alcampo did not respond to our request for information, so we reviewed its most recent 2022 activity and corporate social responsibility report which has a chapter dedicated to describing its actions for the planet.<sup>47</sup> The report includes actions based on decarbonization, circular economy projects, food waste, plastic use and biodiversity conservation.

Regarding forests, the report states that the retailer has implemented a forest policy since 2017. However, this policy is not publicly available<sup>48</sup> Alcampo also mentions a goal related to the sustainable origin of commodities such as wood or beef from Brazil, which as of 2022 are no longer available in the three supermarkets where it was sold in the Canary Islands.<sup>49</sup> This same report also details the actions carried out in relation to the SDGs. Regarding SDG 15, Alcampo has made sustainability commitments for its wood products, and the elimination of palm oil from its private label products. However, none of these actions guarantee the traceability of soy or promote that its private label meat is fed with DCF soy.



## ACTION

Alcampo should disclose the forest policy mentioned in its 2022 activity and corporate social responsibility report, and extend its commitment to combat deforestation and land conversion to other forest-risk commodities such as soy, and to countries other than Brazil. Alcampo should also publish the environmental and social impacts of these commodities on its supply chain, in addition to developing a DCF action plan and establishing a public grievance mechanism to track allegations of deforestation, conversion or human rights violations.

## LIDL

The German-based retailer Lidl, with 670 supermarkets in Spain, and net sales of €6,079 million generated in the country in 2022, is the third-largest Spanish retailers in terms of market share.<sup>50</sup> Lidl also did not respond to our inquiry about its deforestation and conversion policies or commitments in Spain.

In this case we reviewed Lidl's global purchasing policy for deforestation and conversion-free supply chains as of 2021.<sup>51</sup> This global policy states that the company follows the deforestation and conversion guidelines of the Accountability Framework Initiative (AFi),<sup>52</sup> and adopted January 1, 2020, as the deforestation cut-off date after which it will not purchase raw materials linked to deforestation.

While soy appears among the critical raw materials addressed in Lidl's policy, with the emphasis that it is particularly focused on soy used for animal feed, the only soy-specific commitment is that the soy used in its private label vegetarian or vegan products will be certified and produced in Europe. In no case is it mentioned whether there is any kind of control or traceability protocol for the soy used in the animal feed for the meat, such as poultry, pork or beef, sold under its private label.<sup>53</sup>

## ACTION

Although Lidl demonstrates awareness of the impact of its purchases of commodities on deforestation, Lidl Spain does not have a soy-related (DCF) action plan and lacks transparency on its supplier monitoring and traceability requirements in critical sourcing categories such as the soy and meat supply chain. As it has been done for the UK, The Netherlands and Germany, Lidl should ensure that its 2025 DCF commitment is publicly extended to its global operations. The retailer should also disclose its direct and indirect soy and meat suppliers and establish a public grievance mechanism to track allegations of deforestation, conversion and human rights violations.

## **CERTIFICATION SCHEMES: WHY THEY ARE INSUFFICIENT TO ENSURE THAT THERE IS NO DEFORESTATION OR ECOSYSTEM CONVERSION IN SUPPLY CHAINS**

Given the complexity of some commodity supply chains, voluntary certification schemes have emerged in recent decades as a solution for critical commodities (such as soy, palm oil, cocoa, timber) to claim that they are “responsible” or “sustainable.” They are mainly managed by industries and multinational trading companies, and, despite their existence, deforestation has continued to advance at an alarming rate.

There is no internationally accepted definition of responsible or sustainable soy, so each certification sets its own standards. These voluntary schemes have inadequate criteria or lack guarantees of compliance. Certification alone does not guarantee that a product is deforestation-free, or produced in a truly sustainable manner. Rather, it seems to be a response to the commercial desire for greater market access. Therefore, in many cases, its main value is its communicative effect, which also conceals deforestation.<sup>54</sup>

Generally, soy certification schemes are ineffective due to their shortcomings in relevant aspects such as:<sup>55</sup>

- **Governance and decision-making:** Governing bodies tend to have a large number of representatives from companies in the sector, which hinders their objectivity in decision-making.
- **Examined criteria:** Many certification schemes do not cover minimum criteria such as no deforestation, degradation or conversion of natural ecosystems; protection of high conservation value areas, high carbon stock forests, conservation areas and intact forest landscapes; restoration of converted ecosystems and remediation of social damage; free prior and informed consent, indigenous and community rights; and labor rights.
- **Traceability and transparency:** No certification program provides traceability that allows products to be tracked from the point of production through the entire supply chain.
- **Audits:** Certification schemes only verify the conditions at a specific location at a specific time, allowing companies to prepare for the audit date.

The European Commission recognizes the limited scope of voluntary certification to ensure that there has been zero deforestation, forest degradation and conversion, and the European Union Deforestation Regulation (EUDR), adopted in May 2023, states that *“in order to recognise good practice, certification or other third-party verified schemes could be used in the risk assessment procedure. They should not, however, substitute the operator’s responsibility as regards due diligence.”*<sup>56</sup>

## EL CORTE INGLÉS

El Corte Inglés is one of the largest department store groups in Europe, with food and catering sales of €2,827 million in 2022. El Corte Inglés operates 86 department stores with supermarkets and 42 Hipercor centers dedicated exclusively to food distribution.<sup>57</sup> El Corte Inglés did not respond to Mighty Earth's request for information. Instead, we reviewed its environmental practices through its *Sustainability and Corporate Social Responsibility Master Plan 2021-2025*.<sup>58</sup> The plan does not address biodiversity conservation or the fight against deforestation and conversion of natural ecosystems. In fact, among the issues related to sustainability, it indicates that its business model and strategic principles are aligned with the UN SDG 2030 Agenda. However, in the retailer's public list of impacted SDGs, there is no mention of SDG 15, which relates to terrestrial ecosystems. This contrasts with its commitment to "a carbon-neutral consumption production model" where the company says it has conducted a comprehensive measurement of its Scope 3 emissions which includes all the emissions associated with its value chain, that, as part of its Net Zero Transition plan. But to date, no data is publicly available. While El Corte Inglés discloses the names of its private-label meat suppliers, it does not provide any information on its sourced commodities that are associated with the risk of deforestation or land conversion.<sup>59</sup>

### ACTION

El Corte Inglés should urgently take the necessary steps to accurately assess and mitigate the impacts of its purchases of specific commodities on deforestation and the conservation of global biodiversity, and to develop a policy on this issue. This is essential to achieving its carbon footprint neutrality target by 2050.<sup>60</sup> The company should publish a 2025 policy and action plan on zero deforestation and conversion for forest-risk commodities such as soy, as well as the list of its direct and indirect soy suppliers. It should also establish a public grievance mechanism to track allegations of deforestation, conversion or human rights violations.

## GRUPO DIA

Grupo Dia's net sales in 2022 were €7,286 million, and in the same year reached 5,699 stores in Spain, Argentina, Brazil and Portugal, making it the fifth Spanish retailer in terms of market share.<sup>61</sup>

Grupo Dia responded to our request for information (see Annex I) but limited its response to explaining its sustainability commitments and noting that it will take into account our concerns about deforestation and conversion in its next 2024/2025 Sustainability Plan. Its website mentions a current Sustainability Plan which states

that the company has started a due diligence process on four key commodities (palm oil, soy, beef and paper) to gain a broader understanding of its supply chain, which may indicate a low level of insight into the impact of its supply chain on deforestation.<sup>62</sup> It also states that 85% of its private label soy products are sourced from producers in non-risk countries, but it is unclear which products these are, or which countries Grupo Dia considers as “non-risk.” Regarding its commitment to work to mitigate the negative impacts of its soy supply chain, no targets, indicators or action plans are provided.

The 2022 annual report mentions Grupo Dia’s contribution to the SDGs, particularly to commodity sustainability, but it does not specify how this contribution will be made.<sup>63</sup>

## ACTION

While Grupo Dia has acknowledged the importance of the role its soy supply chain plays in the well-being of the planet, it should urgently start developing a policy and establish a 2025 DCF commitment. It should also require from its suppliers to guarantee that their products are DCF. It should also establish a public grievance mechanism to track allegations of deforestation, conversion or human rights violations.

## ALDI

In 2022, the German-based retailer Aldi had a revenue of €1,707 million and operated 435 supermarkets in Spain. It ranks eighth among Spanish retailers in terms of market share.<sup>64</sup> Aldi Spain did not respond to our inquiries; subsequently we reviewed its most recent corporate responsibility policy, which mentions only one critical commodity, wood, which it claims is certified.<sup>65</sup>

The 2021 sustainability report of Aldi Nord, to which the Spanish subsidiary belongs, includes some supply chain targets related to deforestation, information on its suppliers, human rights impacts, and grievance mechanisms.<sup>66</sup> However, the report does not provide any specific information on what actions are being taken to meet these targets, nor does it provide a breakdown by product line or importing country, or information on how their grievance mechanism works. In the same sustainability report, it is stated that since August 2021, the group requires all suppliers of fresh meat, frozen and refrigerated meat products and fresh eggs to exclusively use deforestation-free soy for the production of Aldi Nord products.<sup>67</sup> Again, this commitment is not accompanied by any information or indicators on the degree of compliance.

In 2022, Aldi Nord published its Position Statement on Deforestation and Conversion-free Supply Chains, in which it advocates the application of a robust legislation against imported deforestation in the EU, and sets January 1, 2020, as the cut-off

date from which the raw materials it purchases cannot come from deforested areas. The policy includes a commitment to eliminate deforestation and conversion of natural ecosystems from its high priority supply chains—palm oil, timber and paper, wood-based packaging, cocoa, banana, beef, coffee, coconut, soy and sugar cane—by December 31, 2030.<sup>68</sup> Regarding soy, Aldi committed that 100% will be either certified by a deforestation-free standard or from deforestation-free origins by the end of 2025.<sup>69</sup> Throughout the document, Aldi breaks down the names of the organizations and certification bodies that it works with, but offers little information about its global soy footprint and how it works to ensure full monitoring and traceability of its supply chain.

Many of Aldi's promises are based on soy certification schemes that can help identify good practices or assess risks, but they are not comparable to full traceability of the origin of the products and therefore cannot guarantee that the commodities used are free of deforestation or conversion risk.

## ACTION

Aldi needs to improve its DCF policy with a 2020 cut-off date and a 2025 target for legal and illegal deforestation and conversion. In addition, its commitments should not be based on certification schemes but on full monitoring and traceability down to the farm level. It should also increase its level of transparency by disclosing the list of its direct and indirect soy suppliers and develop an effective public grievance mechanism for possible cases of deforestation, conversion or human rights violations in its supply chain. Since its commitments are global, Aldi should provide information on all countries in which it operates.

From the analysis of the non-financial reports and the supply chain policies of the seven major retailers in Spain, we can conclude that deforestation and conversion-embedded soy as part of animal feed is not recognized as an issue to which the sector is paying sufficient attention or priority to. Even these global retailers don't seem to have consistent commitments across the different European countries in which they operate.



# CARREFOUR SPAIN: TRACEABILITY OF CARREFOUR'S PRIVATE LABEL MEAT SUPPLIERS TO SPANISH PORTS

It is essential that Spanish retailers have more information on the extent of their exposure to indirect deforestation and conversion through the animal feed used for their private label meat products. In the previous section, our analysis showed that Carrefour stood out from the other retailers in terms of global policies and commitments to achieve DCF supply chains. In April 2024, Carrefour informed us that following its supplier's homologation policies, it is asking for soy traceability and whether their suppliers have certifications. In addition, it also claims that action plans are being developed with these suppliers to make progress on the use of deforestation-free soy. We therefore investigated some of Carrefour's private label meat product suppliers and their relationship with Bunge and Cargill, the largest soy importers in Spain.

Specifically, we looked at Carrefour Spain's four main meat suppliers: ElPozo, Campofrío, Vall Companys and Costa Food, all with a turnover of more than €2,000 million. Most of them follow a production model based on vertical integration: the meat suppliers provide the animals, the feed and the healthcare assistance to the livestock farmer. Following this model, these business groups are currently present in the entire production chain, from the production of animal feed, to the breeding and manufacturing of meat products, to the sale through commercial brands recognized by the public or through large private labels such as Carrefour.

## ELPOZO

According to Carrefour's website, ElPozo supplies and packages pork and turkey for Carrefour's private label El Mercado, with products such as turkey breast, extra cooked ham, turkey ham, extra braised cooked ham, bacon strips, or mortadella with olives.<sup>70</sup>

As their labels indicate, these meat products are packaged for Carrefour by Sedi-asa, which, like ElPozo and Procavi, is part of Grupo Fuertes.<sup>71</sup>

Carrefour corporate website |

<https://www.carrefour.es/supermercado/mercado-frescos/carniceria>



PHOTO 6

EXAMPLES OF  
PRODUCTS  
MANUFACTURED  
AND PACKAGED  
BY ELPOZO FOR  
CARREFOUR



Grupo Fuertes is one of the most important business conglomerates in Spain, managing around 20 companies organized into two major business areas, with a strong agri-food core and diversified investments,\* and employing over 8,000 people.<sup>72</sup>

The agribusiness companies that make up the main part of the Grupo Fuertes holding carry out their activities in different food sectors. Cefusa, ElPozo, Procavi (turkey meat) and Sediassa (food fractioning and packaging for distribution) are the companies related to the meat sector.

