



Prepared for the UK Roundtable on Sustainable Soya  
October 2018

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## Executive summary

In March 2018 an industry-led UK Roundtable on Sustainable Soya was convened by the UK Government through the Partnerships for Forest Programme. This Roundtable aims to facilitate the discussions of buyers and specifiers of soya in the UK and is supported by a wider UK Sustainable Soya Initiative.

The purpose of this report is to provide a baseline for measuring future progress towards meeting the goal of the UK Roundtable. Based on publicly available 2017 data, and data provided by UK Roundtable members, the report sets out our current understanding of the UK soya footprint in terms of volumes, source and sustainability credentials

### Current position of UK imports, consumption and sustainability

The UK mostly uses soya in the form of soya meal, which is most commonly used in animal feed (approx. 90% of all soya is used in animal feed across Europe).

The total volume of soya consumed in the UK is estimated to be 3.8 million tonnes of soybean equivalents. This is 3.1 million tonnes of direct imports, and at least 700,000 tonnes of soya embedded in other imports such as meat products.

The proportion of UK soya estimated to be from a 'sustainable' source is around 30%, though it could be as high as 60%. This variation is likely due to where in the supply chain soya scheme credits are purchased, and more work is being done to better understand reporting.

Due to the complexities of the supply chain, it is not currently possible to calculate the proportion of soya used in each animal sector using publicly available data. However, this may be possible for members within their individual supply chains.

According to USDA reports, on average one hectare of land can produce 3 tonnes of soya. Taking the figure of 3.8 million tonnes of soya outlined above, this would therefore equate to 1.3 million hectares of land to produce the soya consumed in the UK.

### Current position of UK Roundtable members

Of the publicly listed members of the UK Roundtable on Sustainable Soya:

- 75% of businesses have already conducted a risk and priority assessment of their soya usage; a further 13% intend to conduct an assessment in the future, mainly by the end of the current year.
- 56% of responding businesses have formulated soya specific policies, while 13% have deforestation policies that cover multiple commodities including soya.
- 38% of policies and timebound plans on soya are publicly available. Other members publish progress reports.
- Of those who submitted their data, 37% of members have already started to apply their soya policy and are up to 50% in line with the Roundtable goal.
- 25% of members are more than half way to having all soya compliance with their aim.

## **Next steps**

Following from the publication of this baseline report, Efeca will continue to provide technical assistance to members and support them as they create and implement sustainable soya policies. Efeca will also undertake work to support more accurate monitoring and reporting of soya in the UK, specifically exploring:

- The volume of sustainable soya purchased and consumed in the UK at a national level, which is currently challenging due to a lack of publicly available data;
- The proportion of soya by the various animal sectors, which is made challenging due to the prevalence of home mixing feed and the lack of centralised data gathering by sector (as per other countries), with data instead being gathered across feed;
- Capturing the volume of soya embedded in imported products;
- How to measure the impact of the UK Roundtable on Sustainable Soya, working with partners such as Trase and producer focused initiatives.

Efeca is working closely with key partners and other national initiatives to ensure an aligned approach to monitoring and reporting and will provide an update on this collaboration in the first annual progress report.

The next report will be the annual progress report and will be published in Summer 2019.

## 1. Introduction

In March 2018 an industry-led UK Roundtable on Sustainable Soya was convened by the UK Government through the Partnerships for Forest Programme, following the success of the UK Roundtable on Sourcing Sustainable Palm Oil which was created in 2012. This soya Roundtable aims to facilitate the discussions of buyers and specifiers of soya in the UK and is supported by a wider UK Sustainable Soya Initiative.

Concerns about the impacts of soya production have largely been focused on links to deforestation in South America. While a much broader range of environmental, social and economic factors have been considered and are important, there is a danger in setting a very wide scope that clarity of purpose and impetus for action is lost. For this reason, the UK Roundtable on Sustainable Soya, is to focus at the outset on the deforestation/conversion agenda.

