KFC Western Europe Soy Report

A Report Prepared for KFC Western Europe **2023**

Contents

Foreword

We are very pleased to share our very first Soy Report for our Western European (WE) region.

The intention of the report is to provide an open, honest, and independent update on the soy used in our supply chain, as well as the areas where improvement is still needed.

Rudi Van Schoor
Supply Chain Officer,
KFC Pan Europe

We are committed to ending deforestation and ensuring that the production of soy in our poultry, pork and dairy feed supply, but also soy used as an ingredient, can be grown without the further destruction of forest or to communities around the world.

When forests are cleared to make room to grow crops or raise animals, sequestered carbon is released. Deforestation can also impact biodiversity by destroying the habitats that native animals and plants depend on. It has also been linked to human rights violations against indigenous peoples.

Many other businesses source the same commodities as we do — therefore, the primary way we are tackling this issue is through collaboration. It will take all parties, including non-governmental organizations (NGOs), companies, governments and more, to move successfully in this area.

This important work is part of our parent company, Yum! Brands' Good Growth strategy, also known as its "Recipe for Good Growth", which guides the company in every aspect of what we do. This strategy is grounded in the idea that our business will only endure if our brands are inclusive, sustainable and reflective of evolving stakeholder needs. Those principles are also core in our KFC Global "Done The Right Way" strategy.

Yum!'s commitments and progress on its pillars of People, Food and Planet are shared in the recently published Yum! Brands 2022 Global Citizenship & Sustainability Report.

Examples of Yum! engagement specific to forest stewardship include endorsing the New York Declaration on Forests (NYDF) and the private-sector goal of eliminating deforestation from the production of agriculture commodities such as palm oil, soy, paper and beef products and ending natural forest loss by 2030. Through Yum!'s 2022 feed mill audit, it was determined that 100% of its feed mills in Brazil, used for Brazilian poultry production, are aligned with the Amazon Soy Moratorium.

We also recognise that there are increasing demands to move even faster and continue to monitor what this means for us.

Due to the complexity of our supply chains, this work is more straightforward for some commodities than for others. For example, soy, which is a primary ingredient in our poultry feed, has a supply chain involving soybean farmers, processors, feed mills, poultry suppliers, farmers and finally KFC restaurants. While our business is at least five steps removed from the soybean field, we continue to work across our supply chain to achieve greater levels of visibility and accountability. In 2022, we published our first Soy Policy, aiming for more transparency and sustainability in our soy supply chain.

We will continue our efforts to show improvement and to focus on providing greater levels of transparency on the performance of the region, and its individual markets.

Introduction

With an estimated embedded soy footprint of 88,381 tonnes[1] in 2022 (in its poultry supply chain), soy is an important commodity for KFC WE. As part of its sustainability strategy to combat climate change and biodiversity loss, KFC is committed to an environmentally and socially responsible global soy supply chain.

By 2030 (2025 for KFC UK&I), KFC WE aims to source 100% of the soy in its supply chains (embedded soy or soy used as an ingredient) from physically traceable, sustainable, deforestation and conversion-free[2] (both legal and illegal) sources. This commitment also reinforces procurement procedures, considering compliance with the main socio-environmental criteria, in particular on deforestation in Argentina (Chaco biome), Brazil (Amazon and Cerrado biomes), and Paraguay (Chaco biome). It is also linked to KFC's Ethical Sourcing Policy, whereby KFC wants to promote responsible production of soy, which benefits farmers and surrounding communities and respects and upholds the rights of workers, indigenous peoples and communities. In light of these commitments, and the evolving landscape around deforestation legislation, KFC WE is accelerating its efforts to eliminate deforestation from its supply chains.

This report explores the context and usage of soy within KFC WE's poultry, dairy and pork supply chains. The vast majority of soy volumes enter KFC supply as poultry feed.

2023 was the first time that KFC WE engaged with their pork and dairy suppliers on soy use. The aim of the initial pork and dairy surveys was to gather preliminary information and encourage supplier engagement, as a first step towards soy footprinting. With this in mind, all data for pork and dairy supply chain is not weighted by volumes and rather presented as the number of suppliers surveyed.

Soy used within animal feed (embedded soy) is the focus of this report, but there are a few other products (mainly desserts) containing soy as an ingredient (mainly soy oil or soy lecithin), where the same policy applies.

This report was developed by FAI Farms on behalf of KFC WE. It includes anonymised data[3] and feedback from the KFC WE 2023 Supplier Surveys (2022 data) as well as a supporting literature review. In line with KFC's production, poultry is the main focus, but soy usage in KFC WE's pork and dairy supply chains is also considered. All three supply chains source product from Europe, with poultry also sourced from Brazil and Thailand.

The key sections of the report include:

- **Scene setting** with relevant context, facts and figures
- An overview of **relevant market legislation**
- **Soy transparency and mapping** for KFC WE and its individual/logistically linked destination markets[4], including an exploration of some **commercial factors influencing soy footprint.**
- A review of **certification and supplier engagement**
- A summary of relevant soy **initiatives and working groups**
- **Concluding comments** and future focus

As another recognised deforestation risk commodity, KFC WE's palm use is also considered within an Annex to the main report.

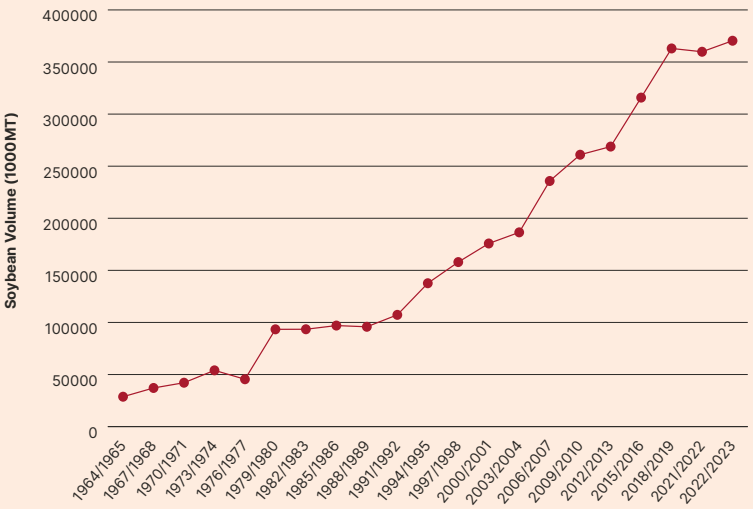
1 Based on those suppliers that submitted volume data for 2022 (excludes 3 KFC WE suppliers).

2 KFC understand deforestation-free and conversion-free soy to be soy that is: 'legal and cultivated in a way that protects against conversion of forests and valuable native vegetation.'

3 Poultry data is based on those suppliers that submitted volume data for 2022 (excludes 3 KFC WE suppliers).

4 UK & Ireland; France; Spain; Italy; Germany, Denmark & Switzerland; The Netherlands, Sweden & Belgium

Soy Facts & Figures.
Why is Soy an Environmental Concern?



Global production volume of soybeans 1964-2022. Data from USDA PSD.

There is major concern about the sustainability of soy production, in particular because of its links to deforestation and loss of native vegetation in the Amazon and other areas of South America[5]. Soy can be a direct or indirect driver of deforestation, whereby forest is either directly cleared to make way for soy, or soy production displaces a different type of agriculture, which then shifts and causes deforestation[6].

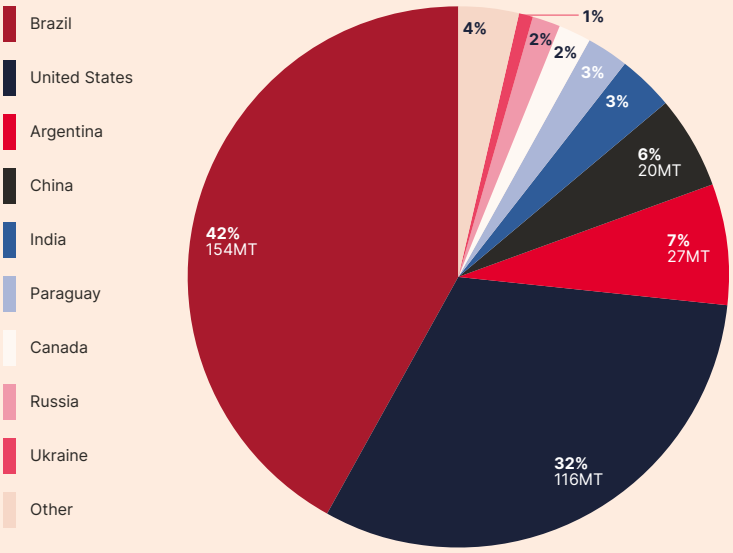
South America's soy output has increased enormously over recent decades[7], mainly due to the expansion of the area used for soy production[8]. While most attention has been paid to deforestation in the Brazilian Amazon, there is growing concern about land use change in other areas, such as the Brazilian Cerrado and the Gran Chaco region in Paraguay and Argentina. Deforestation results in biodiversity loss as well as greenhouse gas emissions from deforestation and land conversion. As an intensively grown crop, soy also has high demands for resources; particularly energy, water, agrochemicals and soil[9]. However, in the majority of producing countries in South America, soy cultivation has supported the economic development of many rural areas.