**Cefusa** focuses on the breeding and fattening of white and Iberian pigs, as well as beef. It is the main livestock supplier to ElPozo Alimentación, a meat company also owned by Grupo Fuertes. Its model integrates livestock facilities and feed mills located in several municipalities in southeastern Spain. One of these feed mills is very close to the Escombreras dock at the port of Cartagena, Murcia, where the soy trader Bunge owns and operates facilities, and which imported 895,641 tons of soy in 2022, the total amount of soy entering that port that year.<sup>73</sup> Between January 2022 and January 2023, at least 608,804 tons of soy, corresponding to 11 shipments that entered through the port of Cartagena, came from Brazil, according to data provided by the international shipping trade platform Panjiva.<sup>74</sup> Local sources in the sector, who requested anonymity, confirmed to Mighty Earth that the transfer of trucks with soy from the dock of the port of Cartagena to the feed manufacturing facilities in Alhama de Murcia, owned by Grupo Fuertes, is frequent.<sup>75</sup>

**Sediassa Food** is a company owned by Grupo Fuertes which specializes in the slicing and packaging of food ready to take away, such as meat delicatessen and bread crumbed meat, with a production capacity of more than 70 million kilos of meat per year.<sup>76</sup>

**Procavi**, a leading company in the turkey meat market, has a national market share of 52%, ranking fourth in Europe, and eleventh worldwide.<sup>77</sup> Procavi's annual production capacity reaches 129,000 tons per year, equivalent to almost 12 million processed turkeys. It has developed a comprehensive management system for its activity which includes hatchery, feed mills, breeding plants, farms, quality control laboratory, slaughter and meat preparation rooms. It is also responsible for the marketing and distribution of its products. In addition, it operates facilities for breeding and fattening birds, three compound feed mills, a comprehensive incubation center, a bird reproduction center and a turkey meat processing center.<sup>78</sup>

---

\*. A diversified business conglomerate, Grupo Fuertes includes holding companies that do not operate in the agribusiness sector. Among there are the real estate company Profusa and the petrochemical company Aemedsa stand out. In the leisure and entertainment sector, it owns Terra Natura Benidorm and Murcia, two new-generation zoological and aquatic parks.



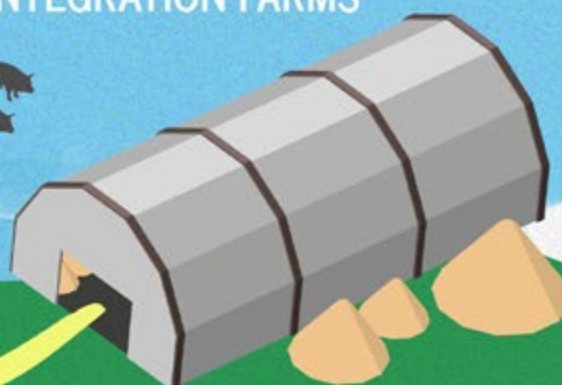
# SOY SUPPLY CHAIN FROM PRODUCTION ORIGIN TO FINAL MEAT PRODUCT PROCESSED BY ELPOZO FOR CARREFOUR



1. SOY ARRIVES IN BUNGE'S FACILITIES AT CARTAGENA PORT



2. CEFUSA FEED FACTORY AND INTEGRATION FARMS



3. SEDIASA, PROCAVI AND ELPOZO MEAT PROCESSING PLANT



4. MEAT PRODUCT TO CARREFOUR SUPERMARKET



## CAMPOFRÍO AND VALL COMPANYS

Several press releases state that Campofrío Food Group supplies meat products to Carrefour's private label.<sup>79</sup> It is also one of the suppliers that has signed the Carrefour Food Transition Pact.<sup>80</sup> With this pact, the signatories commit to providing consumers with healthy choices and easy access to clear and reliable product information, guaranteeing a food system based on the reduction of additives, salts and sugars while respecting the climate and the environment.<sup>81</sup> Campofrío supplies Carrefour with a wide range of sausages, such as Big Baviera, Viena, Chicken Viena, Cheese Viena, Ham Viena, Turkey Viena, Hot Dog and Big Hot Dog. All these products have been seen in supermarkets in Madrid, Las Rozas and Segovia in March and April 2024.

PHOTO 7  
EXAMPLES OF  
PRODUCTS  
MANUFACTURED  
AND PACKAGED  
BY CAMPOFRÍO  
FOR CARREFOUR



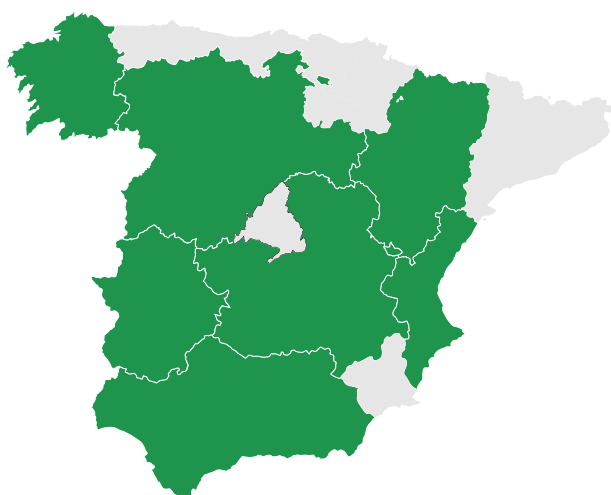
**Campofrío Food Group** is a multinational subsidiary of the Mexican company **Sigma Foods**. It was founded in the 1950s, in Burgos, in the north of Spain, and is based in Alcobendas, in the Community of Madrid. Today, this company is the European leader in the processed meat products sector, with a turnover of €1,780 million in 2022.<sup>82</sup> As stated in its corporate communication, Campofrío, in Burgos, boasts one of the most modern food complexes in Europe, with an annual



meat production capacity of over 200,000 tons, exporting its products to more than 30 countries.<sup>83</sup> It does not have any farms of its own, but purchases meat from various third-party slaughterhouses, many of which source animals from the integrated farms of Agrocesa Agroturia, part of Vall Companys.<sup>84</sup> Our six-month investigation found that Vall Companys' logistics firm, Transegre, usually collects soybeans with its own trucks at the Cargill and Bunge facilities in the Port of Barcelona. The Port of Barcelona's 2022 annual report shows that it received 4,103,708 tons of soybeans that year, about two thirds of which came from Brazil.<sup>85</sup>

The Sigma Group 2022 Sustainability Report, the most recent report available, does not mention any policy of DCF supply of commodities.<sup>86</sup> The areas where Agrocesa Agroturia operates and those of the Campofrío Food Group, as well as their strategic facilities, are very similar, as shown on the following map.

AGROTURIA AGROCESA



Source:  
<https://agrocesa.com>

CAMPOFRÍO



Source:  
<https://www.campofrio.es/nuestros-centros.html>

The Vall Companys Group is a leader in the agribusiness sector and the largest agri-food producer in Spain. It is a family-owned company with a comprehensive production system that is highly vertical and covers all stages of the value chain, from the origin of the product to the end consumer. Its activities are carried out through 40 companies located in Spain and Portugal, including flour mills, feed mills, meat production centers, as well as pork, poultry and beef slaughterhouses.<sup>87</sup> It also has its own pharmaceutical laboratories, insemination centers, incubators and the aforementioned logistics company, Transegre. In 2022 the Vall Companys Group reported a turnover of €3,010 million.<sup>88</sup> It bred more than 5 million pigs; 153 million chickens; produced 481,000 tons of pork meat; 355,000 tons

of chicken meat; 18,400 tons of beef; 22,300 tons of cured ham; 19,000 tons of processed meat and 2,470,000 tons of feed, with 2,600 associated farms: 1,577 pig farms and 929 poultry farms.<sup>89</sup> It also operates nine feed mills in Spain.<sup>90</sup> Among the raw materials used by Vall Companys for animal feed in 2022 are 324,759 tons of soybean cake.<sup>91</sup>

**Agrocesa Agroturia** is a fundamental part of the integrated structure of the Vall Companys Group. It produces soy-based feed and has a network of more than 646 livestock farms throughout Spain. It produces 2,350,000 pigs and 800,000 tons of feed per year.<sup>92</sup>

Vall Companys published its strategic sustainability plan for 2030, and mentions its sustainable supply chain goals in the section on ethical and responsible management.<sup>93</sup> The company's goal is to ensure that 100% of its soy is responsibly sourced and that 100% of its suppliers are sustainable. To this end, Vall Companys states that it will encourage all its suppliers to guarantee that their value chain is responsible and sustainable. The company is starting to certify its suppliers according to sustainability criteria, both for domestic and international commodities.<sup>94</sup> However, it does not indicate what the criteria for certification are, what the starting situation of its suppliers is, how it will work with its suppliers, or how progress will be measured.

In its sustainability strategy plan, Vall Companys recognizes the high impact of soy, and says regarding the supply of this commodity: "We have therefore set the following objectives: reducing the dependence on soy in feed by promoting the viable use of alternatives," without specifying what the alternatives are, nor the key indicators to achieve it. The company adds: "To ensure that, by 2030, all soy is sustainable and from non-deforested areas".<sup>95</sup> This implies that they are currently unable to guarantee that the soy used for their feed is not coming from deforested areas.

Like grain traders Bunge and Cargill, the Vall Companys Group is a member of the Round Table for Responsible Soy (RTRS), which certifies the sustainability of soy through a credit system. Given the limited guarantees offered by voluntary certification schemes, we believe that the credit system is not sufficient to guarantee that the soy used by Vall Companys in its feed is deforestation and conversion free.<sup>96</sup>



# SOY SUPPLY CHAIN FROM PRODUCTION ORIGIN TO FINAL MEAT PRODUCT PROCESSED BY CAMPOFRÍO FOR CARREFOUR

1. SOY EXPORTED FROM BRAZIL TO SPAIN

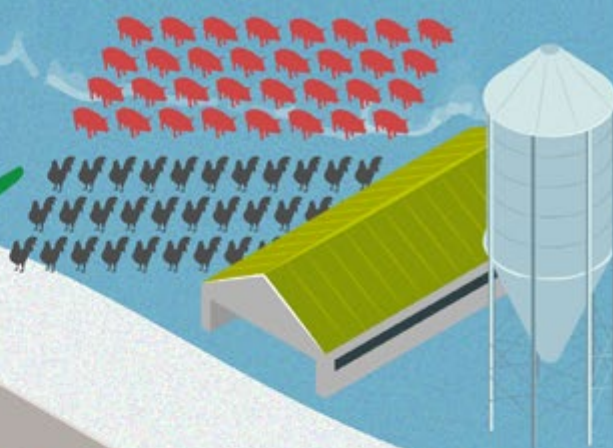


2. TRANSEGRE PICKS UP SOY AT THE PORT OF BARCELONA AT BUNGE AND CARGILL'S FACILITIES



Vall Companys

3. TRANSEGRE TRANSPORTS SOY TO AGROCESA AND AGROTURIA FEED FACTORIES TO SUPPLY INTEGRATED FARMS



Vall Companys



AGROCESA



AGROTURIA

4. CAMPOFRÍO FACTORY



5. MEAT PRODUCT TO CARREFOUR SUPERMARKET



Carrefour

## THE ROUND TABLE FOR RESPONSIBLE SOY AND ITS CREDIT SYSTEM<sup>97</sup>

RTRS certification is one of the most recognized in the industry. Buyers of 100% RTRS soy claim to be supporting sustainable production through this certification.

Most RTRS soy sales are based on “credits” rather than physical traceability, and buyers do not know if RTRS soy producers are deforesting or destroying ecosystems. The credit system is used to incentivize farmers to produce soy responsibly, but the price farmers receive for the credits (about 0.5% of the soy price) is too low to compensate them for not deforesting land for production.<sup>98</sup>

In addition, the RTRS certification scheme contains other loopholes that undermine its reliability:

- Producer audits are conducted only on a producer’s certified plot of land, and not at the level of the entire producer property or company.
- The commodity can be mixed with a non-certified product, rather than being segregated or individually tracked through the supply chain. This practice allows deforestation-related products to be green-labelled.
- Downstream companies that have purchased volumes of a non-certified commodity on the open market can purchase equivalent volumes of credits, allowing them to claim that they are supporting certified production.
- The RTRS has a grievance procedure, but its lack of transparency makes it impossible to say how complaints are recorded and addressed.

## COSTA FOOD GROUP

**Costa Food Group** is a key meat supplier to Carrefour, according to the commitment ratified during the celebration of the Carrefour Show in May 2023, where Carrefour signed an agreement with this company to be part of its *Círculo de Calidad* brand.<sup>99</sup>

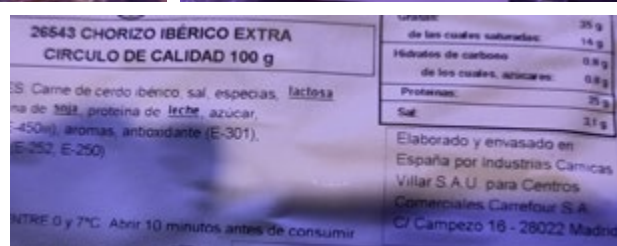
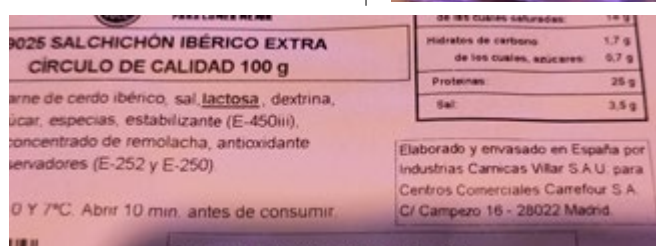
Among the Costa Food Group meat products available at Carrefour are Extra Iberian Chorizo and Extra Iberian Salchichón, both bearing the Carrefour *Círculo de Calidad* label (see photos below), produced and packaged for Carrefour stores by *Cárnicas Villar SAU* (part of Costa Food Group).

**Costa Food Group** is a family business founded in the 1960s. It owns the popular brands Casademont, *Cárnicas Villar*, Roler, Embutidos La Nuncia, Aviserrano, La Alegría Riojana and Juan Luna. Its history is linked to *Piensos Costa* in Fraga (Huesca) in 1966, as the company began its activity with the purchase and sale of cereals and, since then, has followed models of integration, expansion and growth that have allowed it to consolidate in the national and European agri-food sector.