### 1.1. The UK Roundtable on Sustainable Soya

The role of the Roundtable is to provide buyers and specifiers of soya in the UK with a platform to provide:

- a renewed impetus for action on sustainable soya – *‘the need to act’*
- consensus around a framing Goal and scope – *‘what we want to achieve’*
- stronger and closer collaboration on the practicable steps necessary to convert the Goal into action plans within supply chains – *‘what we need to do’*
- a means of tracking and communicating our progress *‘how are we doing?’*

Through private-public collaboration, the Roundtable aims to support long term sustainability of agricultural industries in producing countries and a *mass market* move to secure, resilient supplies of sustainable soya to the UK and the UK livestock industry.

The following goal was agreed by members of the UK Roundtable on Sustainable Soya at a meeting of members on the 12<sup>th</sup> July 2018 following several working group meetings:

*“The UK recognises the need to accelerate progress towards a secure, resilient supply of sustainable soya to the UK.*

*The UK Government supports Roundtable signatories’ commitment to soya that is legal and cultivated in a way that protects against conversion of forests and valuable native vegetation.*

*This will be achieved by signatories committing to:*

- *Publish timebound plans, by April 2019, to achieve this;*
- *Meaningful and demonstrable progress towards this Goal by 2020”*

### 1.2. This report

The purpose of this report is to provide a baseline for measuring future progress towards meeting the goal of the UK Roundtable. Based on publicly available data, and data provided by UK Roundtable members, the report sets out our current understanding of the UK soya footprint in terms of volumes, source and sustainability credentials. The annual progress reports which will follow, will use this report as their baseline.

## 2. Background

### 2.1. The soya supply chain

Soybeans are a highly versatile globally traded commodity. With uses ranging from a source of protein in livestock feed to an alternative to meat and dairy products. While whole soybeans can be eaten directly or as a food ingredient, typically soya is crushed to form meal (the part typically used in animal feed) and oil (Figure 1). Soybean oil is the second largest source of vegetable oil globally<sup>1</sup> and is also used in products such as biodiesel and detergents.



Figure 1 Global soybean production, by volume<sup>2</sup>

The expansion of the production of natural commodities such as soya, timber and cattle ranching has been a significant driver in the loss of forest and other native vegetation in South America, with consequent impacts on bio-diversity, carbon emissions and water systems. There are also socio-economic impacts, as a result of pesticide use and land speculation.

On a global level, it is estimated that deforestation and forest degradation represent between 10% – 20% of global anthropogenic CO<sub>2</sub> emissions. Considerable efforts have been made to halt deforestation, through global-leading environmental legislation such as the Forest Code in Brazil, to the Amazon Soy Moratorium, a cross-sector agreement that since 2006 has dramatically reduced forest loss in the Amazon Biome. The current work of the GTC, Cerrado Manifesto and SOS Cerrado Manifesto groups continues this work to support producers in protecting areas considered most at risk.

The largest producers of soybeans are the USA, Brazil, Argentina and China, and production has more than doubled over the past 20 years, with the market now exceeding USD\$115 billion.<sup>3</sup> The large increase in soya consumption can be attributed in part to the increase in global population growth but also to the rise in prosperity, leading to a growing middle class and

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<sup>1</sup> Engage the Chain <https://engagethechain.org/soybeans>

<sup>2</sup> Engage the Chain <https://engagethechain.org/soybeans>

<sup>3</sup> Engage the Chain <https://engagethechain.org/soybeans>

increasing demand for meat.<sup>4</sup> Approximately 90% of soya consumed in the EU is used in livestock feed, mostly as soya meal as this has a high protein content. This is beneficial when used in the feed of animals that need to grow in mass quickly, such as poultry and pork.