Soy Production & Use

Often referred to as the 'King of Beans' soybeans are one of the only plant-based protein sources providing nine essential amino acids[10]. They are also well suited to large scale, mechanised production. With a water content of 8% when dried, soybeans also have a very good storage life and can be transported for relatively long periods and in bulk[11].

Production and consumption of soy has increased significantly over the last 50 years, with global production totalling 370,421 (1000MT) in 2022[12] (see chart top right). Globally, soy was the crop with the seventh highest production volume and fourth highest value in 2021[13].

The 10 largest soy producing countries in 2022 were Brazil, US, Argentina, China, India, Paraguay, Canada, Russia, Ukraine and Bolivia, with average yields of between 0.96 MT/HA (India) and 3.58 MT/HA (Brazil)[14]. Production from Brazil, US and Argentina contributed over 80% of the global total[15] (see pie chart below).

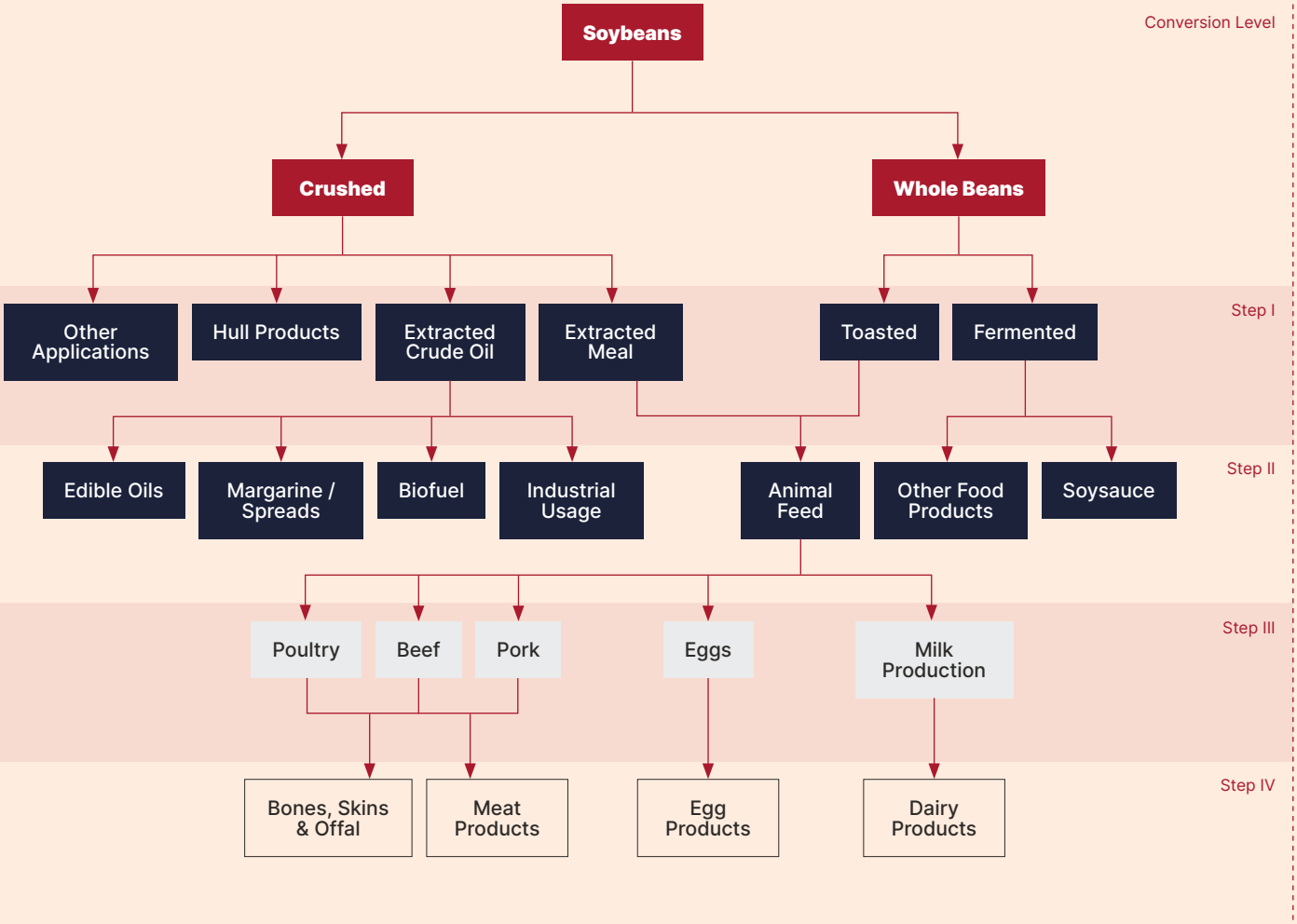


Soybean production in megatonnes per country in 2022-23. Data from USDA PSD.

5 FCRN 2020 Soy: food, feed, and land use change | TABLE Debates
6 Ibid.
7 UN FAOSTAT
8 Yield (i.e. productivity) has also increased but to a lesser extent.
9 WWF 2023 Soy | WWF (panda.org)
10 IISD 2023
11 BMT CargoHandbook 2023
12 USDA Foreign Agriculture Service
13 UN FAOSTAT
14 USDA Foreign Agriculture Service
15 Ibid

Soy Facts & Figures
Soy Product Flows

Soybeans are crushed and processed into soybean meal and oil. The defatted meal of soybeans[16] makes up soybean meal, which is most commonly used for animal feed[17]. Whole beans and hulls (a by-product of processing) are also used as feed. Soy product flows are illustrated in more detail in the infographic below.



Soy Product Flows. Source: The Consumer Goods Forum, A Framework for the Measurement of Soy Usage in Consumer Goods Businesses, CGF Sustainable Soy Sourcing Guidelines, 2nd Edition.

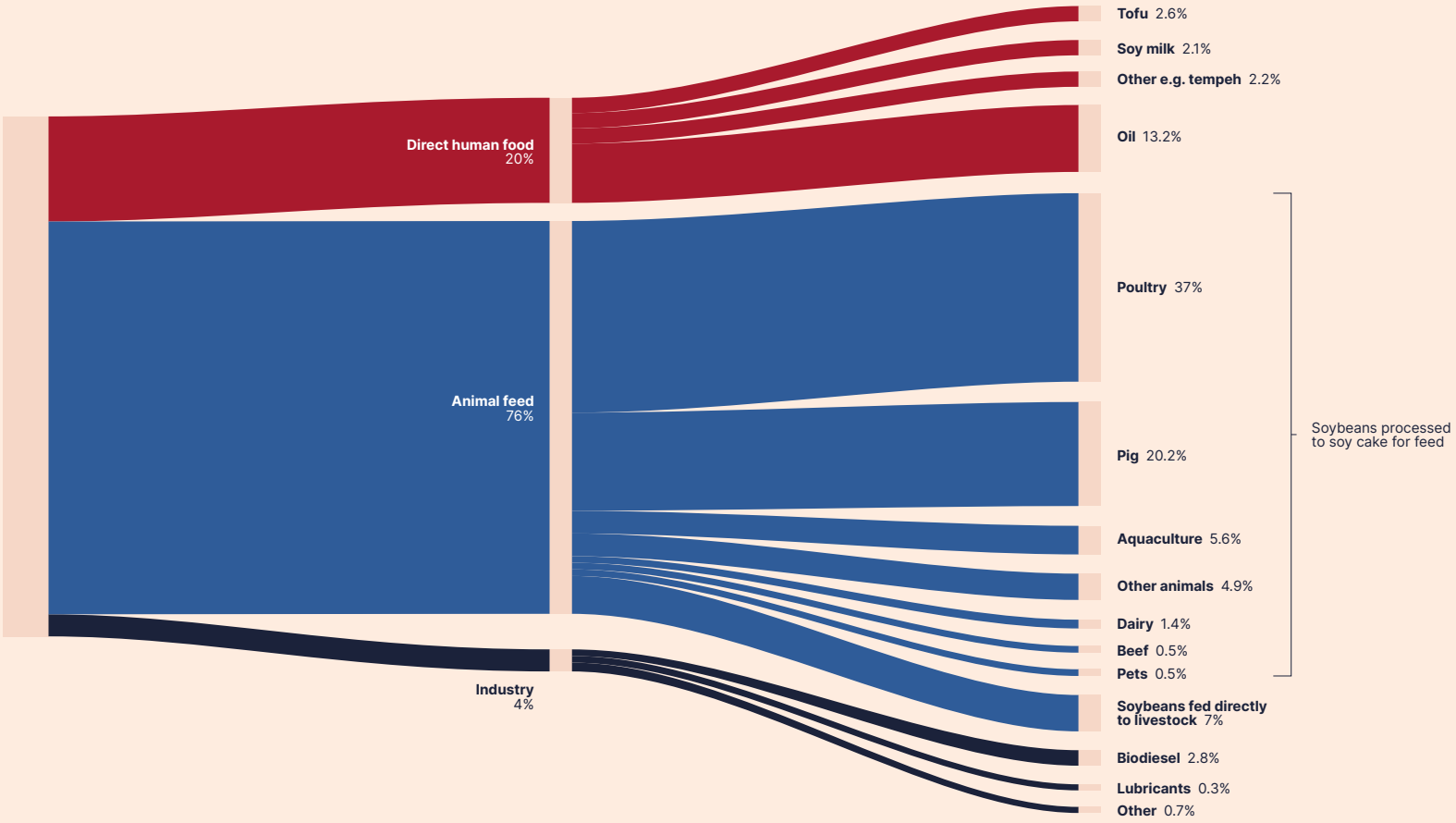
16 Fat is removed via the use of solvents.