PHOTO 8

EXAMPLES  
OF PRODUCT  
MANUFACTURED  
AND PACKAGED  
BY COSTA FOOD  
FOR CARREFOUR



The Costa Food Group operates in 107 countries and has an annual turnover of €2,000 million.<sup>100</sup> It also operates feed mills in Fraga and Huesca (Aragon), Artajona and Caparroso (Navarra), and Guadix (Andalusia).<sup>101</sup>

**Cárnicas Villar** has two production plants, the first one located in Los Rábanos (Castilla León), and the other in Burguillos del Cerro (Extremadura). The main plant in Los Rábanos has 47 curing rooms for hams and shoulders and 28 curing rooms for cold cuts, as well as an independent building for the processing and slicing of products.<sup>102</sup> At the Burguillos del Cerro plant, all the production processes for Iberian meat products are carried out, many of which have the “Dehesa de Extremadura” Denomination of Origin seal. It also offers products derived from white and Iberian pigs, which it also markets in Europe, Central and South America, Asia and Oceania.

From its feed mills, Costa Food Group supplies more than 850 integrated farms located in Aragon, Catalonia, Navarre, Extremadura, Castile and León, Castilla-La Mancha, La Rioja, the Basque Country and Andalusia, with Aviserrano operating 400 farms in Andalusia, Murcia and Extremadura.<sup>103</sup> It has its own fleet of trucks.<sup>104</sup> According to sources interviewed in January 2024, the Port of Barcelona is one of the ports where Costa Food Group usually collects soy. Bunge and Cargill have facilities in this port, which received about 4,103,708 tons of soybeans in 2022, about two thirds of which came from Brazil.<sup>105</sup> Other ports from which Costa also receives soy supplies, according to sources close to the Fraga feed mill,<sup>106</sup> the Port of Tarragona, where some 9,563 tons of soybeans entered in 2022, is one of the ports where the Costa Food Group collects soy.<sup>107</sup>



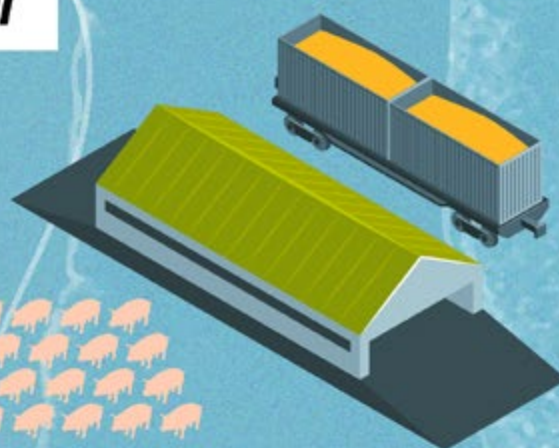
# SOY SUPPLY CHAIN FROM PRODUCTION ORIGIN TO FINAL MEAT PRODUCT PROCESSED BY COSTA FOOD FOR CARREFOUR



1. SOY PRODUCED IN BRAZIL EXPORTED TO SPAIN BY BUNGE AND CARGILL



2. COSTA FOOD PICKS UP SOY AT BUNGE AND CARGILL'S FACILITIES AT THE PORT OF BARCELONA



3. COSTA FEED FACTORIES TO INTEGRATED FARMS



4. FÁBRICA INDUSTRIAS CÁRNICAS VILLAR



5. MEAT PRODUCT TO CARREFOUR SUPERMARKET



# MAIN SOY OPERATORS IN SPAIN AND THEIR LINKS TO DEFORESTATION AND CONVERSION IN BRAZIL

## KEY PORTS IN SPAIN AND BRAZIL FOR SOY TRADE

Although soy enters Spain through a number of key Spanish ports, we have chosen to focus in this report on those with the largest volumes of soy, and which in most cases coincide with the presence of the infrastructure of the top soy traders, Swiss Bunge and US Cargill.

TONS OF SOY UNLOADED  
IN THE MAIN SPANISH PORTS IN 2022

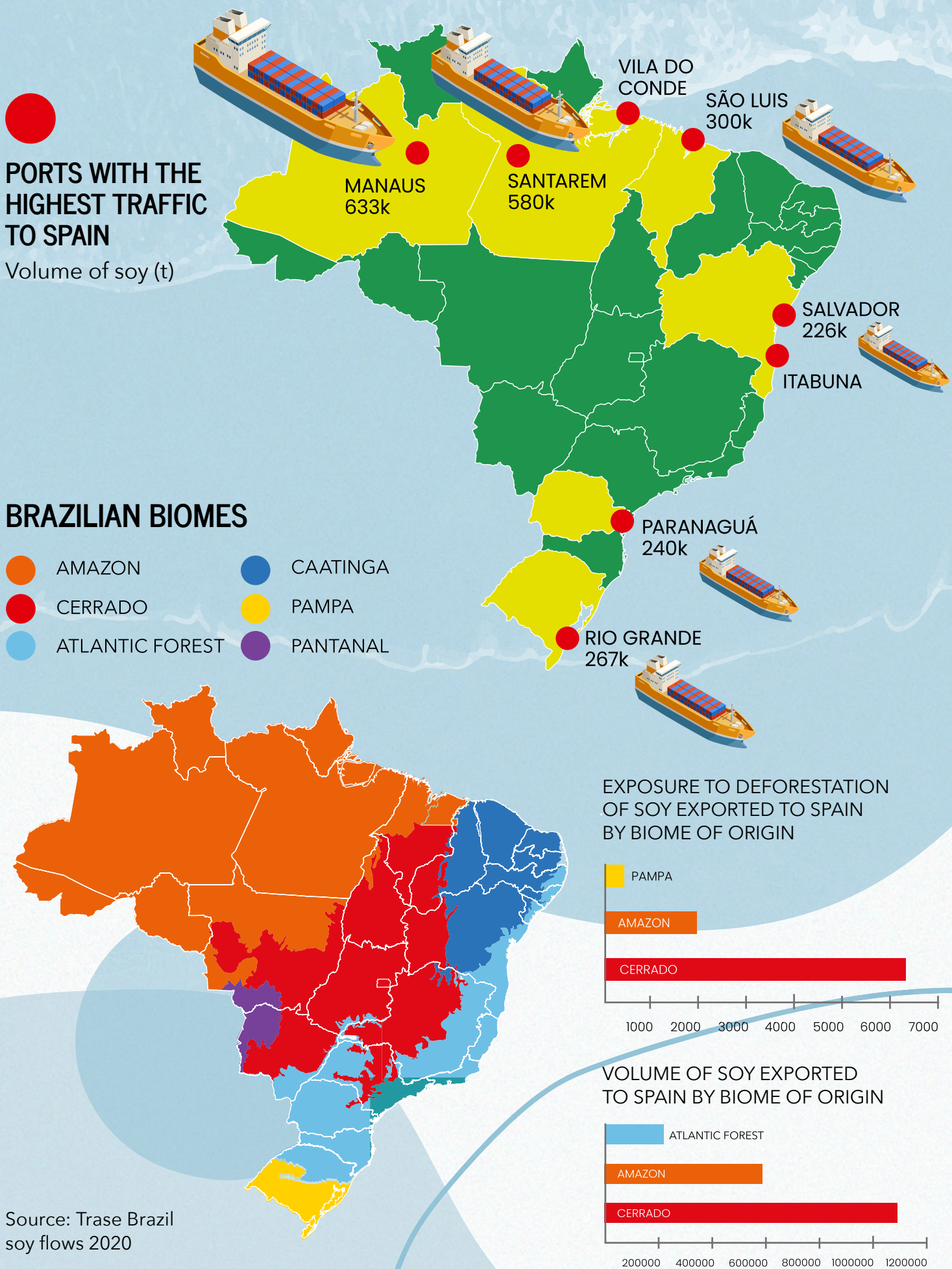
PORT	SOY IMPORTS 2022 (tons)
Barcelona	1.370.821
Cartagena	895.641
Bilbao	929.404
**Canary Islands	19.339
Tarragona	9.563
Marín	9.119
A Coruña	6.463

Source: State Port Authority (2022)<sup>108</sup>

\*Port of Las Palmas de Gran Canaria



# ORIGIN OF BRAZILIAN SOY EXPORTED TO SPAIN (BIOME AND PORT OF SHIPMENT) AND THEIR EXPOSURE TO DEFORESTATION



According to Panjiva's latest shipping trade data, approximately 34 shipments of soybeans and 23 shipments of soybean cake were delivered from Brazil to Spain in 2023, mainly through the Spanish ports of Barcelona, Cartagena and Bilbao.<sup>109</sup>

Barcelona accounts for nearly 50% of Spain's soy traffic, and is one of the main supply points for the feed industry in Catalonia and Aragon, where companies such as Vall Companys and Costa Food Group, among others, have many facilities. The port of Cartagena is also one of the main entry points for soy beans from Brazil to Spain, with only one known buyer, Bunge.<sup>110</sup> From this port, the feed industry in Murcia and companies such as Cefusa are supplied, with Cefusa being the Grupo Fuertes company in charge of feed production and feed supply to the group's integrated farms.

Sourcing patterns in soy supply chains tend not to vary significantly from year to year, largely due to the well-established infrastructure of storage and processing facilities.<sup>111</sup> For this reason, we compared the information available on the Trase deforestation trade risk platform for 2020 with the most recent shipments published on the Panjiva shipping platform. We found that the ports of origin in Brazil with the highest traffic to Spain are still Paranaguá (Paraná) and Rio Grande (Rio Grande do Sul), both located in the Atlantic Forest biome; Vila do Conde (Pará) together with the inland ports of Manaus (Amazonas) and Santarém (Pará) located in the Amazon; Itabuna (Bahia), Salvador (Bahia) and São Luis (Maranhão) in the Cerrado biome.<sup>112</sup>

## **TRADERS BUNGE AND CARGILL LINKED TO DEFORESTATION IN BRAZIL**

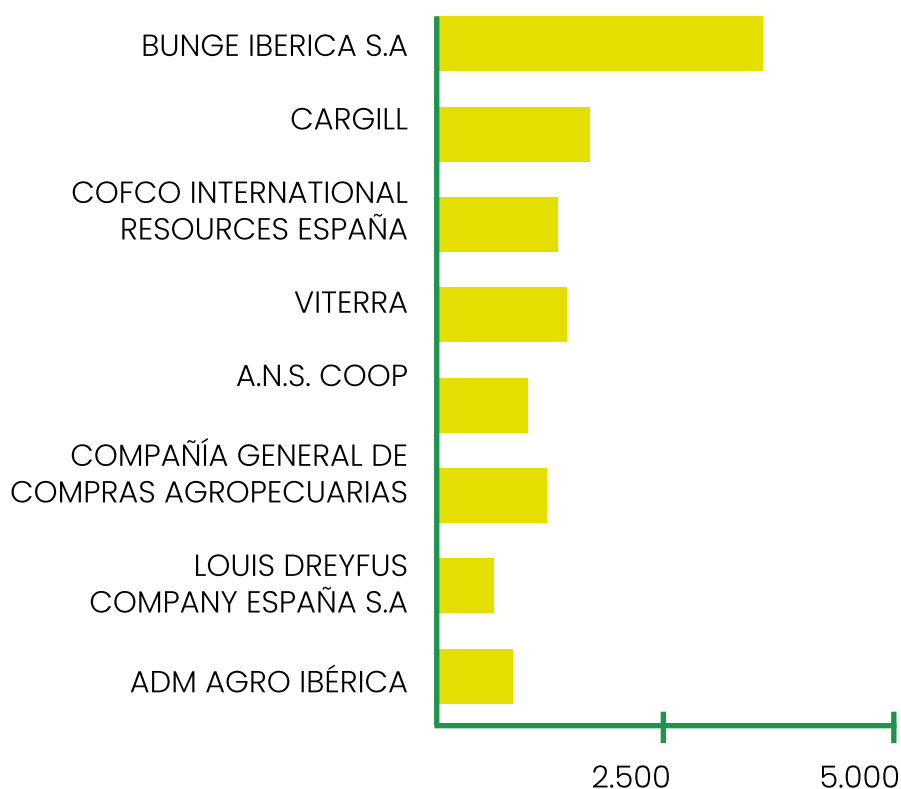
A recent report by the European Feed Manufacturers' Federation (FEFAC) found that Spain, Germany, and France continue to hold the top positions in soy compound feed production within the EU. Spain leads in both cattle and pig feed production, with 9.1 million tons and 12.9 million tons respectively, while France maintains its dominance in poultry feed production with 7.7 million tons.<sup>113</sup> In 2022, total feed production in Europe reached 37,556,764 tons, requiring the use of 4,676,683 tons of soybeans in different variants, among other raw materials.<sup>114</sup>

Two of the multinational soy giants, Bunge and Cargill, control a significant portion of the world grain market, and in Spain they process millions of tons of imported soybeans to meet the voracious demand of the animal feed sector. They are a crucial link in understanding the soy supply chain with an indirect presence in the meat sold in Spain by major retailers. Bunge and Cargill ship 98% of the soy that enters Spain, mainly through the ports of Bilbao, Barcelona and Cartagena, where their milling facilities are located.<sup>115</sup> Bunge and Cargill established themselves in Spain in the 1960s, and by the mid-1970s, controlled 90% of the total import, milling and production of feed.