### **The role of NGO's**

Non-Governmental Organisations (NGO's) continue to play a strong role in this area, driving change and encouraging industry to take action. Though perhaps one of the most significant actions has been the Greenpeace led campaign to introduce the Amazon Soy Moratorium in 2006. Work has continued to drive change, such as WWF publishing annual/bi-annual Scorecards<sup>5</sup> highlighting the progress made by businesses in sourcing sustainable soya and palm oil. The most recent Soy Scorecard was published in 2017. More recently, the NGO Mighty Earth has begun to campaign more strongly, having released the report 'The Avoidable Crisis' with Rainforest Foundation Norway and Fern, revealing large scale deforestation, fires and human rights abuses.<sup>6</sup>

Campaigns and consumer boycotts are some of the potential consequences if a company is associated with unsustainable practices, and some NGO's have begun more direct campaigning activity, such as Mighty Earth's (with other partner NGO's) targeting of Burger King.<sup>7</sup>

### **Demand side action**

For companies active in the global trade of commodities such as soya, palm oil, beef/leather or timber products, deforestation has become a critical business issue. The production of these forest-risk commodities can contribute to habitat loss, greenhouse gas emissions and social conflict, and it is becoming an expectation of consumers that companies (particularly within the animal feed industry) will address these issues within their supply chains.<sup>8</sup>

Many businesses use soya within their supply chain, and those related to food and drink are under increasing scrutiny from NGOs, consumer groups, investors and government to sustainably source their raw materials. Companies are engaging publicly on responsible practices for sourcing their materials and committing to social and environmental policies when managing relations with their suppliers.

In the UK, a significant number of companies have already committed to eliminating deforestation associated with soya through a range of initiatives including the Statement of Support for the Cerrado Manifesto and the Consumer Goods Forum 'zero-net deforestation' commitment. The UK is a signatory to the New York Declaration on Forests and the Amsterdam Declaration; through the DFID funded Partnerships for Forests (P4F) Programme the UK government is committed to supporting the private sector to transition to sustainable supply

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<sup>4</sup> Soy Barometer 2014 [https://s3-eu-west-1.amazonaws.com/oneworld-wp/app/uploads/2017/03/07102143/141.105.120.208\\_dsc\\_wp-content/uploads\\_2014\\_04\\_Soy-Barometer2014.pdf](https://s3-eu-west-1.amazonaws.com/oneworld-wp/app/uploads/2017/03/07102143/141.105.120.208_dsc_wp-content/uploads_2014_04_Soy-Barometer2014.pdf)

<sup>5</sup> <http://soyscorecard.panda.org/>

<sup>6</sup> <http://www.mightyearth.org/soy/>

<sup>7</sup> <http://www.mightyearth.org/burger-king-commits-to-stop-destroying-rainforests-in-13-years/>

<sup>8</sup> CDP report 2016 [http://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.r81.cf3.rackcdn.com/cms/reports/documents/000/001/328/original/CDP\\_2016\\_forests\\_report.pdf?1482313940](http://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.r81.cf3.rackcdn.com/cms/reports/documents/000/001/328/original/CDP_2016_forests_report.pdf?1482313940)

chains for agricultural commodities, ensuring a level playing field and driving up standards globally. On behalf of DFID and BEIS, Efeca has been engaged through P4F to support buyers and specifiers of soya in the UK to establish a UK Roundtable on Sustainable Soya.

### 3. Methodology: estimating UK soya consumption

This section will explain the methodology used to calculate the estimated amount of soya consumed in the UK, in order to assess the progress of members towards meeting the goal of the UK Roundtable on Sustainable Soya.

The highly complex nature of soya supply chains and final end 'uses' means that it can be challenging to accurately capture data on all products containing soya. For this reason, the baseline report will be split into two parts, the first being a UK country level 'overview' figure and the second a more detailed report on specific activity of the Roundtable members and in the future, progress.

The national level reporting will initially focus on soya beans, meal and oil imported into the UK, coming from both producer countries and inter-European trade. Where possible, additional data has been provided on imports likely to contain soya (such as meat products) from which a proportional soya value can be attributed. It should be noted that this will vary across supply chains and will be an estimated figure.

#### 3.1. Data sources

Total volumes of UK imports of soya have been gathered from several data sources, including the International Trade Centre (ITC) Trade Map tool, the Agricultural Industries Confederation (AIC) which is the trade association that represents UK animal feed and TRASE. Both Trase and ITC use customs trade data, TRASE from producer country ports and ITC from UN COMTRADE data.