17 Soy Info Center 2007 History of Soybean Crushing: Soy Oil and Soybean Meal – Part 1

Soy Facts & Figures
Soy in Animal Feed

Soy feed use is highest in poultry and pork production but soy is also used in dairy production[18]. Soy is high in protein, has a favourable amino acid profile and, after heat treatment, contains low levels of anti-nutritive compounds making it a good feed ingredient[19].

Approximately 76% of global soy production is used for animal feed, with about 20% for food and 4% for biofuel and other industrial purposes[20,21], (see infographic below). The top consumers of soy meal for feed in 2022 were China, the US, the EU, Brazil and Mexico[22].

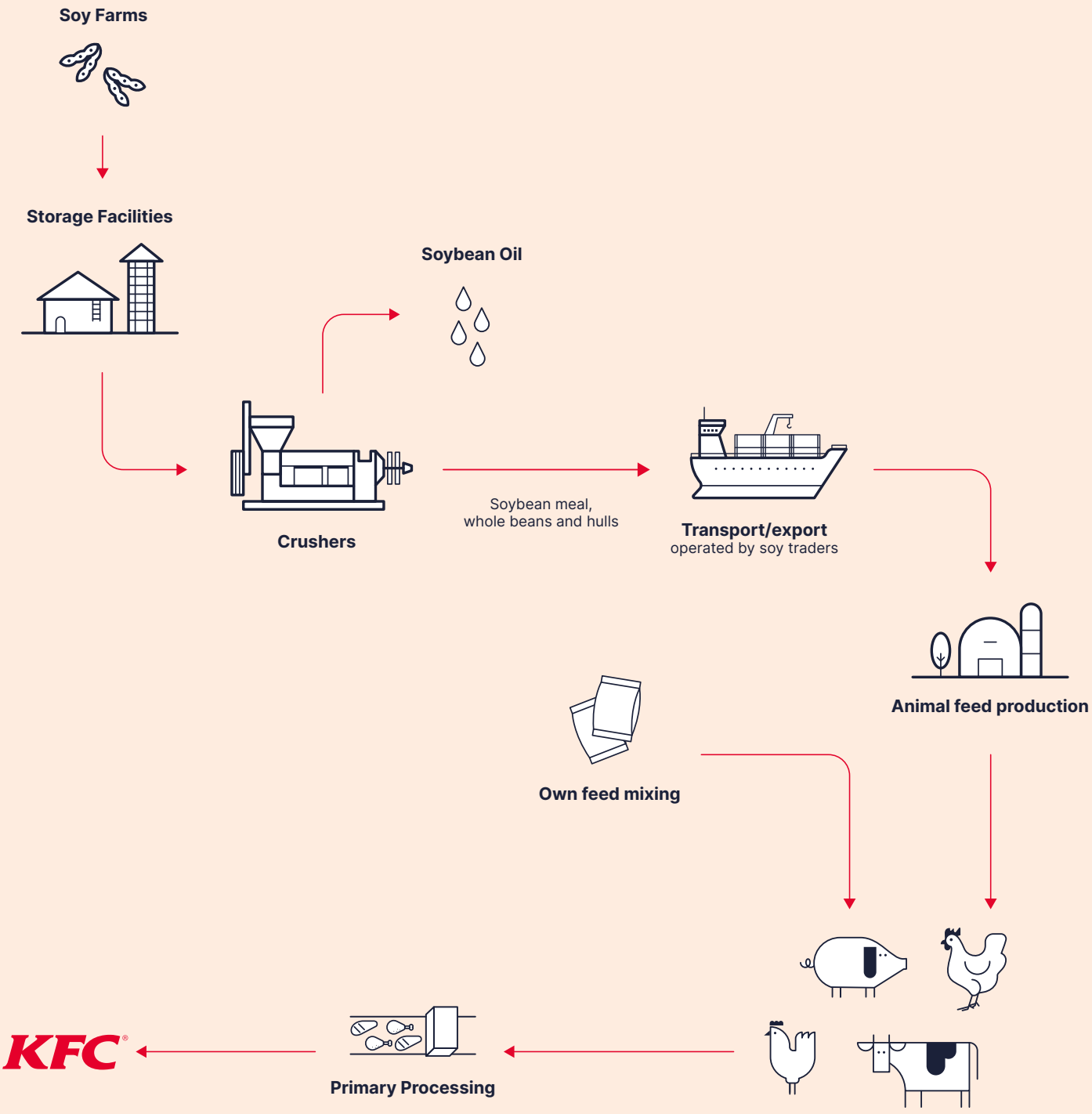


Uses of soybean by weight. Source: Hannah Ritchie and Max Roser 2021 Soy — Our World in Data

18 FCRN 2020 Soy: food, feed, and land use change | TABLE Debates
19 Ibid.
20 Ibid.
21 Hannah Ritchie and Max Roser 2021 Forests and Deforestation
22 USDA Foreign Agriculture Service

Soy Facts & Figures
Supply Chain Structure

The supply chain from 'field to fork' for soy used in livestock feed is outlined in the infographic below. The supply chain is complex with many steps, and often involves long transportation distances and product aggregation.



Generalized soy supply chain structure flow for KFC WE.

Legislation

A new landmark EU regulation on deforestation-free supply chains entered into force on 29 June 2023. Once applied, the new law will ensure that key commodities exported or placed on the EU market do not come from deforested or degraded land[23].

The commodities include cattle, cocoa, coffee, palm-oil, rubber, wood and soy, including products derived from or fed these commodities (such as leather, chocolate or furniture). All relevant companies will only be able to sell these products in the EU if they have carried out strict due diligence, including information gathering, risk assessments and mitigation measures. This is to ensure that the product has not led to forest degradation, or come from deforested land, after a cut-off date of 31 December 2020. Due diligence processes will include traceability requirements, including the use of geolocation coordinates and satellite imagery, to check that there is no deforestation where the commodities were produced. Companies will also need to verify that these products are compliant with relevant legislation in the country of production, including human rights, and that the rights of indigenous peoples are upheld. The competent EU authorities will conduct risk-based checks on companies according to risk criteria, such as country of origin and complexity and length of supply chain, to confirm compliance with the legislation[24].

The new rules will be applicable in December 2024, 18 months after the regulation came into force. KFC WE will follow the development of the guidelines linked to the new rules and will adapt its soy policy toward those guidelines.

From 2025, the legislation will be reviewed with a view to extending its application to other non-forest ecosystems such as savannahs, wetlands and peatlands, and to other commodities such as maize and biodiesel. Within the 2023 Annual Supplier Surveys, several KFC WE poultry and dairy suppliers commented on how the new EU legislation will help encourage more action on sustainable soy across the supply chain.