Today, their turnover accounts for almost 45% of the sector in Spain.<sup>116</sup>

GRAPHIC 3  
REVENUE OF THE  
MAIN WHOLESALE  
COMPANIES OF  
CEREALS, RAW  
TOBACCO, SEEDS AND  
ANIMAL FEED IN 2022

Source: Statista (2024)



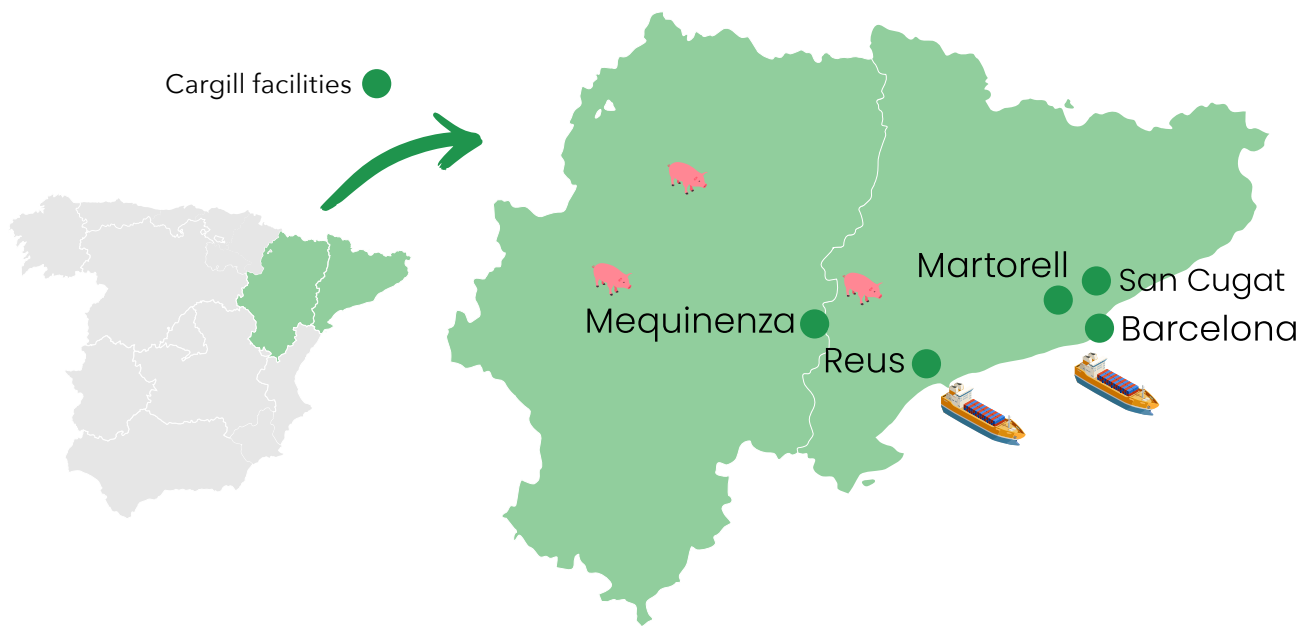
## CARGILL

US soy giant Cargill operates in Spain through its sole legal entity, Cargill SLU, and employs 2,140 people who work in its different facilities across the country: <sup>117</sup>

- San Cugat del Vallès (Catalonia): headquarters.
- Barcelona (Catalonia): Facility dedicated to the grinding and extraction of soybean flour and oil.
- Mequinenza (Aragon): Two plants dedicated to the manufacture of animal feed, concentrates and premixes.
- Reus (Catalonia): Facility dedicated to the grinding and extraction of oil from sunflower seeds and the refining of corn and sunflower oil.
- Martorell (Catalonia): Facility dedicated to the manufacture of starches and starchy products from corn.

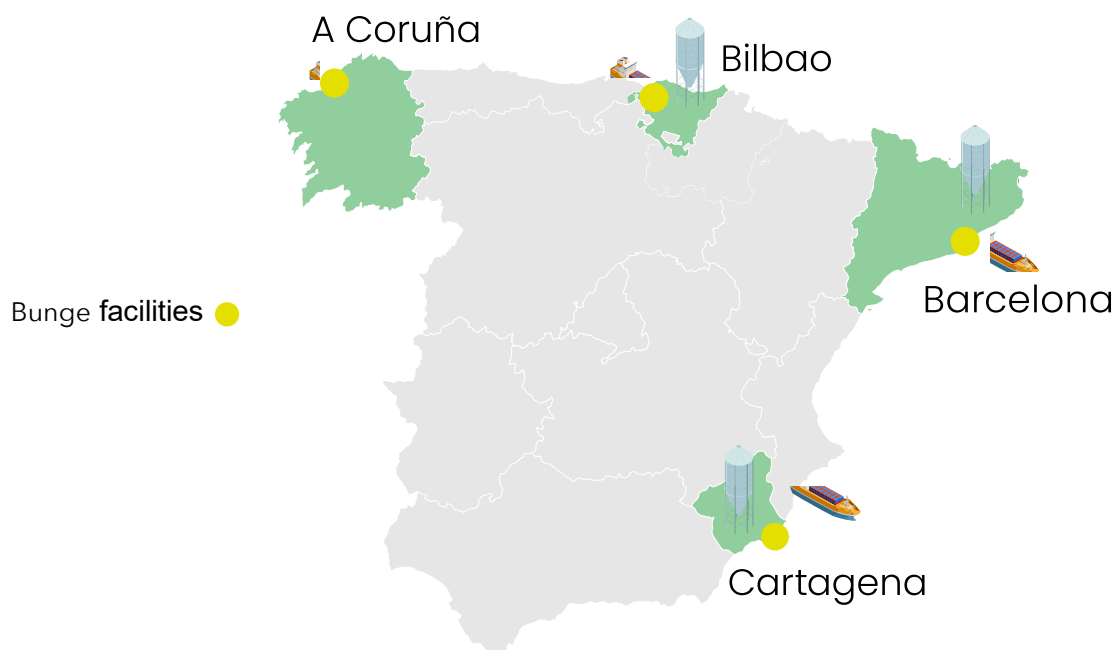
Cargill has an important presence in the ports of Barcelona and Tarragona, and the location of its factories in Catalonia and Aragon is directly related to their proximity to the bulk of livestock activity, the pig farms of Lleida, Huesca and Zaragoza, in order to reduce its logistics costs. As indicated in its non-financial information, Cargill used 760,232 tons of soybeans in Spain in 2022.<sup>118</sup>



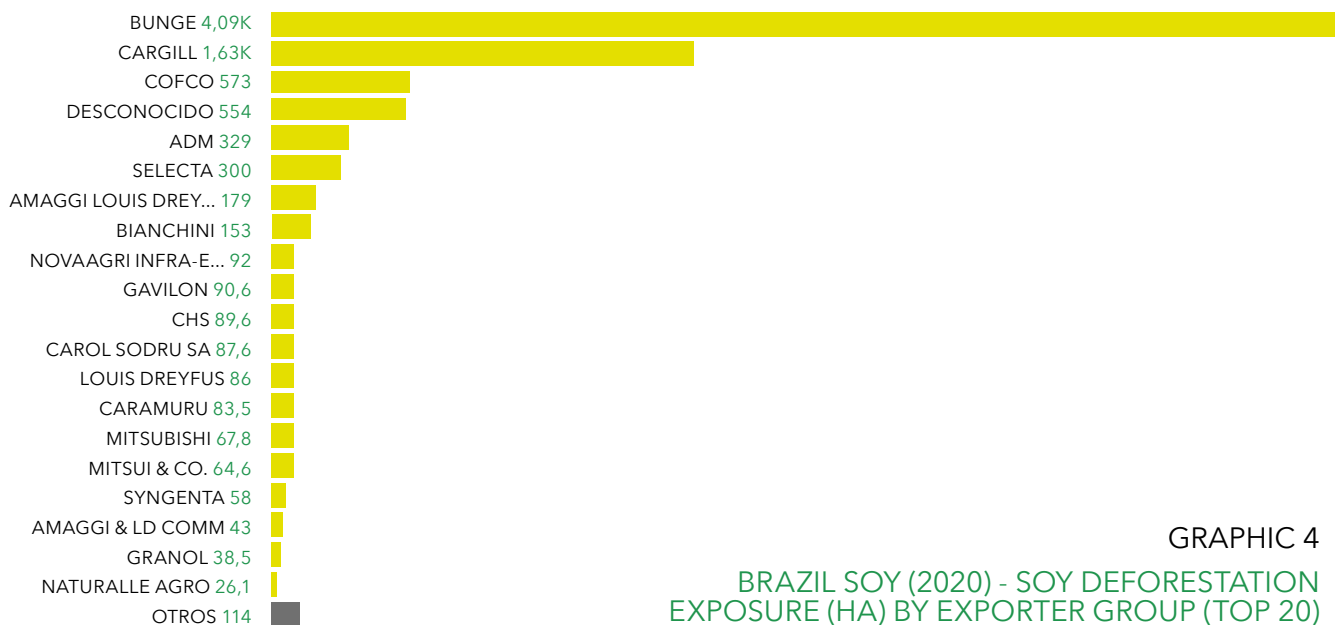


## BUNGE IBÉRICA

According to the information available on its corporate website, the Swiss group Bunge is one of the main producers of compound feed in Spain and Portugal and is a major national and international distributor of grains, cereals and oilseeds, mainly through the ports of A Coruña, Barcelona, Bilbao, Cartagena and Lisbon.<sup>119</sup> It has commercial offices in Barcelona and A Coruña, as well as grain milling plants in the Spanish ports of Barcelona and Cartagena. The Zierbana plant in Bilbao is primarily, but not exclusively, dedicated to the production of biodiesel.



As already seen in the previous section, soybeans imported by Spain from Brazil are highly exposed to deforestation and conversion risk. The following graph shows the exporter groups most exposed to deforestation were Bunge and Cargill, which together account for 65% of Spain's deforestation exposure.



GRAPHIC 4  
BRAZIL SOY (2020) - SOY DEFORESTATION  
EXPOSURE (HA) BY EXPORTER GROUP (TOP 20)

Source: Trase Database. Last accessed June 14, 2024

In June 2023, Mighty Earth, in partnership with Repórter Brasil and the Instituto Centro de Vida, published a report showing that Bunge is directly linked to the deforestation of an area of 11,351 hectares in the Brazilian Cerrado after 2021.<sup>120</sup> The findings confirmed that most of the land units on these farms were the product of recent deforestation and conversion in Legal Reserves and Permanent Preservation Areas, and would therefore fall under the category of illegal deforestation. Slots were also found that did not have Brazilian environmental permits for deforesting, or where deforestation was taking place outside the authorized perimeter.<sup>121</sup>

The same report includes information from partner satellite imagery specialist AidEnvironment, which detected another five cases linked to an additional 14,578 hectares of deforestation that occurred in early 2023 in municipalities in the states of Bahia and Piauí in the Cerrado.<sup>122</sup>

In response to Mighty Earth's inquiries, Bunge said that of the nine farms identified as suppliers to the company, its due diligence process had identified four farms with which it had a direct relationship, and although deforestation had occurred, soy was not necessarily grown on the land in question. One of the farms was also identified as an indirect supplier through a reseller and was in the process of being approved by the environmental agency in accordance with Brazilian legislation. At the time of Bunge's response, the farms identified as having deforested land were

undergoing a due diligence process, but until Bunge implements its deforestation-free commitment in 2025, it will continue to do business with these farms if it can demonstrate that the land clearing is permitted under Brazilian law.<sup>123</sup>

This year, Mighty Earth is using its real-time satellite imagery deforestation monitoring system (known as *Rapid Response*) to track the expansion of soy plantations in the Amazon and Cerrado. This system can monitor hundreds of thousands of hectares of the agricultural frontier throughout Brazil. When deforestation or conversion of native vegetation is detected in soy operators' supply chains, alerts are sent to them, their retail customers and their financiers to address the deforestation or conversion identified in their supply chains.

Mighty Earth's second Rapid Response soy report was released in April 2024.<sup>124</sup> Combining deforestation alerts with satellite imagery and field investigations, Mighty Earth identified soy-related deforestation and degradation on a total of 30,031 hectares in the Amazon and 26,901 hectares in the Cerrado, in Brazil. The study focused on farms that produced soy in the 2022 harvest, and that are located within 50 kilometers of the grain silos of the major soy exporters: Amaggi, ADM, ALZ Grãos, Bunge, Cargill, COFCO and LDC.<sup>125</sup> Notably, the highest rates of recent deforestation were found in the municipality of Barreiras (Bahia), in the Cerrado biome, an area that exported soy to France, Germany, the Netherlands, Spain and the United Kingdom in 2023. The second-highest rate of deforestation alerts was identified in the municipality of Nova Santa Helena (Mato Grosso) in the Amazon biome, which exported soy to the Netherlands, Spain and the UK in 2023.

Both the outcomes of Mighty Earth's June 2023 study on Bunge, which Spanish supermarkets were made aware of, and this latest 2024 report show that the major soy traders operating in Spain still cannot guarantee that the soy they import is DCF. With the EUDR becoming into force in December 30, 2024, it is therefore urgent that Spanish retailers monitor and exclude from their supply chains those who contribute to deforestation and conversion, and disclose a list of their suppliers of the soy used by their meat product manufacturers, in addition to generating alerts in the supply chain, creating a public grievance mechanism and publishing the proportion of DCF soy, if they are to comply with the legal restrictions.

# EUROPEAN DEFORESTATION REGULATION AND THE LACK OF TRANSPARENCY OF SOY OPERATORS ON ZERO DEFORESTATION AND CONVERSION

The European Union Deforestation Regulation (EUDR) is a groundbreaking legislation that will allow products to be imported into or exported from the EU only if their supplier has issued a “due diligence” statement confirming that the products do not come from deforested lands or have caused forest degradation after December 31, 2020. The products covered by the EUDR are: cattle, cocoa, coffee, palm oil, rubber, soy and timber, including products that contain, are fed on, or are made from these products, including leather, chocolate, and furniture.<sup>126</sup> Companies importing these commodities into the EU will also have to verify that these products comply with the national legislation of the country of production, as well as with some aspects related to human rights recognized in the country, also with the free, prior and informed consent of affected local and indigenous peoples.<sup>127</sup> The EUDR is due to be applicable from December 30, 2024, except for microbusinesses or small businesses, which will apply six months later. In the course of 2024, the Spanish Government will work on the law to combat deforestation associated with the commercialization of commodities and their products. This law is expected to adapt the sanctions established by the EUDR to the national legal system and to ensure an effective and homogeneous application of the EUDR throughout the territory, including coordination and collaboration measures throughout the State, as well as the designation of the different competent authorities, according to the powers established by the Spanish Constitution.

The EUDR is an important step forward in the fight against deforestation and one of its virtues is that it applies to both legal and illegal deforestation and degradation. However, it is based on a very limited FAO definition of “forest” which currently only includes areas with trees higher than five meters and a canopy cover of more than ten percent; as such, it fails to include the category “Other wooded land” (OWL), or areas that are less densely wooded or have a mosaic and non-continuous tree cover such as savannas, grasslands, freshwater wetlands, peatlands

or coastal wetlands, which account for nearly one billion hectares of the world's forests.<sup>128</sup> This is especially important as much of the destruction of nature and forests, as well as the degradation related to European consumption of forest-risk commodities, occurs in ecosystems classified by the FAO as "Other Wooded Land."<sup>129</sup> Highly vulnerable biomes are being destroyed by intensive production of beef and soy for animal feed, especially in South America, and we believe they must also be included in the EUDR.<sup>130</sup>

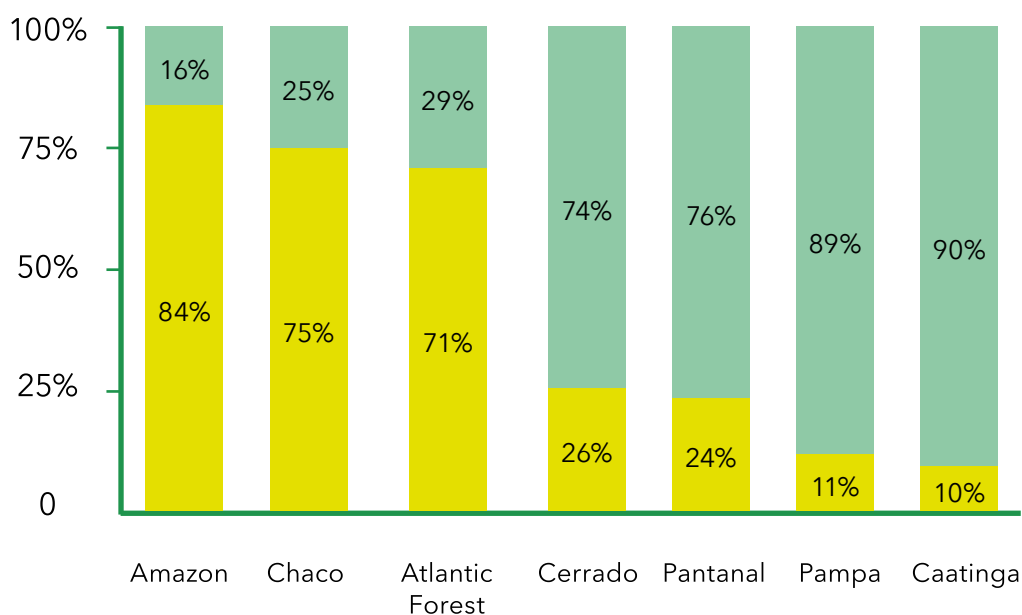
In the case of soy imported by Spain, the most affected biome, which is barely protected by the EUDR, is the Cerrado savanna. Everything indicates that the global focus is on the Amazon biome, which receives a higher level of protection by Brazilian law, while the Cerrado record devastation due to the advance of agribusiness in search of less regulated land. Currently, only 3% of the Cerrado is under strict legal protection—in the form of parks, wildlife refuges, biological reserves, and others.<sup>131</sup> The Brazilian Forest Code requires landowners to preserve only 20% to 35% of the Cerrado's native vegetation, leaving the rest for other uses. Under Brazilian law, up to 80% of land in the Cerrado can be legally deforested and converted, and private sector currently owns about three-quarters of the land in this biome and has little incentive to protect it.<sup>132</sup>

Expanding the scope of the EUDR to include "Other Wooded Land" would significantly increase the level of protection of native vegetation in the Cerrado biome from 26% to 82%, in the Chaco to 76%, in the Pantanal to 42% and in the Caatinga from 11% to 93%.<sup>133</sup> In addition, the inclusion of "Other Wooded Land" would make enforcement stronger and easier, since OWL is often mixed with forests in complex spatial mosaics, making it more difficult to distinguish from forests in remote sensing mapping.<sup>134</sup>

GRAPHIC 5

NATIVE  
VEGETATION  
NOT  
CURRENTLY  
COVERED BY  
THE EUDR

Source:  
MapBiomias. April  
2022. Technical  
note. Potential  
impacts of due  
diligence criteria  
on the protection  
of threatened  
South American  
non-forest natural  
ecosystems.





During the UN COP 28 climate conference, the eight major soybean traders—ADM, Amaggi, Bunge, Cargill, COFCO, LDC, Olam Agri and Viterro—were signatories of the “Agricultural Sector Roadmap Towards 1.5 °C,”<sup>135</sup> which committed to “halting deforestation linked to soy areas in the Chaco, Cerrado and Amazon biomes by 2025, and the conversion in non-forest primary native vegetation no later than 2030.”<sup>136</sup> The collective goal established in this joint declaration drew criticism for its lack of ambition. The fine print of the commitment allows these companies to continue converting and destroying the native non-forest vegetation of the Cerrado savanna until 2030. The commitment also failed to include other South American biomes such as the threatened Atlantic Forest, the Caatinga, Pantanal and the Pampas, as well as the current and emerging frontiers of soy in other locations.<sup>137</sup>

In the absence of much-needed ambition from soy traders, failure to include OWL in the EUDR scope, will likely exacerbate the vulnerability of the Cerrado and other South American biomes classified as OWL. In contrast, some suppliers of soy for the feed and dairy industry in Europe could see this as an opportunity to intensify production in these less protected areas to avoid EU regulations. It is therefore urgent that policy makers in the European Commission make a positive commitment to the ongoing Review of the inclusion of OWL in the EUDR.

The lack of clarity on the adoption of a 2020 deforestation cut-off date by soy traders will also make it impossible for them to meet their obligations under the EUDR. This deadline should act as a wake-up call for the seven key Spanish retailers surveyed in this report to urgently start monitoring their direct and indirect soy suppliers and put an end to soy sourcing from all those operators and meat producers that cannot prove that the soy they use has been produced on non-deforested or converted land after December 31, 2020.

# ALTERNATIVES TO THE IMPACT OF MEAT PRODUCTION AND CONSUMPTION. PLANT PROTEINS AS A SOLUTION

## THE ENVIRONMENTAL IMPACT OF MEAT PRODUCTION

Emissions from the livestock sector represent an estimated 14.5% of human-induced greenhouse gas (GHG) emissions, in addition to widespread air and water pollution, loss of soil structure and nutrients, loss of biodiversity and fresh water.<sup>138</sup> The production and processing of feed and enteric fermentation due to ruminant animals are the two main sources, responsible for 45% and 39% of the sector's emissions respectively, with manure storage and processing alone representing 10%. The remaining part is attributed to the processing and transportation of livestock products.<sup>139</sup>

Agriculture and livestock are the main emitters of methane (CH<sub>4</sub>), a greenhouse gas 80 times more potent than carbon dioxide (CO<sub>2</sub>) over a 20-year cycle, and already account for nearly one-fifth of the global GHG emissions.<sup>140</sup> Anthropogenic methane emissions' are responsible for nearly 45% of current net climate warming.<sup>141</sup> According to the Intergovernmental Panel on Climate Change (IPCC), "global methane emissions must be reduced by 40–45% by 2030 to achieve least-cost pathways that limit global warming to 1.5°C this century", and that this reduction is feasible and cost-effective.<sup>142</sup> Such reductions would avoid nearly 0.3 °C of global warming by 2045 and be consistent with the Paris Climate Agreement's goal of limiting the global temperature rise to 1.5 degrees Celsius (1.5°C).<sup>143</sup>

Total GHG emissions in Spain increased by 2% in 2022 compared to the 2021 figures, with the agriculture and livestock sector being responsible for 11.9% of the total.<sup>144</sup> In particular, livestock practices, which account for 75.3% of emissions in this sector, slightly increased their emissions (+0.9%), mainly due to the increase in the number of industrial livestock.<sup>145</sup> Methane is the second-largest contributor to GHG emissions, accounting for 14.4% of the total, after carbon dioxide.<sup>146</sup>

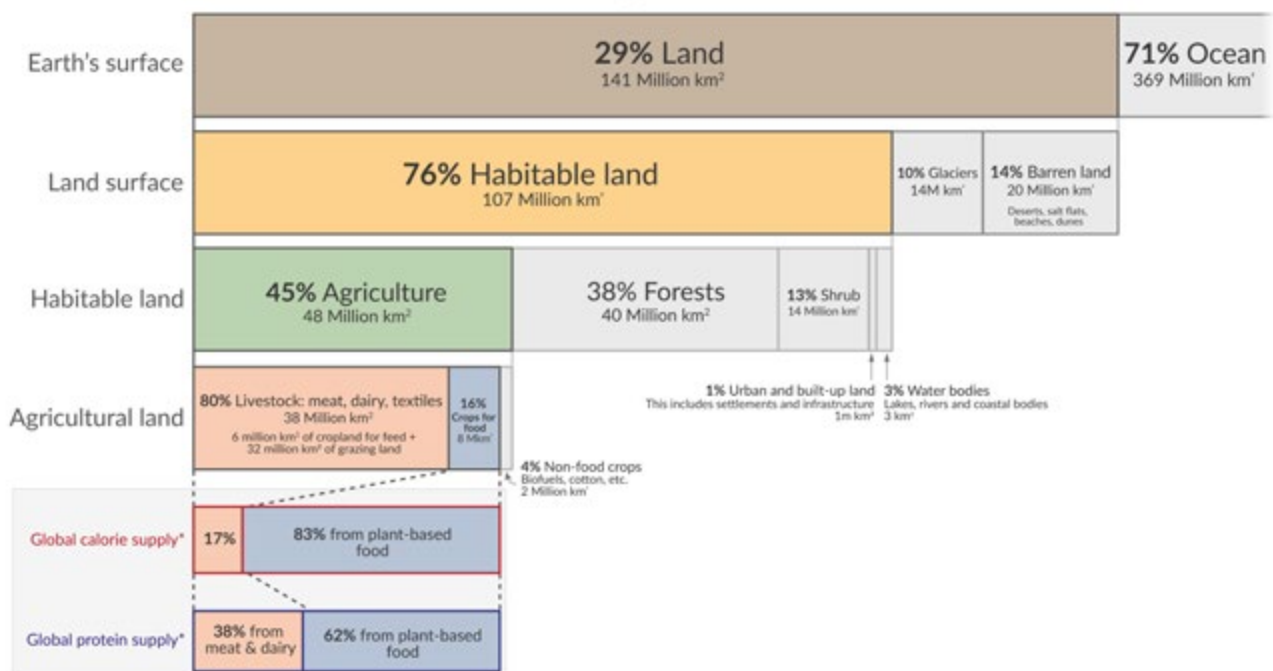
Mighty Earth considers it essential for Spain's Ministry for Ecological Transition and the Demographic Challenge to draw up a national methane emissions reduction plan for all methane-emitting sectors, particularly the agriculture sector. According to IPCC recommendations, the net methane emission reduction target should be between 40% and 45% of 2020 levels by 2030.

In addition, meat production occupies up to 83% of the world's agricultural land and 80% of deforestation and conversion is due to livestock production.<sup>147</sup> More than 77% of global soy supply is used to manufacture feed for livestock, that is, most of the cultivated soy is used to nourish the animals we eat.<sup>148</sup> Despite the high environmental cost of current meat production, it has a low nutritional return; meat only provides 18% of the world's calories.<sup>149</sup>

It is therefore necessary not only to adopt healthy diets (including vegetarian and reduced meat and dairy) as one of the effective measures to reduce methane and other GHG emissions from the agricultural sector, but also to adopt policies to radically phase down meat and dairy production levels which cannot be the basis of a sustainable food system.

#### GRAPHIC 6. LAND AREA DESTINED FOR FOOD PRODUCTION

Source: Ritchie H. and Roser M. (First published in September 2019)" Land Use. How is humanity using the Earth's land? And how can we decrease our land use so that more land is left for wildlife?", Our world in data (September 2023)



## THE HEALTH IMPACT OF MEAT CONSUMPTION

Over the past 50 years, globalization and the intensification of food production systems—combined with urbanization, rising incomes, the expansion of processed food markets by transnational corporations and other social trends have led to a homogenization of dietary patterns around the world, towards diets high in processed foods, meat, refined grains, sugars and fats.<sup>150</sup>

In the case of meat consumption, the World Health Organization (WHO) has classified processed meat as “carcinogenic to humans”. In addition, excessive meat consumption, combined with other factors such as lack of physical exercise, contributes to poor health, leading to overweight, obesity, type II diabetes and cardiovascular diseases.<sup>151</sup> This information was supported in 2018 by the International Agency for Research on Cancer (IARC), which classified processed meat as carcinogenic after evaluating 800 studies, with most of the evidence coming from its effect on colorectal cancer and, to a lesser extent, stomach cancer. The same study also found a detrimental association between regular consumption of red meat and an increased risk of pancreatic and prostate cancer.<sup>152</sup>

## HOW MUCH MEAT DO WE CONSUME?

Pork is the most consumed meat in the EU with 42.4 kg per inhabitant per year in 2021, followed by poultry with 26.6 kg per inhabitant per year, beef with 14.8 kg per inhabitant per year and sheep and goat with 1.5 kg per inhabitant per year.<sup>153</sup> According to a sector report, the consumption of meat products in Spain, registered a “*change in trend*” in 2023, with an increase of the demand by 2.7%. Meat consumption reached 2,215 million kg, an average of 32.4 kg per Spanish inhabitant per year, compared to 31.9 kg in 2022 and 32.1 kg in 2021.<sup>154</sup> Chicken, pork and beef represented 75% of the volume of fresh meat and, except for preserved meat, all ranges of meat preparations grew in volume in 2023.<sup>155</sup> Such consumption is well above the healthy recommendations of the Spanish Agency for Food Safety and Nutrition, which estimates ideal consumption at a maximum of three weekly servings of meat (one ration equals 100–125 grammes or about 15 kg per year), prioritizing the consumption of poultry and rabbit meat and minimizing processed meat.<sup>156</sup>

While it is fair and equitable to provide access to animal protein for those who lacked it and wish to enjoy it today, considering these data we cannot make the mistake of increasing their consumption to unhealthy levels.