In the UK, the government is looking to introduce legislation under the Environment Act 2021, which will require companies that use forest-risk commodities to conduct due diligence to ensure their products are free of illegal deforestation and conversion.

Outside of Europe, the proposed US Forest Act has similar aims to tackle illegal deforestation in US supply chains. These approaches refer to the country of origin's national legislative frameworks at the time of deforestation (e.g. see Appendix 2). Illegal deforestation approaches can help to support forest governance systems in producer countries, however there are concerns that these will have a limited impact as 30%-50% of tropical deforestation is nominally lawful[25].

"The EU regulation coming in place by 2024 will help to integrate more action into our supply chain."

– KFC WE Dairy Supplier
(quote taken from the supplier survey)

23 European Parliament legislative resolution of 19 April 2023 on the proposal for a regulation of the European Parliament and of the Council on making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (COM(2021)0706 – C9-0430/2021 – 2021/0366(COD))

24 European Commission 2023 Green Deal: New law to fight global deforestation and forest degradation driven by EU production and consumption enters into force

25 Assessing the G7's international deforestation footprint and measures to tackle it. Food and Land Use Coalition 2022.

Legislation

According to the Annual Survey results, in 2022 the largest producing countries for soy used in KFC WE poultry supply chains were Brazil (54.6%), Paraguay (14.9%) and Argentina (10.1%)[26].

KFC WE's main soy producing countries also have national legislation covering the protection of native forests, as follows:

- The Brazilian Forest Code, established through Law 12,651, of May 25, 2012
- The Paraguayan Forest Law, also known as Law No. 422/734 on Forests and Wildlife (Ley de Bosques y Vida Silvestre), enacted on August 30, 1973
- The Argentinian Forest Law on the Minimum Standards for the Environmental Protection of Native Forests National Law N° 26.3311, enacted in December 2007

Implementation varies by country and can involve agencies at the federal, state, and municipal levels. Within deforestation risk areas in both Brazil and Argentina, the law requires landowners to maintain a certain percentage of their property as a forested area. Projects that involve land-use change or potential deforestation may also be subject to environmental impact assessments and other restrictions. For a more detailed summary of forest protection laws and approaches in KFC WE's main soy producing countries in South America please see Appendix 2.

Other South American countries producing soy for KFC WE supply chains in 2022 were Bolivia and Uruguay. Both countries have a Forest Law, which establishes regulations for the management, conservation, and protection of forests. In Bolivia, the expansion of soy plantations has led to deforestation in the Chiquitano Dry Forest and in the Bolivian Amazon. In Uruguay, the smaller-scale soy cultivation is generally not associated with extensive deforestation or the conversion of natural biomes[27]. KFC WE suppliers also reported sourcing soy from Canada and US and Europe (Ukraine and Italy). At this point in time, deforestation for soy produced within these countries is not a significant concern.

26 The volume represented by suppliers that answered the question fully equates to 97.5% of KFC WE's 2022 volume reported by suppliers.

27 World Bank; CIAT. 2015. Climate-smart agriculture in Uruguay. CSA Country Profiles for Africa, Asia, and Latin America and the Caribbean Series. Washington D.C. The World Bank Group.

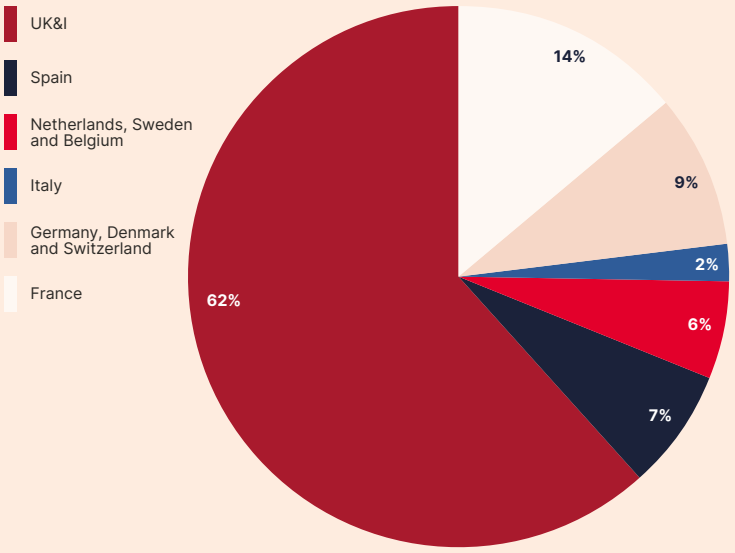
KFC Supply Chain Transparency & Mapping
KFC WE Soy Footprint

To better understand KFC WE's soy impact, understanding the volume of soy used within their animal feed is a vital step. FAI developed a soy calculator to estimate KFC WE's embedded soy footprint for their poultry supply chain[28]. The ability to estimate a soy footprint across KFC's markets gives a foundation for benchmarking progress, as well as context for stakeholder discussions. For more detailed information on the soy calculator methodology, including key assumptions and limitations, please see Appendix 3.

The 2023 Annual Supplier Survey results helped to identify factors influencing KFC WE's overall soy footprint, these include the average percentage of soy in the broiler diet, breed and, to a lesser extent, average liveweight.

In 2022, the average percentage of soy in KFC WE's broiler diets was 22%, based on the results of the Annual Supplier Survey[29]. Using this average, and assuming that all birds were Ross 308 and were grown to the average KFC WE liveweight of 2.7kg, the total 2022 KFC WE soy footprint was estimated at 88,381[30] tonnes of soy.

The pie chart shows how KFC WE's different destination markets contribute to this total soy tonnage.



The contribution (in % of grand total) of each logistically linked market to KFC's overall soy footprint for the poultry supply chain.

28 2023 is the first year for the KFC WE Pork and Dairy Supplier Surveys. The aim for the initial surveys was to gather preliminary information and encourage supplier engagement through a simple survey, rather than to achieve footprinting in 2023

29 The volume represented by suppliers that answered the question fully equates to 76.1% of KFC WE's 2022 volume reported by suppliers.

30 Based on those suppliers that submitted volume data for 2022 (excludes 3 KFC WE suppliers).

KFC Supply Chain Transparency & Mapping

Alternative Proteins in Feed

When asked about levers for more sustainable sourcing across the broiler industry, KFC WE suppliers referred to an overall reduced reliance on soy in diets. One way to achieve this could be to supplement or replace soy with alternative proteins such as pulses or oil seed by-products.

Novel proteins such as insect processed animal protein (PAP) and microalgae have been touted as circular, soilless alternatives to soy with lower carbon footprints[31]. There is an opportunity to further explore novel proteins, which have the potential to displace some of the soy used within Europe.

In the 2023 Annual Supplier Survey, 90% of KFC WE poultry suppliers reported using alternative proteins within their broiler diets[32]. Future surveys will seek to explore whether alternative proteins are used to replace soy. Oil seeds by-product proteins such as linseed, sunflower and sesame meal were the most commonly used[33].

Soy Footprint for Pork & Dairy Products

Based on results of the Pork Supplier Survey, soy was used by one supplier in their pork diets, however the inclusion rate was unknown. Two other pork suppliers did not know the feed composition used for their supply, but soy is a commonly used ingredient in pig feed in Europe so its inclusion in the rations of these suppliers is likely. For dairy, four suppliers indicated that soy was included in their dairy cow diets, with two providing inclusion rates of 4% and 8% (three suppliers did not know whether soy was used).