According to a recent report on the sustainability of consumption in Spain, more than 43% of the environmental impact of our diet is due to meat consumption, mainly pork, beef and chicken.<sup>157</sup> In fact, the adoption of a diet with a lower consumption of meat and dairy products is essential to ensure that not only the food sector, but the total environmental footprint of consumption in Spain is within planetary limits.<sup>158</sup> The Spanish Agency for Food Safety and Nutrition supports these



guidelines and recommends prioritizing the consumption of foods of plant origin over those of animal origin as the main sources of protein in people's diets.<sup>159</sup> It advises that the consumption of vegetable protein, mainly legumes, should occupy one of the protein portions of the main daily meals (lunch and dinner), with it possible to use the other portion for consuming fish, eggs, dairy products or meat.<sup>160</sup>

In this regard, new research indicates that a relatively small shift toward greater consumption of plant-based proteins has enormous benefits for the climate, nature and water.<sup>161</sup> Replacing 30% of beef, pork and chicken with a mix of legumes, tofu and new alternative plant-based protein products could generate net savings of 728 million tons of CO<sub>2</sub>-equivalent per year.<sup>162</sup> The equivalent of offsetting nearly all emissions from global air travel in 2022.<sup>163</sup>

In the transition to a sustainable food system, a shift to a plant-based diet in countries such as Spain seems obvious. This will require an awareness process, changes in national agricultural, livestock and consumer policies, and an increased supply of plant-based protein products.

# CONCLUSION

Soy has become an essential source of protein to produce meat, responding to a consumption pattern that is far from the healthy recommendations and with environmental and socio-economic impacts that transcend our borders.

Spain is a dominant force in meat production within the EU and a leader in feed production for cattle and pigs. The meat industry is central to the soy chain in Spain. Following a vertical integration model, it covers the entire production chain (from feed production to breeding and meat processing), which allows it to optimize resources and reduce costs. This situation has led large multinational cereal and grain companies such as Bunge and Cargill to have infrastructure in Spain, where they import and grind huge quantities of soybeans to meet the voracious demand of the feed industry. The third key player of the soy chain is the retail sector which sells most of the meat consumed in the country.

To date, our research has found that most of the seven largest retailers in Spain do not have sufficiently robust policies and action plans to end deforestation and conversion associated with their direct or indirect soy supply chains for their meat products. Those that have committed to mitigating the problem, are not taking adequate action, nor are they working urgently with their meat suppliers to replicate and implement these policies. The four meat companies studied, that produce meat products for Carrefour's private label, are supplied with Brazilian soy from Bunge and Cargill facilities in the ports of Barcelona and Cartagena. Both traders have been linked to cases of deforestation and degradation of native ecosystems in Brazil.

Given that the soy imported by Spain has a high risk of being linked to the deforestation or conversion of threatened biomes such as the Amazon or the Cerrado, and that this soy is used to produce animal feed, the retailers cannot guarantee that their meat produced with this feed is free from deforestation and conversion. In addition, with less than six months to go before its implementation, the seven Spanish retailers must act quickly to ensure that they comply with the legal requirements of the EUDR and that the meat they sell to Spanish consumers has not been fed with soy from deforestation.

Deforestation and the destruction of natural ecosystems must be immediately eliminated from supply chains if we want to limit global warming to the 1.5 °C envisaged by the Paris Agreement.

## **RETAILERS OPERATING IN SPAIN AND ITS MEAT INDUSTRY NEED TO ACT QUICKLY ON THEIR SOY FOOTPRINT AND PROMOTE TRANSPARENCY. THEY SHOULD:**

- Exclude from their supply chains all actors that contribute to the deforestation and conversion of natural ecosystems in areas such as the Amazon or Cerrado by immediately ending direct and indirect soy sourcing, including both operators and meat product companies that fail to comply with a 2020 deforestation cut-off date.
- Publicly commit to a Deforestation and Conversion Free (DCF) policy and action plan that explicitly includes a January 2020 cut-off date, applicable to all natural ecosystems.
- Establish an online public platform for reporting on the origin of their soy, meat suppliers, in addition to implementing a supply chain alert system and disclosing the proportion of soy from DCF supply chains.
- Establish a public grievance mechanism to monitor and track allegations of deforestation and conversion, and human rights violations.
- Develop a plant-based policy to promote an alternative diet to animal protein with defined targets by 2030.
- Promote sectoral and multisectoral commitments to address deforestation associated with imports of risk commodities.

## **MIGHTY EARTH URGES CARGILL AND BUNGE TO:**

- Promptly disclose on a public platform the origin of their soy products imported from Brazil, including lists of all their direct and indirect suppliers, with the proportion of soy sourced from a verified DCF supply chain.
- Submit all alleged cases of deforestation and conversion and alleged human rights violations to a public grievance mechanism and to suspend purchases from direct or indirect suppliers and farms found to be involved in deforestation or conversion of native vegetation in Brazil and elsewhere.
- Promote among soy operators the updating of the Soy Agreements in the Agriculture Sector Roadmap to 1.5 °C, and the immediate establishment of a 2020 deforestation cut-off date that applies to all natural ecosystems, legal and illegal destruction, and to direct and indirect suppliers.

## THE GOVERNMENT OF SPAIN SHOULD:

- Ensure the proper implementation of the EUDR, which will apply from December 30, 2024.
- Promote a national agreement to combat deforestation that goes beyond the current legislation.
- Take the necessary political, economic and social measures to ensure a healthy diet in accordance with the sustainable and healthy intake recommendations.



# ANNEX I

## MERCADONA RESPONSE TO OUR REQUEST FOR INFORMATION

**De:** [REDACTED]  
**Enviado el:** [REDACTED] miércoles, 8 de noviembre de 2023 8:26  
**Para:** [REDACTED]  
**Asunto:** 231108 Mighty Earth: colaboración estudio "situación distribución alimentaria y sus cadenas de suministro"  
**Datos adjuntos:** 20231017121305943.pdf

Queremos agradecerle el interés mostrado en nuestra empresa. Como contestación a su carta paso a transmitirle la siguiente información sobre el sistema de gestión ambiental que tenemos en Mercadona.

Dicho sistema de gestión ambiental está en proceso de mejora continua, y a medida que vamos implementando las mejoras se actualizan a través de la web y de nuestras diferentes publicaciones. La información ambiental relevante relacionada con nuestros procesos se encuentra en los siguientes enlaces:

- <https://www.mercadona.es/es/conocenos/sala-de-prensa>
- <https://info.mercadona.es/es/cuidemos-el-planeta/nuestros-hechos/sistema-de-gestion-ambiental-de-mercadona-/news>

En cuanto a la deforestación, podemos señalar que se trata de una preocupación global y que desde Mercadona estamos adoptando medidas que nos permitan, en colaboración con nuestros proveedores, minimizar nuestra contribución a este problema. Como empresa asumimos nuestra responsabilidad y trabajamos para conseguir una cadena de suministro sostenible que permita la conservación de los bosques y la biodiversidad.

En este sentido disponemos de un grupo de trabajo específico junto con nuestros proveedores y gerentes de compras cuyo objetivo es llevar a cabo los trabajos necesarios para alcanzar con éxito los requisitos y objetivos marcados por el Reglamento de Deforestación Importada, de reciente aprobación como usted bien conoce. Además nos hemos adherido a la Iniciativa Española Empresa y Biodiversidad de la Fundación Biodiversidad (Ministerio de Transición Ecológica y Reto Demográfico- MITERD) para trabajar conjuntamente con el resto de

1

empresas españolas y evolucionar entre todas hacia un modelo de compra más sostenible.

También formamos parte desde hace años del grupo de trabajo de Deforestación de EuroCommerce.

Por otro lado, en cuanto a los productos derivados de la soja disponemos de la trazabilidad de los ingredientes derivados de la soja y en nuestros lineales se pueden encontrar alternativas a la carne. Estos productos han sido incorporados a la oferta comercial de Mercadona tras un proceso de trabajo con consumidores que nos permite identificar sus necesidades, en este caso de proteína de origen vegetal.

Espero sinceramente que esta información le sea de utilidad. Con ella hemos querido transmitirle el compromiso de Mercadona para trabajar en minimizar los riesgos de la deforestación como un reto empresarial e ir transmitiendo los avances al respecto.

Somos conscientes de que el tiempo apremia, por lo que trabajamos conjuntamente con el resto de sectores implicados para tener una estrategia operativa y realista, que nos permita dar respuesta a los retos que plantea el citado Reglamento y a desarrollar las herramientas necesarias.

## GRUPO DIA RESPONSE TO OUR REQUEST FOR INFORMATION

Las Rozas de Madrid (Madrid), 8 de noviembre de 2023

Estimados Sres.:

Nos referimos a la comunicación de fecha 13 de octubre de 2023 (la **Comunicación**) remitida por su parte, en nombre de la entidad Mighty Earth, a Distribuidora Internacional de Alimentación, S.A. (**Grupo DIA**).

En dicha Comunicación, ustedes expusieron determinadas consideraciones sobre la lucha contra la deforestación y la crisis climática, así como en favor de la preservación de la biodiversidad. En particular, nos manifestaron su preocupación sobre la creciente deforestación vinculada a determinadas materias primas, como, por ejemplo, la soja. Igualmente, nos manifestaron su voluntad de realizarnos algunas cuestiones a efectos de elaborar un informe sobre la situación de la distribución alimentaria y sus cadenas de suministro en España, y en concreto las relativas a su aprovisionamiento de carne y el origen de las materias primas con que ha sido alimentada.

Desde Grupo Dia queremos compartirles nuestro más firme compromiso con la sostenibilidad, tomando en cuenta sus consideraciones de cara a nuestro Plan de Sostenibilidad 2024/2025.

Esperamos que la anterior información sea de su interés y utilidad.

Atentamente,

## ACES RESPONSE TO OUR REQUEST FOR INFORMATION

[Redacted]

---

De: [Redacted]  
Enviado el: jueves, 19 de octubre de 2023 13:03  
Para: [Redacted]  
CC: [Redacted]  
Asunto: RE: Situación de la distribución alimentaria y sus cadenas de suministro en España

Buenos días [Redacted]  
Gracias por la información. Estos días se han puesto en contacto con nosotros las empresas que estaban recibiendo vuestras cartas y os responderemos de forma sectorial. En estos momentos, como sabéis estamos trabajando de la mano con los sectores y la Administración, obteniendo información para ver el estado de situación.  
Os responderemos lo antes posible.  
Muchas gracias!  
Un saludo

[Redacted]  
**ACES ( Asociación de Cadenas Españolas de Supermercados )**  
[Redacted]

## CARREFOUR RESPONSE TO OUR RIGHT TO REPLY LETTER

### **Conocer los procedimientos que tenemos implementados con todos los proveedores para asegurar la trazabilidad de la soja .**

En cuanto al procedimiento, solicitamos a los proveedores la información específica sobre la soja que garantice que es cero deforestación. Origen: incluyendo si tiene algún tipo de certificación ( RTRS , Proterra , Soja Danau ,Soja UE ..), nombre del fabricante del pienso y nombre del trader. La dirección de Calidad está a vuestra disposición para explicar los procedimientos implementados.

### **Conocer los compromisos reales del grupo Carrefour en España con respecto a la soja.**

Los compromisos reales de España con respecto a la soja son los mismos a los publicados por el Grupo Carrefour: el 100% de los productos Círculo de Calidad y productos clave de marca Carrefour utilizarán soja no procedente de la deforestación y conversión para alimentación animal en 2025.

En 2024, Carrefour España ya cumple el compromiso con todos los proveedores de acuicultura. Se han mantenido reuniones entre la dirección de calidad, las áreas comerciales y el resto de proveedores para diseñar y ejecutar planes de acción para avanzar en este compromiso.

### **Excluir de la cadena de suministro a todos los agentes que contribuyen a la deforestación (principalmente Bunge y Cargill).**

Para cambiar las prácticas en las fases anteriores de su cadena de suministro, Carrefour mantiene un diálogo con los principales importadores de soja a varios niveles, mediante su participación en iniciativas colectivas, mediante intercambios a nivel local y mediante intercambios bilaterales para compartir su ambición de deforestación cero en toda la cadena de suministro. Como parte de la coalición forestal del Foro de Bienes de Consumo, Carrefour apoya la introducción de requisitos más estrictos para los comerciantes. A través de la Coalición para la Transparencia de la Soja, se ha puesto en marcha un sistema compartido de evaluación de la actuación de los comerciantes para entablar un diálogo con ellos y permitir que cada empresa dirija sus suministros hacia los comerciantes más virtuosos.

Para 2021, el 100% de los importadores de soja clave vinculados a los suministros de Carrefour han sido evaluados y comprometidos a través de la STC, seminarios web e intercambios bilaterales.