31 Food Standards Agency 2023 The Future of Animal Feed: Animal by-products and insects.

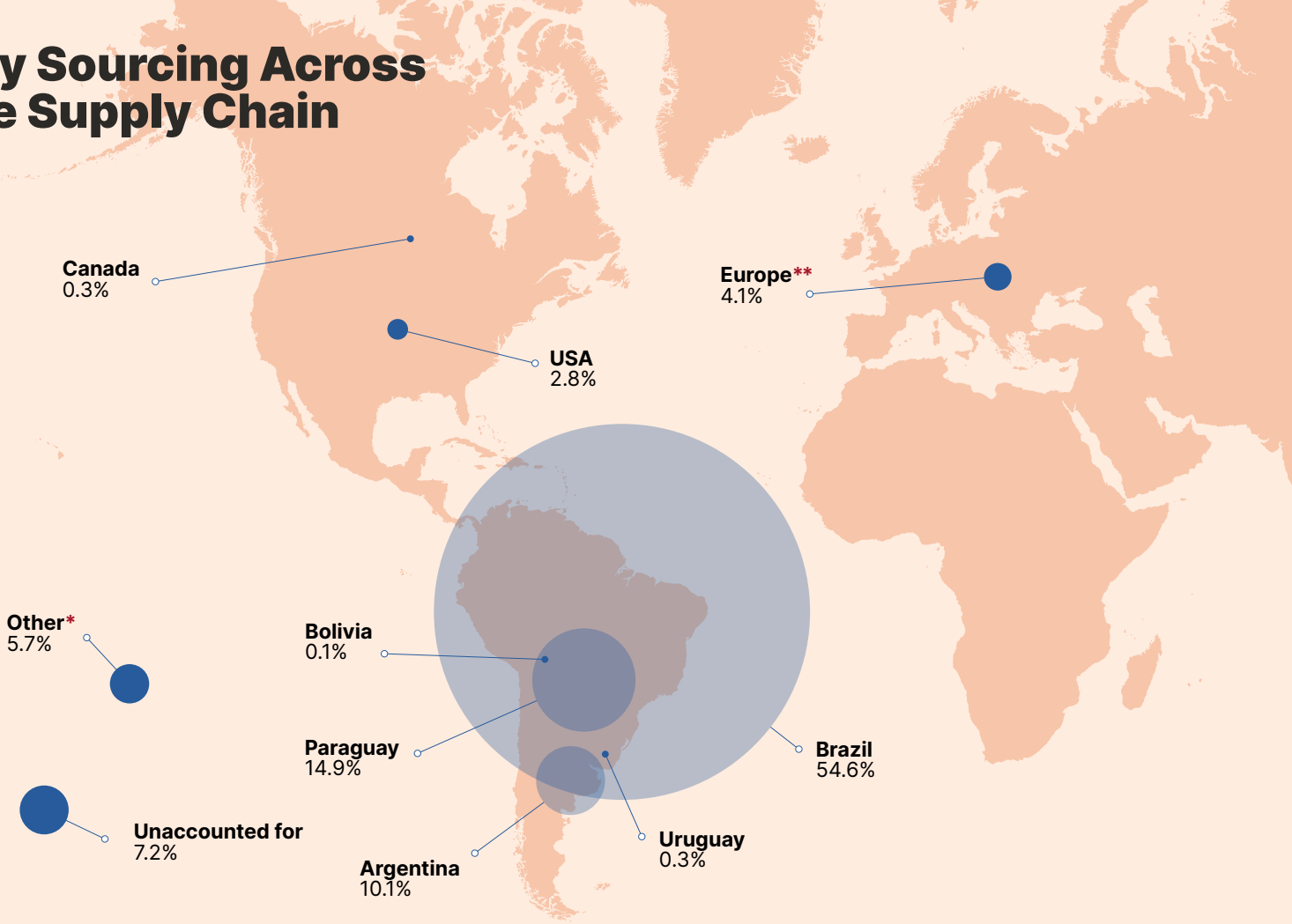
32 The volume represented by suppliers that answered the question fully equates to 64.5% of KFC WE's 2022 volume reported by suppliers.

33 The volume represented by suppliers that answered the question fully equates to 98.4% of KFC WE's 2022 volume reported by suppliers.

Soy Sourcing Across the Supply Chain

From certification schemes to supplier engagement, the following sections explore how and where soy is sourced across the KFC WE supply chain. Using responses from the 2023 Annual Supplier Survey, poultry data was weighted to reflect the volume produced, in percentages, by each supplier into each market. Not all suppliers answered each question and the number or proportion of suppliers answering individual questions is provided in each case. There are footnotes to indicate the gaps in the data provided by these suppliers. In some graphs, this gap is presented as an 'unaccounted for' percentage.

Soy Sourcing Across the Supply Chain



Percentage of reported KFC WE volume sourced by soy producing country (%) for poultry supply. The 'Unaccounted for' percentage captures both suppliers that did not answer the question, and gaps where suppliers only partially answered the question.

Over half of the soy products used across the KFC WE poultry supply chain were sourced from Brazil, mirroring global trends as the world's largest soy producing country[34]. In 2022, 54.6% of KFC WE's poultry supply chain volume was sourced from Brazil, followed by 14.9% sourced from Paraguay and 10.1% from Argentina (see map above).

Traceability to biomes and mills

Within the dominant South American producing countries, traceability to specific biomes was more challenging. None of the respondents sourcing from South America reported the biomes their soy came from[35]. However, 6.8% of the soy volume was sourced by suppliers who could trace some of their soy back to the mill, including some suppliers that sourced from South America[36]. This could suggest that suppliers are either unwilling to share information related to the biome, or they have less visibility of their South American supply compared to other regions they source from.

Pork & Dairy Supply Chain Traceability

Soy traceability within KFC WE's dairy and pork supply chains is limited based on the results of the 2023 Annual Supplier Survey. Only one pork supplier out of three reported that traceability was possible to mill level and that all use was certified. For dairy, soy traceability to any level (Country, Region, Province, Mill, Crushing facility) was only reported by one supplier. The same supplier was the only one to report countries/region of origin for the soy used (Argentina, Canada, US, Europe).

34 USDA Soybean 2023 World Production.

35 The volume represented by suppliers that answered the question fully equates to 54% of KFC WE's 2022 volume reported by suppliers.

36 The volume represented by suppliers that answered the question fully equates to 97.6% of KFC WE's 2022 volume reported by suppliers.

*Other: countries were not specified by the supplier

**Europe includes Italy and Ukraine

Certification & Supplier Engagement

Certification Schemes

Certification schemes aim to ensure that agricultural commodities, such as soy and palm, are protected by strict environmental and social standards. Certification is seen as a critical tool for bringing responsible soy into the mainframe and could play an increasingly important role in facilitating compliance with emerging EU legislation.

Different certification schemes for soy may have varying mechanisms to certify soy production. However, they all aim to ensure that soy production adheres to sustainable practices and to provide a credible assurance of responsible sourcing. An overview of some common mechanisms used in soy certification schemes are:

- **Standards:** Certification schemes establish a set of standards and criteria that soybean producers must meet to obtain certification. These standards outline the requirements and expectations for sustainable and responsible soy production.
- **Inspections & Audits:** Independent and accredited certification bodies are responsible for evaluating and certifying soybean producers, typically conducting on-site inspections and audits at soybean production facilities and farms, with the review of relevant documents and records to ensure ongoing compliance.
- **Chain-of-Custody Models:** There are currently many certification options available, and these fall into different Chain of Custody (CoC) model categories. The level of connection and transparency between the product and the sustainability claim for CoC models varies. Identity Preservation models provide the greatest connection, and certificate trading models the least[37].

The table below summarises the categories as defined by the ISEAL 'Chain of Custody Models Guidance'[38].

COC MODEL	SUMMARY
Identity Preservation (IP)	Certified material from a single source is kept separate from all other material throughout the supply chain, allowing maximum traceability from production to end use.
Segregation	Segregation ensures that produce from multiple certified sources is kept separate from that of uncertified sources throughout the supply chain, and that output quantities should correspond to the input quantities. Information on the origin of each certified source may be unavailable.
Mass balance	Involves the use of both certified and uncertified product. The volume of certified product entering the operation is controlled, and an equivalent amount can then be sold as certified. The physical mixing of certified and uncertified product is allowed but not required – the important thing is that the quantities of both are controlled and documented. Mass balance can be considered as being a transition route to 100% physical verification[39].
Certificate 'book and claim' trading	The administrative record flow is not connected to the physical flow of materials or products throughout the supply chain. This is because traders buy certificates (or 'credits') from certified producers instead of the product itself.

Summary of the CoC models as defined by ISEAL 2016 Chain of Custody Models Guidance. Source: EFECA Soya-Certification-Options-Briefing-2020.

For a full list of the certification schemes present in KFC WE's poultry, dairy and pork supply chains, see Appendix 4.