## ALDI RESPONSE TO OUR RIGHT TO REPLY LETTER

ALDI España forma parte del Grupo ALDI Nord, un retailer de descuento presente en ocho países europeos. El compromiso del Grupo es abastecerse de soja 100% sostenible para 2025, ya sea de fuentes certificadas o de regiones de bajo riesgo como Europa. Se puede encontrar información detallada en la Position Statement on Deforestation del Grupo ALDI Nord y el Grupo ALDI SOUTH<sup>1</sup>. En ALDI Nord, estamos comprometidos públicamente con la protección de los bosques y otros ecosistemas naturales con el fin de crear un impacto positivo en la sociedad y el planeta. Nos sentimos responsables y colaboramos estrechamente con otras compañías, organizaciones y stakeholders a favor de la protección de los espacios naturales.

Nos hemos posicionado públicamente mediante compromisos en los que apoyamos, expresamos y nos sumamos al interés que hay en el sector del retail para proponer e implementar soluciones responsables para el mercado actual y para los sistemas de producción agrícola y la deforestación asociada a él. Una muestra de ello la pueden encontrar en el Manifiesto en apoyo al Cerrado<sup>2</sup>, y la carta abierta para la protección del Amazonas<sup>3</sup>.

En Europa, el Grupo ALDI Nord ha estado trabajando estrechamente con otros retailers y proveedores con el objetivo de crear conocimiento, así como dar soluciones a los retos que plantea la trazabilidad de las materias primas de la alimentación animal de ciertos productos de origen animal, conocida también como el reporte de origen de la soja. Este proceso se ha llevado a cabo con la ayuda de un proveedor de servicios externo. Adicionalmente, ALDI Nord es miembro del Retail Soy Group<sup>4</sup>, un grupo independiente de retailers internacionales que trabajan colaborativamente con el fin de encontrar soluciones a favor de la trazabilidad y la protección de ecosistemas en la industria de la soja y la alimentación animal. Por otro lado, también trabajamos en las cadenas de suministro para alimentación humana, estamos adheridos a la organización sin ánimo de lucro Round Table on Responsible Soy (RTRS) y aceptamos la certificación de soja RTRS. Además, RTRS ha establecido su propio procedimiento y sistema para atender a quejas y reclamaciones del sector<sup>5</sup>.

### Clima y Alimentos a base vegetal

Estamos poniendo mucho empeño y esfuerzos en reducir nuestras emisiones de gases de efecto invernadero mediante nuestra política climática, así como establecer y cumplir objetivos de reducción, no solo para el alcance 1 y 2, sino también para reducir nuestro impacto a lo largo del alcance 3. En ALDI, promovemos los alimentos con base vegetal y prueba de ello es la creación de la marca propia de ALDI, My Vay, una marca dedicada exclusivamente a productos veganos y vegetarianos certificados con el sello V-Label. Respecto a V-Label, resaltar que es un sello fácilmente reconocible con un precio asequible para nuestros consumidores, lo cual promueve e incrementa el consumo de productos sin proteína animal.

### Apoyo al marco jurídico europeo y al nuevo reglamento de deforestación

Hacer frente a los desafíos sistémicos requiere de una colaboración intersectorial en la que participen los agentes políticos, económicos y sociales pertinentes. Las asociaciones y colaboraciones que hemos llevado a cabo desde ALDI Nord con nuestros stakeholders han demostrado ser la mejor

<sup>1</sup> [https://www.aldi-nord.de/content/dam/aldi/germany/verantwortung/umbau\\_oi\\_bereich/entwaldung/AN\\_Deforestation\\_Position\\_Statement\\_FINAL.pdf](https://www.aldi-nord.de/content/dam/aldi/germany/verantwortung/umbau_oi_bereich/entwaldung/AN_Deforestation_Position_Statement_FINAL.pdf)

<sup>2</sup> <https://www.theconsumergoodsforum.com/environmental-sustainability/business-for-the-cerrado/>

<sup>3</sup> [https://www.retailsoygroup.org/wp-content/uploads/2021/05/Letter-from-Business-on-Amazon\\_2021.pdf](https://www.retailsoygroup.org/wp-content/uploads/2021/05/Letter-from-Business-on-Amazon_2021.pdf)

<sup>4</sup> <https://www.retailsoygroup.org/>

<sup>5</sup> <https://responsiblesoy.org/wp-content/uploads/2021/12/RTRS-Grievances-Procedure-V1.0.pdf>

manera de conseguir erradicar la deforestación de esos productos con cadenas de suministro complejas, como en el caso de la soja.

Asimismo, el grupo ALDI Nord apoya públicamente la implementación de un marco legal robusto y sólido para reducir la contribución de la UE a la deforestación y degradación forestal global<sup>6</sup>. Estamos trabajando intensamente en la aplicación del nuevo Reglamento Europeo sobre la deforestación. En lo que respecta a ALDI Nord, creemos que las medidas legislativas de la Unión Europea en materia de deforestación son esenciales para crear e impulsar un cambio en el sector.



# REFERENCES

1. FEFAC (2024) *Feed and Food 2023*, FEFAC: Brussels, Belgium
2. Ministerio de Agricultura, Pesca y Alimentación (2023) *Informe Anual de Comercio exterior Agroalimentario: 2022*, Ministerio de Agricultura, Pesca y Alimentación: Madrid, Spain
3. ICEX España Exportaciones e Inversiones (2023) '*Brasil, Informe económico y comercial*', Ministerio de Economía, Comercio y Empresa: Spain (last update March, 2023)
4. UN Comtrade Database (2023). Data for the category under the combined HS 1201 soy code
5. UN Comtrade Database (2023). Data for the category under the combined HS 2304 code for soy cake and other solid residues from the extraction of soybean oil (soybeans), whether or not ground or in pellets
6. UN Comtrade Database (2023). Data for the category under the combined HS 1201 code
7. UN Comtrade Database (2023). Data for the category under the combined HS 2304 code
8. Ministerio de Agricultura, Pesca y Alimentación (2023) *Informe Anual de Comercio exterior Agroalimentario: 2022*, Ministerio de Agricultura, Pesca y Alimentación: Madrid, Spain
9. Fundación CESFAC (2021) *Soja sostenible para un suministro responsable de piensos compuestos*, CESFAC: Madrid, Spain
10. Mighty Earth (2023) *Saving the Cerrado: Why Bunge, supermarkets and governments must act fast*, Mighty Earth: Washington DC, United States
11. Critical Ecosystem Partnership Fund (2017) *Ecosystem Profile Cerrado Biodiversity Hotspot Extended Summary*, Critical Ecosystem Partnership Fund: Arlington, VA, United States
12. Evans M (2020) '*The Brazilian Cerrado: the Upside-down Forest on the Frontlines of Agriculture*', Landscape News, August 25, 2020
13. Chaves MED, Mataveli G, zu Ermgassen, E. et al. (2023) *Reverse the Cerrado's neglect. Nature Sustainability* 6, 1028–1029, 2023
14. "What's at stake is the life of every being: Saving the Brazilian Cerrado", Mongabay, Peter Yeung, Mongabay, February 11, 2021
15. Abiove (2022) "*Geospatial Analysis of Soy Expansion in The Cerrado Biome 2000-2021*"
16. Abiove (2022) "*Geospatial Analysis of Soy Expansion in The Cerrado Biome 2000-2021*"
17. "Deforestation falls for 8th straight month in the Amazon rainforest, but rises in the Cerrado", Mongabay, December 8, 2023
18. "Deforestation falls for 8th straight month in the Amazon rainforest, but rises in the Cerrado", Mongabay, December 8, 2023
19. "Desmatamento no cerrado cresce 83% em maio; acumulado é recorde," *BrasilAgro*, June 9, 2023
20. Mighty Earth (2023) *Saving the Cerrado: Why Bunge, supermarkets and governments must act fast*, Mighty Earth: Washington, D.C., United States
21. UN Comtrade Database (2023). Data for the categories under the combined HS 1201 and HS 2304 soy codes
22. Trase, Brazil, Soy, Supply chain, Brazil soy supply chain
23. "La distribución de carne y productos cárnicos en España," *Carnica*, Nina Jareño, March 10, 2023; "Porcentaje de ventas de carne procesada en los distintos canales de distribución en España en 2022", *Statista*, Abigail Orús, June 30, 2023

24. FCRN Foodsource (2020) *Soy: food, feed, and land use change*, FCRN Foodsource: Oxford, United Kingdom
25. Pendrill, F., et al. (2020) *Deforestation risk embodied in production and consumption of agricultural and forestry commodities 2005–2017*, version 1.0, Zenodo, November 9, 2020
26. Eurostat, International trade, International trade in goods, detailed data, EU trade since 1988 by HS2-4-6 and CN8
27. Asociación Española de Distribuidores, Autoservicios y Supermercados, ASEDAS
28. Asociación Española de Cadenas de Supermercados, ACES
29. "Carrefour crece un 10% y bate su récord de ventas en España," *Expansión*, Víctor M. Osorio February 14 2023
30. "Consumer Goods Industry Announces Initiatives on Climate Protection," The Consumer Goods Forum, press release, November 29, 2010
31. Ministère de la Transition écologique et solidaire (2018) *Stratégie nationale de lutte contre la déforestation importée 2018-2030*, Ministère de la Transition écologique et solidaire: Paris, France
32. Earthworm Foundation, Manifeste soja
33. Carrefour Group (2022), *Protecting Forests*, Carrefour Group: Massy, France
34. Carrefour Group (2022), *Protecting Forests*, Carrefour Group: Massy, France
35. Carrefour Group (2022), *Protecting Forests*, Carrefour Group: Massy, France
36. Carrefour Group (2023) *Forest Transparency Platform*, (Last login February 2024)
37. Carrefour, Matière première transparence : soy
38. Carrefour, Matière première transparence : soy
39. Carrefour, Matière première transparence : soy
40. "El Consejo de Administración Forestal (FSC), ha nombrado a Alexandre de Palmas, director ejecutivo de Carrefour España, único embajador nacional de los bosques FSC," Carrefour España, press release, March 23, 2023
41. "Carrefour, FSC y Mahou San Miguel amplían su alianza para la reforestación en España," *Food Retail & Service*, June 28, 2023
42. "Mercadona's turnover is 31,041 million, an 11% increase, and inflation reduces its margin and profitability," Mercadona, press release, March 14, 2023
43. Mercadona, Cuidemos el Planeta, Nuestros Hechos, Sistema de Gestión Ambiental de Mercadona
44. Mercadona (2023) *Progressing with the Mercadona Model - 2022 Annual Report*, Mercadona S.A.: Valencia, Spain
45. Mercadona (2023) *Progressing with the Mercadona Model - 2022 Annual Report*, Mercadona S.A.: Valencia, Spain
46. "Alcampo factura 4.771 millones de euros en 2022 en España, un 11% más," *El Español*, Sandra Tobar, May 10, 2023
47. Alcampo S.A. (2023) *Informe de Actividad y Responsabilidad Social Corporativa 2022*, Alcampo S.A.: Madrid, Spain
48. Alcampo S.A. (2023) *Informe de Actividad y Responsabilidad Social Corporativa 2022*, Alcampo S.A.: Madrid, Spain
49. Alcampo S.A. (2023) *Informe de Actividad y Responsabilidad Social Corporativa 2022*, Alcampo S.A.: Madrid, Spain
50. 'Lidl factura en España 6.079 millones de euros (+18%) y se consolida como tercer retailer alimentario', *Food Retail & Food Service*, June 20, 2023
51. Lidl corporate website, Política de Compras Responsable
52. Accountability Framework Initiative, see: <https://accountability-framework.org/>

53. Lidl corporate website, Política de Compras Responsable
54. Ecologistas en Acción (2022) *Con la soja al cuello: piensos y ganadería industrial en España*, Ecologistas en Acción: Madrid, Spain
55. Greenpeace International (2021) *Destruction Certified*, Greenpeace International: Amsterdam, The Netherlands
56. Official Journal of the European Union, Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance), June 9, 2023
57. "El Corte Inglés traspasa a Carrefour el 25% de su red de Supercor por 60 millones," *Cinco Días*, Javier García Ropero, September 20, 2023
58. El Corte Inglés, 2021-2025 Corporate Social Responsibility and Sustainability Master Plan
59. El Corte Inglés (2023) *Listado de Proveedores de Marca Propia de El Corte Inglés*, El Corte Inglés: Madrid, Spain
60. El Corte Inglés (2023) *Non-Financial Statement FY 2022-2023*, El Corte Inglés: Madrid, Spain
61. "Grupo Dia cierra 2022 con ventas netas de 7.286 millones de euros, un 9,6% más que en 2021, con un impulso del 7,3% en las ventas Like-for-Like del cuarto trimestre," Grupo Día, press release, January 26, 2023
62. Grupo Dia, *Plan de sostenibilidad (2024-2025)*, Grupo Dia: Madrid, Spain
63. Grupo Dia (2023) *Memoria Anual 2022*, Grupo Dia: Madrid, Spain
64. "Aldi redujo su beneficio en España un 40% en 2022 pese a lograr unas ventas récord," *Cinco Días*, Javier García Ropero, January 13, 2024
65. Grupo Aldi Nord (2015), *Nuestra Responsabilidad - Política De Responsabilidad Corporativa*, Grupo Aldi Nord: Sant Cugat Del Vallés, Spain
66. Grupo Aldi Nord (2022), *Memoria de Sostenibilidad*, Grupo Aldi Nord: Sant Cugat Del Vallés, Spain
67. Grupo Aldi Nord (2022), *Memoria de Sostenibilidad*, Grupo Aldi Nord: Sant Cugat Del Vallés, Spain
68. Grupo Aldi Nord (2022), *Position Statement on deforestation- and conversion-free supply chains*, Grupo Aldi Nord: Sant Cugat Del Vallés, Spain
69. Grupo Aldi Nord (2022), *Position Statement on deforestation- and conversion-free supply chains*, Grupo Aldi Nord: Sant Cugat Del Vallés, Spain
70. Carrefour corporate website, supermercado, mercado frescos, carnicería, Los mejores ganaderos y granjeros de tu región están con nosotros
71. Grupo Fuertes corporate website, Agro-food core
72. Grupo Fuertes corporate website, Agro-food core
73. Puerto de Cartagena (2023) *Memoria Anual - Annual Report - 2022*, Puerto de Cartagena: Cartagena, Spain
74. Data compiled and analyzed by Mighty Earth from Panjiva. Panjiva provides samples of export data and cannot be considered exhaustive. Panjiva data from January, 2022 to January, 2023 (data extracted in February 2024)
75. Interview, January 15, 2024
76. Grupo Fuertes corporate website, Agro-food core, Sediasa
77. Grupo Fuertes corporate website, Agro-food core, Procavi
78. Grupo Fuertes corporate website, Agro-food core, Procavi
79. "Estas son las compañías que están detrás de las marcas blancas de Carrefour," *El Mira*, Jaime Núñez, February 2, 2022
80. 'Carrefour Signs Food Transition Pact with 50 Manufacturers', *Carrefour Press Release*, September, 2021