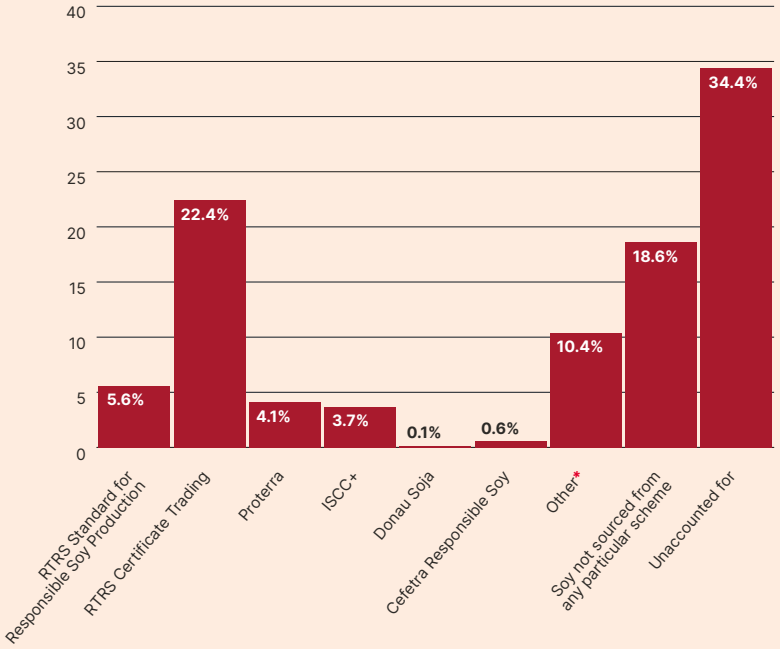
37 Efeca 2020 Soya-Certification-Options-Briefing-2020

38 ISEAL 2016 Chain of Custody Models Guidance

39 Rainforest Alliance 2023 What is Mass Balance Sourcing?

Certification & Supplier Engagement

KFC WE endorses certified soy and aims to increase the proportion of certified soy within their supply chain each year, through certification schemes[40]. In 2022, 47% of KFC WE's poultry volume was covered by soy certifications (see chart right). Of the disclosed certification schemes, 22.4% was covered by RTRS Certificate Trading, 5.6% by RTRS Standard for Responsible Soy Production and 10.4% 'other' certification schemes[41] 18.6% of volume was not covered by certification schemes, and 34.4% of the volume was unaccounted for[42]. Other certification schemes of significance to KFC WE such as Proterra, ISCC+, Donau Soja and Cefetra Responsible Soy were represented in smaller volumes.



The percentage of total KFC WE poultry volume (%) covered by suppliers sourcing from certification schemes. The 'Unaccounted for' percentage captures both suppliers that did not answer the question and gaps where suppliers only partially answered the question.
*Other certification schemes include ADM Responsible Soy, Cargill Triple S, Bunge, USSEC and Agrofert.

In 2020, the IDH European Soy Monitor Report estimated a 43.8% uptake in FEFAC Soy Sourcing Guidelines (FEFAC SSG) compliant soy and 25.9% certified Deforestation and Conversion Free (DCF) soy across the EU27+ (European, UK, Norwegian, and Swiss) countries. Within the feed industry, the certified DCF figure is even smaller at 13%.

40 KFC Western Europe Sourcing Code of Practice

41 Other certification schemes include ADM Responsible Soy, Cargill Triple S, Bunge, USSEC and Agrofert.

42 The 'Unaccounted for' percentage captures both suppliers that did not answer the question and gaps where suppliers only partially answered the question.

Deforestation and Conversion Free Soy: Challenges & Opportunities

In 2022, 15%[43] of KFC WE's total poultry volume covered was reported as physically verified Deforestation and Conversion Free (vDCF) soy[44].

A recent review identified several barriers to the growth of soy certification including high certification costs for small producers and limited stakeholder involvement[45]. When asked about the challenges they face in sourcing soy that is vDCF, KFC WE poultry, pork and dairy suppliers mirrored some of these limitations in their 2023 Annual Supplier Survey responses.

Concerns that appeared more than once included:

- The prohibitive cost of a segregated supply chain
- Poor or no traceability data from soy traders
- Availability and consistency of raw materials

Comments captured across KFC WE's suppliers emphasise the need to go beyond certification and look to other mechanisms, investment opportunities and communication methods to drive sustainable soy. One recommendation, put forward in the IDH European Soy Monitor, suggests a 'clean supplier approach' which advocates for the development of long-term and robust relationships across the supply chain[46]. There are also other tools and working groups at the disposal of the private sector to help accelerate engagement on sustainable soy (see section below — Soy Initiatives and Working Groups).

Supplier comments taken from the survey also highlighted a number of barriers to achieving vDCF soy, including:

"Our milk suppliers are stand-alone businesses who have free choice of where to source their feed."

– KFC WE Dairy Supplier

"Suppliers/slaughterhouses do not have information on what pigs are fed."

– KFC WE Pork Supplier

"Availability of material as well as cost prohibitive segregated supply chain."

– KFC WE Poultry Supplier

"More sustainable soy is expensive, we are continuously looking with our customers if consumers are willing to pay for this."

– KFC WE Poultry Supplier

43 The volume represented by suppliers that answered the question fully equates to 87.7% of KFC WE's 2022 volume reported by suppliers.

44 KFC understand deforestation-free and conversion-free soy to be soy that is: 'legal and cultivated in a way that protects against conversion of forests and valuable native vegetation.'

45 Jia, F., Peng, S., Green, J., Koh, L., Chen, X. (2020). Soybean supply chain management and sustainability; A systematic literature review. Journal of Cleaner Production (255).

46 IDH 2022 European Soy Monitor: Insights on European uptake of responsible, deforestation, and conversion-free soy in 2020

Soy Policies

Certification is not sufficient as a stand-alone mechanism towards responsible, vDCF free soy. Cascading and consistent soy policies aim to drive demand for vDCF soy in the supply chain. As of 2022, 69.4% of KFC WE's poultry supply was covered by suppliers with a soy sourcing policy[47].

Pork & Dairy

None of the pork suppliers who responded to the supplier survey had a soy sourcing policy. 57% of dairy a had a soy sourcing policy (3 publicly available) and one also had a product specification that specified sustainable soy.

47 Based on those suppliers that submitted volume data for 2022 (excludes 3 KFC WE suppliers).

Soy Initiatives & Working Groups

The global soy supply chain consists of numerous interdependencies, actors and influences.

Fluctuating markets and trading relationships add to the complexity of tackling deforestation associated with soy. With so many moving parts, a transition to 100% sustainable soy will require cross-industry collaboration at multiple levels.

As a food service industry leader, there are opportunities for KFC WE to leverage change, but this will also require comprehensive engagement across all supply chain actors, especially traders[48]. When asked about barriers to more sustainable soy sourcing across the broiler industry, KFC WE suppliers flagged lack of commitment and engagement across the entire supply chain as an issue. However, they also highlighted cross-industry collaboration as a potential lever for positive change.

> "Joint movement of industries and soy producers for the same objective [sustainable soy]."
>
> – KFC WE Poultry Supplier (quote taken from the supplier survey)

Several governmental and industry initiatives have been implemented to drive progress towards vDCF soy. Voluntary mechanisms, such as the Amazon Soy Moratorium, have demonstrated their potential for significantly reducing environmental risk and deforestation[49]. KFC WE are committed to working with their supply chain to meet their commitments to a vDCF future. Meaningful dialogue with upstream suppliers has been vital in catalysing change in other sectors[50].

- **Amazon Soy Moratorium (ASM):** ASM is a sectoral agreement under which traders agreed to avoid the purchase of soybeans from areas that were deforested after 2008. Implemented in 2006, the objective of the ASM is to eliminate deforestation from Amazon soy supply chains.
- **Cerrado Manifesto:** The Cerrado biome is a savannah south and east of the Amazon forest, now understood as a significant biodiversity hotspot. In 2017, over 60 Brazilian NGOs and global companies released the Cerrado Manifesto to halt deforestation in the biome. However, transnational soy traders such as Cargill, ADM and Bunge are yet to signal willingness.
- **UK Soy Manifesto:** The UK Soy Manifesto was launched in 2021 and with over 27 signatories **(including KFC UK&I)** it represents 60% of soy bought in the UK every year. The manifesto lays out 5 commitments that encourage companies to engage with their direct suppliers and ensure all physical shipments of soy to the UK are DCF by 2025.
- **French Soy Manifesto:** Signed by eight of the largest supermarkets in France, the French Manifesto scopes out clear, time-bound commitments for each actor in the soy value chain. In conjunction with this, the French government released a new tool that assesses French imports for soy-linked deforestation risk.

48 Zu Ermgassen, et al., (2020). Using supply chain data to monitor zero deforestation commitments: an assessment of progress in the Brazilian soy sector. Environmental Research Letters, 15(3).

49 Heilmayr, R., Rausch, L. L., Munger, J., Gibbs, H. K. (2020). Brazil's Amazon Soy Moratorium reduced deforestation. Nature Food (12), 801–810.

50 E.g. the Norwegian Salmon Industry, see: https://www.reuters.com/business/environment/brazil-soy-firms-commit-zero-deforestation-2020-2021-01-15/

Soy Initiatives & Working Groups

With a business that is at least five steps[51] removed from the soybean field, KFC recognises the vital importance of working collaboratively across its soy supply chain to achieve greater levels of visibility and accountability. In 2022, KFC WE took the important step of incorporating a soy sourcing policy into its Sourcing Code of Practice and Sustainable Sourcing Policy. KFC WE has been raising awareness of the policy with suppliers, to help them aspire to the same standards within their own business operations.

Given the complexity of the global soy supply chain, KFC knows that it will take industry-wide change to end deforestation. This is also well recognised by KFC WE suppliers. For this reason, KFC is firmly committed to supporting change within the industry.

Aware that collaborating beyond their own supply chains is also crucial, Yum![52] has partnered with WWF for a number of years. Yum! drafted an Accountability Framework initiative (Afi) plan with WWF guidance, recognising the industry challenges including traceability across a complicated soy supply chain, especially for downstream actors. Together with Yum!, KFC WE continues to execute against the Afi plan and revise this as needed. This includes engaging with suppliers on their soy sourcing strategies and a soy mapping. The review was started in 2022 by conducting an engagement session with major suppliers on their sustainability programmes, including their soy sourcing strategy.

Yum! is also a member of the Tropical Forest Alliance and The Consumer Goods Forum. In addition, Yum! is tracking and exploring the newly released Forest, Land and Agriculture Guidance (FLAG) from the Science Based Targets initiative (SBTi)[53]. As a key market within KFC WE, KFC UK&I is also member of the UK Roundtable on Sustainable Soy and EFECA, and is a signatory of the UK Soy Manifesto.

KFC WE are also exploring the potential for partnerships in the following focus areas:

- **Soy traceability:** to achieve better direct tracing of soy when cargos are loaded in South America.
- **Financial mechanisms:** to provide low interest loans to farmers who are willing to commit, contractually, to conserving forests on their farms.
- **Collaboration on soy reduction/alternatives:** engagement with working groups in relation to alternative solutions or the reduction of soy within animal feed (e.g. the use of insects, other vegetables or amino acids).

Yum! has also endorsed the New York Declaration on Forests and the private-sector goal of eliminating deforestation from the production of agriculture commodities[54] and striving to end natural forest loss by 2030. Additional details can be found within Yum!'s Global Forest Stewardship Policy. Recognising that there are increasing demands to move even faster, KFC WE continue to monitor what this means for its business and supply chains.

KFC WE welcomed the UK government and EU parliament proposals to bring forward legislation on mandatory due diligence to end deforestation. When asked about levers for more sustainable sourcing across the broiler industry, KFC WE suppliers also highlighted the new EU deforestation legislation. Developing alignment across industry will help drive progress on sustainable soy and improve accessibility to data for all.

51 KFC WE's parent company.

52 Ibid

53 Science Based Targets initiative (SBTi) Ambitious corporate climate action - Science Based Targets

54 Such as palm oil, soy, paper and beef products.

Closing Remarks & Future Focus

KFC WE's soy supply chain mapping exercise is a vital first step on their journey towards sustainable soy. The 2023 Annual Supplier Survey and this inaugural KFC WE Soy Report have built on the supplier engagement started in 2022, and KFC WE is working hard to achieve soy supply chain transparency. KFC's goal is to improve transparency of soy sourcing and increase the amount of certified and sustainable soy across their supply chain.

Key progress highlights for 2022/23 include:

- **Incorporating a soy sourcing policy** into their Sourcing Code of Practice and Sustainable Sourcing Policy.
- **Initiating a soy supply chain mapping exercise,** including engagement on supplier sustainability programmes and soy strategies.
- **Engaging KFC WE poultry, dairy and pork suppliers through the 2023 Supplier Surveys,** with the scope of the surveys expanded to include pork and dairy suppliers for the first time in 2023.
- **Estimating a soy footprint for the WE region and it's individual and logistically linked markets,** a key step for improved visibility and benchmarking future improvement.
- **Publishing this 2023 WE Soy report** to share KFC's current position and ongoing efforts to transition to sustainable soy, including collaboration within and beyond their own supply chains.

Overall, KFC WE's initial supply chain mapping work has helped to benchmark progress towards KFC WE's deforestation commitments and bring greater clarity to their soy sourcing operations and potential risks. However, there is much work still to be done. Supplier engagement has revealed some positive strides, such as soy policies, sustainability commitments and engagement in cross-industry initiatives. However, it has also revealed substantial gaps in supplier soy data/knowledge. This is a particular issue in more fragmented supply chains, such as dairy. Some suppliers also flagged commercial sensitivity as a barrier to full disclosure on certain topics, which KFC will explore with suppliers to better understand.

Given the international and complex nature of soy supply chains, and the fact that the vast bulk of soy appears in KFC WE's supply chain as animal feed, it is imperative KFC WE continue to work collaboratively with their supply chain to improve visibility. Since supply chain transparency is a vital precursor to achieving vDCF soy, continuing to engage with suppliers to better understand and address soy data/knowledge gaps will be a key focus for KFC WE in 2023/24. Mindful that this cannot be achieved alone, Yum!/KFC WE will also expand and intensify their efforts to collaborate on relevant cross-industry soy sustainability initiatives.

KFC WE will also closely monitor the implementation of the EU deforestation legislation, and the development of the guidelines linked to the new rules and will adapt its soy policy toward those guidelines. KFC WE will also monitor the implementation of this legislation by its suppliers.

Appendix

Appendix 1: Product information

SPECIES	FINISHED PRODUCT
Poultry	Chicken cut in pieces, wings, filet, strips and bites.
Dairy	Milk, ice cream, cheese slices and spray cream.
Pork	Bacon slices and bacon flakes.

Appendix

Appendix 2: Review of forest protection laws in the main soy producing countries in Latin America

COUNTRY

Brazil

LEGISLATION

Brazilian **Forest Code**

Established through **Law 12,651, of May 25, 2012,** reformulating the **Forestry Code of 1965.**

The law regulates the use and protection of forests and other types of native vegetation on private rural properties – for properties located in areas of the Atlantic Forest, 20% of the property must be covered by native vegetation in areas of legal reserve or permanent preservation, in the Cerrado, the percentage is 35% and, in the Amazon, 80%. The new Forest Code has similar and complementary importance in the conservation of biodiversity and ecosystem services, as well as in climate regulation.

IS DEFORESTATION LEGALLY ALLOWED?

Projects that may involve deforestation or land conversion in Brazil are subject to environmental licensing processes. Environmental Impact Assessments and Environmental Impact Reports are required to evaluate the potential environmental impacts of proposed projects and ensure compliance with environmental regulations. The licensing process aims to mitigate the negative effects of activities that may lead to deforestation.

APPROACH FOR PROTECTION OF FORESTS

The Brazilian government has environmental agencies at the federal, state, and municipal levels responsible for enforcing environmental laws and regulations. The main agency is the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA). These agencies monitor compliance with environmental legislation, conduct inspections, and impose penalties for illegal deforestation and other environmental offenses.

The monitoring and surveillance of forest areas are crucial for detecting and combating deforestation. The Brazilian Institute for Space Research (INPE) uses satellite imagery to monitor deforestation and provide regular updates on forest cover changes. Additionally, there are initiatives to develop and improve monitoring technologies, such as remote sensing and geospatial analysis, to enhance the effectiveness of forest monitoring efforts.

AFFECTED BIOMES

Soy cultivation is a major driver of deforestation in Brazil, particularly in the Amazon rainforest and the Cerrado.

Summary of forest protection laws and approaches in the main soy producing countries in Latin America. Source: IUCN, 2019 An analysis of existing laws on forest protection in the main soy producing countries in Latin America

Appendix

Appendix 2: Review of forest protection laws in the main soy producing countries in Latin America

COUNTRY

Paraguay

LEGISLATION

The Paraguayan Forest Law, also known as Law No. 422/73 on Forests and Wildlife (Ley de Bosques y Vida Silvestre), was enacted on August 30, 1973. This law provides the legal framework for the management, conservation, and protection of forests and wildlife in Paraguay. It establishes regulations regarding forest management, protected areas, permits, and penalties for illegal activities. The law has undergone revisions and amendments over the years to address emerging environmental challenges and enhance forest protection measures.

IS DEFORESTATION LEGALLY ALLOWED?

Projects that involve land-use changes or potential deforestation in Paraguay may be subject to environmental impact assessments. These assessments evaluate the potential environmental and social impacts of proposed activities and ensure compliance with environmental regulations. Environmental Impact Assessments are required for certain projects and can help mitigate the negative effects of deforestation.