81. Carrefour 'Carrefour Signs Food Transition Pact with 50 Manufacturers', Carrefour Press Release, September, 2021
82. "Campofrío Food Group pierde 70,2 millones en 2022, un 70% más, pero eleva un 4,9% su facturación," *Europa Press*, September 8, 2023
83. Campofrío corporate website, About us
84. "Aranda autoriza una granja con 2.000 cerdos en las afueras," *El Correo de Burgos*, March 24, 2019
85. Port de Barcelona (2022) *Estadísticas de tráfico del Port de Barcelona Datos acumulados Noviembre 2022*, Port de Barcelona: Barcelona, Spain
86. Sigma Alimentos (2023) *2022 Sustainability Report*, Sigma Alimentos: San Pedro Garza García, Mexico
87. Grupo Vall Companys corporate website, Our Structure
88. "Grupo Vall Companys supera los 3.000 millones de euros de facturación por la inflación y las adquisiciones," Grupo Vall Companys, press release, July 20, 2023
89. Grupo Vall Companys corporate website, Divisions
90. Grupo Vall Companys corporate website, Divisions, Livestock and animal nutrition
91. Grupo Vall Companys (2022) *Estado de información no financiera*, Grupo Vall Companys: Lleida, Spain
92. Agrocesa Agroturia corporate website, Agrocesa Agroturia en cifras
93. Grupo Vall Companys (2022) *Plan estratégico de sostenibilidad 2030*, Grupo Vall Companys: Lleida, Spain
94. Grupo Vall Companys (2022) *Plan estratégico de sostenibilidad 2030*, Grupo Vall Companys: Lleida, Spain
95. Grupo Vall Companys (2022) *Plan estratégico de sostenibilidad 2030*, Grupo Vall Companys: Lleida, Spain
96. Grupo Vall Companys (2022) *Plan estratégico de sostenibilidad 2030*, Grupo Vall Companys: Lleida, Spain
97. Greenpeace International (2021) *Destruction Certified*, Greenpeace International: Amsterdam, The Netherlands
98. Greenpeace International (2021) *Destruction Certified*, Greenpeace International: Amsterdam, The Netherlands
99. "Carrefour incorpora a su 'Círculo de Calidad' los proveedores regionales Grupo Costa y Dimar," *Intereconomía*, May 16, 2023
100. Costa Food Group corporate website, Origins
101. "Grupo Empresarial Costa prepara un ambicioso plan industrial," *Alimarket*, Ana B. Antelo, July 25, 2018
102. Industrias Cárnicas Villar corporate website, Facilities
103. Costa Food Group corporate website, About us, Piensos Costa
104. Costa Food Group corporate website, Aviserrano
105. Port de Barcelona (2022) *Estadísticas de tráfico del Port de Barcelona Datos acumulados Noviembre 2022*, Port de Barcelona: Barcelona, Spain
106. Interview with sources from the feed mill in Fraga (January 2024)
107. Port Tarragona (2022) *Estadístiques Tràfic Portuari*, Port Tarragona: Tarragona: Spain
108. Puertos del Estado, Memorias de las Autoridades Portuarias y Anuario Estadístico de Puertos del Estado, Memorias Anuales 2022, see: <https://www.puertos.es/es-es/estadisticas/Paginas/Memorias.aspx>
109. Data compiled and analyzed by Mighty Earth from Panjiva. Panjiva provides samples of export data and cannot be considered exhaustive. Panjiva data from February 2023 to November 2023 (data accessed in February 2024).
110. Autoridad Portuaria de Cartagena, *Memoria anual*, 2022
111. "How supply chain 'stickiness' drives deforestation," *Trase*, Tiago Reis, Patrick Meyfroidt and Vivian Ribeiro, January 31, 2023
112. Trase, Brazil, Soy, Supply chain, Brazil soy supply chain



113. FEFAC (2024) *Feed and Food 2023*, FEFAC: Brussels, Belgium
114. Comisión Nacional de Coordinación en materia de alimentación animal (CNCAA) (2023) *Datos de producción de piensos 2022*, CNCAA, Ministerio de Agricultura, Pesca y Alimentación: Madrid, Spain
115. Ecologistas en Acción (2022) *Con la soja al cuello: piensos y ganadería industrial en España*, Ecologistas en Acción: Madrid, Spain
116. "Main Spanish companies dedicated to trading in wholesome cereal, raw Tabaco, animal feed according to turnover in 2022," *Statista*, Abigail Orús, February 15, 2024
117. Cargill S.L.U. (2022) *Estado de Información No Financiera mayo 2022*, Cargill S.L.U.: Sant Cugat del Vallés, Spain
118. Cargill S.L.U. (2022) *Estado de Información No Financiera mayo 2022*, Cargill S.L.U.: Sant Cugat del Vallés, Spain
119. Bunge Iberica corporate website, Nuestra presencia en España y Portugal
120. Mighty Earth (2023) *Saving the Cerrado: Why Bunge, supermarkets and governments must act fast*, Mighty Earth: Washington, D.C., United States
121. Mighty Earth (2023) *Saving the Cerrado: Why Bunge, supermarkets and governments must act fast*, Mighty Earth: Washington, D.C., United States
122. Aidenvironment (2023) *Realtime Deforestation Monitoring System 12*, Aidenvironment: Amsterdam, The Netherlands
123. Mighty Earth (2023) *Saving the Cerrado: Why Bunge, supermarkets and governments must act fast*, Mighty Earth: Washington, D.C., United States
124. Mighty Earth (2024) *Rapid Response #2, Soy, Monitoring deforestation in Brazilian supply chains*, Mighty Earth: Washington, D.C., United States
125. Mighty Earth (2024) *Rapid Response #2, Soy, Monitoring deforestation in Brazilian supply chains*, Mighty Earth: Washington, D.C., United States
126. Official Journal of the European Union, Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance), June 9, 2023
127. Official Journal of the European Union, Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance), June 9, 2023. Annex II
128. FAO (2022) *The State of the World's Forests 2022. Forest pathways for green recovery and building inclusive, resilient and sustainable economies*, FAO: Rome, Italy
129. The Greens/EFA/Trase (2022) *Proposed EU Regulation on Deforestation & Forest Degradation. Understanding the impact of excluding other ecosystems*, The Greens/EFA/Trase: Brussels, Belgium/ Stockholm, Sweden
130. The Greens/EFA/Trase (2022) *Proposed EU Regulation on Deforestation & Forest Degradation. Understanding the impact of excluding other ecosystems*, The Greens/EFA/Trase: Brussels, Belgium/ Stockholm, Sweden
131. "Race against time': Saving the snakes and lizards of Brazil's Cerrado," *Mongabay*, Sharon Guynup, February 2, 2021
132. "Still time to save Brazil's Cerrado, study shows, but it's running out fast," *Maurício Brum, Mongabay*, May 2, 2023
133. "Why the new EU Deforestation Regulation (EUDR) should include an additional billion hectares of 'Other Wooded Lands'," *Mighty Earth et al.*, September 21, 2023
134. "Why the new EU Deforestation Regulation (EUDR) should include an additional billion hectares of 'Other Wooded Lands'," *Mighty Earth*, September 21, 2023

135. Tropical Forest Alliance, Collective Action, Agriculture sector roadmap to 1,5 °C, see: <https://www.tropicalforestalliance.org/en/collective-action-agenda/cop27-roadmap/>
136. "Growing Global Agriculture to Its Full Potential, Sustainably and Responsibly," ADM, Amaggi, Bunge, Cargill, Cofco Intl, LDC, Olam Agri and Viterro, joint statement, 2023
137. "Collective statement by soy traders clarifies targets but falls short of 1.5 °C ambitions," *Accountability Framework Initiative*, December 7, 2023
138. FAO (2013) *Tackling climate change through livestock - A global assessment of emissions and mitigation opportunities*, FAO: Rome, Italy
139. FAO (2013) *Tackling climate change through livestock - A global assessment of emissions and mitigation opportunities*, FAO: Rome, Italy
140. International Energy Agency (2023), *Global Methane Tracker 2023*, IEA: Paris, France
141. IPCC (2023) *AR6 Synthesis Report: Climate Change 2023*, IPCC: Geneva, Switzerland
142. United Nations Environment Programme and Climate and Clean Air Coalition (2021) *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*, United Nations Environment Programme: Nairobi, Kenya
143. United Nations Environment Programme and Climate and Clean Air Coalition (2021) *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*, United Nations Environment Programme: Nairobi, Kenya
144. Ministerio para la Transición Ecológica y el Reto Demográfico (2024) *Informe de Inventario Nacional de Emisiones de Gases de Efecto Invernadero*, Ministerio para la Transición Ecológica y el Reto Demográfico: Madrid, Spain
145. Ministerio para la Transición Ecológica y el Reto Demográfico (2024) *Informe de Inventario Nacional de Emisiones de Gases de Efecto Invernadero*, Ministerio para la Transición Ecológica y el Reto Demográfico: Madrid, Spain
146. Ministerio para la Transición Ecológica y el Reto Demográfico (2024) *Informe de Inventario Nacional de Emisiones de Gases de Efecto Invernadero*, Ministerio para la Transición Ecológica y el Reto Demográfico: Madrid, Spain
147. Poore J. and Nemecek T. (2018) *Reducing food's environmental impacts through producers and consumers*, Science, Vol. 360, n°6392, June 1, 2018
148. Poore J. and Nemecek T. (2018) *Reducing food's environmental impacts through producers and consumers*, Science, Vol. 360, n°6392, June 1, 2018
149. Poore J. and Nemecek T. (2018) *Reducing food's environmental impacts through producers and consumers*, Science, Vol. 360, n°6392, June 1, 2018
150. Contreras J. (2019) *La alimentación contemporánea entre la globalización y la patrimonialización*, Boletín de Antropología, vol. 34, n°58, 2019
151. "IARC Monographs evaluate consumption of red meat and processed meat," World Health Organization, press release, October 26, 2015
152. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans (2018) *Red Meat and Processed Meat*, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, N° 114, 2018
153. FEFAC (2023) *Feed and Food 2022*, FEFAC: Brussels, Belgium
154. "Aumenta cerca de un 3 % el consumo de carne y de productos cárnicos en España durante 2023," *Cárnica*, Depares B., February 22, 2024
155. "Aumenta cerca de un 3 % el consumo de carne y de productos cárnicos en España durante 2023," *Cárnica*, Depares B., February 22, 2024
156. López García, E., et. al., (2022) *Informe del Comité Científico de la Agencia Española de Seguridad Alimentaria y Nutrición (AESAN) sobre recomendaciones dietéticas sostenibles y recomendaciones de actividad física para la población española*, Revista del Comité Científico de la AESAN, n°36, 2022

157. Ministerio de Consumo (2022) *Informe de Sostenibilidad del consumo en España. Evaluación del impacto ambiental asociado a los patrones de consumo mediante un análisis del ciclo de vida*, Ministerio de Consumo: Madrid, Spain
158. Ministerio de Consumo (2022) *Informe de Sostenibilidad del consumo en España. Evaluación del impacto ambiental asociado a los patrones de consumo mediante un análisis del ciclo de vida*, Ministerio de Consumo: Madrid, Spain
159. López García, E., et. al., (2022) *Informe del Comité Científico de la Agencia Española de Seguridad Alimentaria y Nutrición (AESAN) sobre recomendaciones dietéticas sostenibles y recomendaciones de actividad física para la población española*, Revista del Comité Científico de la AESAN, nº36, 2022
160. López García, E., et. al., (2022) *Informe del Comité Científico de la Agencia Española de Seguridad Alimentaria y Nutrición (AESAN) sobre recomendaciones dietéticas sostenibles y recomendaciones de actividad física para la población española*, Revista del Comité Científico de la AESAN, nº36, 2022
161. Profundo (2023) *Impacts of a Shift to Plant Proteins - Effects of reduced meat production on GHG emissions, land, and water use*, Profundo: Amsterdam, The Netherlands
162. Profundo (2023) *Impacts of a Shift to Plant Proteins - Effects of reduced meat production on GHG emissions, land, and water use*, Profundo: Amsterdam, The Netherlands
163. "Replacing 30% of meat with plants proteins could offset almost all global aviation emissions, free up an India-sized carbon sink and save 7.5 million swimming pools worth of water a year", *Madre Brava*, Muzzi N., November 2, 2023

## Acknowledgments

**Author** Isabel Fernández Cruz

**Contributions** Alex Wijeratna  
Carlos Bravo  
Gemma Hoskins  
Jordan McDonald  
Mariana Bombo Perozzi Gameiro  
Boris Patentreg  
Joao Gonçalves  
Laura Ojea

**Revision/Proofreading** Julie Higonnet

**Layout & Graphics** Traficantes de sueños





**MIGHTY  
EARTH**

**Mighty Earth**

**July 24**

1150 Connecticut Avenue NW  
Suite 800 - Washington, DC 20036

**[mightyearth.org](https://mightyearth.org)**