APPROACH FOR PROTECTION OF FORESTS

Paraguay has established mechanisms for monitoring and controlling activities that impact native forests. Institutions such as the Secretariat of the Environment (SEAM) and the National Forest Institute (INFONA) oversee the enforcement of forest regulations, conduct inspections, and impose penalties for illegal activities such as deforestation and timber trafficking.

AFFECTED BIOMES

In Paraguay, the most deforested biome for soy cultivation is the Atlantic Forest.

Summary of forest protection laws and approaches in the main soy producing countries in Latin America. Source: IUCN, 2019 An analysis of existing laws on forest protection in the main soy producing countries in Latin America

Appendix

Appendix 2: Review of forest protection laws in the main soy producing countries in Latin America

COUNTRY

Argentina

LEGISLATION

National Law N° 26.331 of "Minimum Standards for the Environmental Protection of Native Forests"

The law enacted in December 2007 establishes minimum environmental protection standards for the enrichment, restoration, conservation, use and sustainable management of native forests and the environmental services that they provide.

Argentina is a federal country, and the National Constitution establishes that natural resources belong to the provinces (Article 124). According to the National Forest Law (Law N° 26,331, Art. 6), each jurisdiction must achieve a Territorial Planning of the Native Forests (OTBN, its acronym in Spanish) existing in its territory within a maximum period of one year from the enactment of the Law.

IS DEFORESTATION LEGALLY ALLOWED?

The law requires landowners to maintain a certain percentage of their property as a forested area, known as the Mandatory Forest Reserve (Reserva Forestal Legal). It also sets criteria for land-use planning, regulates logging activities, and aims to prevent unauthorized deforestation.

Projects that involve land-use change or potential deforestation in Argentina may be subject to environmental impact assessments. These assessments evaluate the potential environmental and social impacts of the proposed activities and ensure compliance with environmental regulations.

APPROACH FOR PROTECTION OF FORESTS

Argentina conducts forest inventories and monitoring to assess the status and trends of its native forests. These assessments help identify areas of conservation importance, track deforestation rates, and evaluate the effectiveness of conservation measures. The National Forest Directorate (Dirección Nacional de Bosques) is responsible for overseeing the collection and analysis of forest data.

AFFECTED BIOMES

Soy cultivation in Argentina has expanded significantly, driven by international demand for soybeans and soy products. The expansion of soy plantations has led to deforestation, primarily in the Gran Chaco and the conversion of other agricultural lands, including the Pampa.

Summary of forest protection laws and approaches in the main soy producing countries in Latin America. Source: IUCN, 2019 An analysis of existing laws on forest protection in the main soy producing countries in Latin America

Appendix

Appendix 3: Soy Calculator Methodology

Soy Calculator Overview

The Soy Calculator was developed as a simple and bespoke way to calculate KFC's soy footprint, whilst accounting for some commercial factors that affect soy consumption in broilers. The Soy Calculator generates the total feed, and total soy, consumed by broilers within the KFC poultry supply chain. It uses a combination of feed conversion rate (FCR) and yield data in the public domain and average liveweight (kg) and soy-in-diet (%) data from the suppliers.

Assumptions

In 2022, welfare data showed that the main breed used across KFC was the Ross 308, and the average liveweight was 2.7kg.

Therefore, the Soy Calculator takes the FCR and yield from the Ross 308, and the average liveweight of 2.7kg across all birds.

Limitations

The calculator is limited by the scope and granularity of the data obtained from suppliers. For example, different soy products are used in diets throughout a flock cycle at varying percentages, which equate to different soybean 'equivalents'[55]. Similarly, the calculator does not account for soy quality or efficiency.

Summary of the Soy Calculator, including key assumptions and limitations.

The soy calculator generates the total feed, and total soy, consumed by broilers within the KFC WE supply chain, depending on the influencing factor values and market/region selected. Average liveweight and percentage of soy in diet figures for 2022 were obtained from suppliers. Breed information, such as feed conversion ratios (FCR) (per liveweight) and yield was taken from Aviagen publications[56]. In 2022, the main breed used was the Ross 308 and therefore, the soy calculator projects the scenarios on the assumption that all birds are Ross 308.

The total feed consumed per bird is calculated using the FCR data. This is multiplied by the percentage of soy in the diet to calculate the volume of soy consumed per bird. The meat produced per bird is estimated by adding the component parts utilised in KFC products. This yield is also affected by the liveweight selected. The total tonnage of meat enables an estimation of the number of broilers needed to produce the volume of finished product and therefore, the feed and soy consumed by those broilers.

55 Round Table on Responsible Soy Association (RTRS) 2021 Technical supporting document. Soy footprint calculator

56 Aviagen Ross 308 Efficiency Pro x Ross 308 and Efficiency Pro x Ross 308 FF Broiler Performance Objectives

Appendix

Appendix 4: Full list of soy & palm certification schemes present in KFC WE's supply chains

SPECIES	SOY CERTIFICATION SCHEMES	PALM CERTIFICATION SCHEMES
Dairy (reported by two suppliers	RTRS Chain of Custody, RTRS Standard for Responsible Soy Production, Proterra, Donau Soja	RSPO identity preserved, RSPO segregated, RSPO mass balance, RSPO credits "book and claim"
Pork (reported by one supplier)	RTRS Chain of Custody, RTRS Standard for Responsible Soy Production, RTRS Certificate Trading, Proterra, ISCC+, Donau Soja, Cargill Triple S, Cefetra Responsible Soy, ADM Responsible Soy version 2	RSPO credits "book and claim"
Poultry (79.5% of KFC reported volume covered by suppliers that fully responded to this question)	RTRS Standard for Responsible Soy Production, RTRS Certificate Trading, Proterra, ISCC+, Donau Soja, Cargill Triple S, Cefetra Responsible Soy, ADM Responsible Soy version 2, Bunge, USSEC, Agrofert	RSPO credits "book and claim"

Summary of the soy and palm certifications present in KFC WE's dairy & pork supply chains

Palm Annex

Context

As with soy, production of palm has also increased significantly over recent years, with global production of 20,124 (1000MT) in 2022. The largest producing countries are: Indonesia (59%), Malaysia (24%), Nigeria (4%), Thailand (4%) and Colombia (2%). Like soy, palm oil has been strongly linked to deforestation.

KFC WE Palm Policy

Today, the KFC WE Palm Policy is the following:

KFC Western Europe does not permit the use of palm oil or palm oil blended oil for frying. The utilisation of palm oil as an ingredient must be limited (to palm needed for technical reasons), and where palm oil remains an ingredient or derivative, it must be RSPO certified.

Of course, the geopolitical situation with the Ukraine crisis caused an abrupt global shortage of sunflower oil from Ukraine. Food processors had to find other oils to use instead, and re-introduction of palm oil had to be authorised for a limited period of time in some products, but always with an RSPO certification.

Poultry supply chain and palm in feed

31% of poultry suppliers surveyed reported that palm was used as an ingredient in their animal feed. These suppliers constitute 36.9% of total KFC WE supply[57]. Of these suppliers, only one had a palm sourcing policy, representing 3% of KFC WE's total supply and one supplier commented that palm was incidental in feed and therefore the volumes were minimal.

RSPO (Roundtable on Sustainable Palm Oil) credits "book and claim" was the only certification mechanism in place across all poultry suppliers, with 18% of KFC WE's total reported volume covered by this scheme.

Dairy & Pork supply chain and palm in feed

Palm was used in the diets of one pork supplier and three dairy suppliers. Inclusion rates were unknown for pork but were reported to be between 1-3% for dairy. Three dairy suppliers have a palm policy, with one also having a product specification that specifies sustainable palm in dairy cow feed and dairy calf milk replacer. No pork supplier had a palm policy, but the supplier using palm in their diets can trace to mill level and reports 90% is certified via RSPO credits 'book and claim'. Of the three dairy suppliers using palm, two use only certified palm (RSPO identity preserved, RSPO segregated, RSPO mass balance, RSPO credits "book and claim").

Remarks & future focus for palm

KFC WE is now working with their suppliers to understand how its palm policy could be extended to animal feed, recognising that the same problem of transparency that exists for soy can also apply to palm supply chains. However the palm supply chains are further along in their journey regarding traceability. The new EU deforestation regulation will also cover palm and will help to drive this conversation.

57 The volume represented by suppliers that answered the question fully equates to 99.8% of KFC WE's 2022 volume reported by suppliers