The International Trade Centre (ITC) is an online service of a suite of tools, funded by the World Bank and the European Commission. It was developed to support global trading decisions, improve transparency and facilitate access to markets. The tools available include maps for trade, market access, investment, trade competitiveness and standards. For the purpose of this study, Efeca has used the Trade Map tool, and its associated datasets.

Trase is a tool that aims to support governments, companies and investors who have made deforestation commitments to gain a greater understanding about trade flows and the source countries where their commodities originate. The tool aims to increase transparency, by linking exported commodities with production areas, and highlighting any perceived environmental and social risks. The tool currently supports data for four countries (Brazil, Paraguay, Argentina and Indonesia) across three commodities (soya, beef and palm oil) but undergoes continuous updates and developments. Soya data is currently available at a national level in Argentina for 2016, and a sub national level in Brazil and Paraguay for 2015.

The Agricultural Industries Confederation (AIC) is the UK trade association for several sections of the agri-supply industry including 90% of UK animal feed, and 90% of UK grain and oilseeds. The association has over 250 members and represents £6.5 billion turnover at farmgate. The AIC supports collaboration throughout the food chain to support modern commercial agriculture in the UK.

The Agriculture and Horticulture Development Board (AHDB) is funded by farmers, growers etc. in the supply chain via a levy and is independent of both commercial industry and government. The aim of the AHDB is to support British farming to be resilient and competitive on the global market, accelerate innovation and support industry in understanding the needs of consumers. As a result, AHDB undertakes a range of work including extensive research and development programmes, providing market information and undertaking marketing exercises both in the UK and export markets. The membership of AHDB is formed of six main agricultural areas, pork, dairy, beef and lamb, horticulture, cereals and oilseeds and finally potatoes. Poultry is not a focus of AHDB, but as AHDB has a working partnership with Defra some information related to poultry is included in its publicly available database.

The ITC trade map can provide more detailed breakdowns of soya (e.g. whole beans, meal, oil) and trade by country within Europe, the TRASE data can be used to support the ITC findings for imports of soya bean equivalents from producer countries and provide more detailed information as to the geographical source of the UK's directly imported soya. Once the soya has entered the UK market, this figure can be verified with AIC's member data. Defra's own import data can also be used via AHDB's data portal, to explore the volume of soya used in compound feed. Unfortunately, this dataset does not currently allow for soya used in feed to be split across the various animal sectors, please see section 4.7 Use of soya in the UK below for more information on this issue.

### **3.2. Indirect soya imports**

Some soya consumed in the UK may be imported 'indirectly' for example, meat from an animal reared in another country and sold into the UK market.

To calculate the volume of soya associated with these products, proxy calculations can be used to provide a reasonably accurate estimate of the volume of soya that has been used to produce the volume of chicken, pork etc. sold to the UK. Proxy figures vary across different sets of research, and so Efeca has chosen to present a range of figures across a number of sources: RTRS<sup>9</sup> (an independent 3<sup>rd</sup> party certification scheme), the Dutch Soy Barometer<sup>10</sup> and WWF (in their most recent study on soya 'Risky Business', published October 2017).<sup>11,12</sup> These conversion factors are intended to provide a proxy calculation for the proportion of soya in a product. For example, according to the WWF Risky Business report, 58% of the weight of a chicken product can be attributed to the volume of soya consumed.

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<sup>9</sup> <http://www.responsiblesoy.org/contribute-to-change/know-your-soy-print/?lang=en>

<sup>10</sup> [http://www.bothends.org/uploaded\\_files/document/Soy\\_Barometer2014\\_ENG.pdf](http://www.bothends.org/uploaded_files/document/Soy_Barometer2014_ENG.pdf)

<sup>11</sup> <https://www.wwf.org.uk/sites/default/files/2017-10/Risky%20Business%20-%20October%202017.pdf>

<sup>12</sup> Please note, that the Risky Business report has used proxies based on a mid-range estimate from a range of sources.

Table 1: Common conversion factors applied to soya (kg of soya per tonne of product).

	RTRS Conversion factor	WWF Risk Business report (2017) conversion factors	Dutch Soy Barometer (2014) conversion factors
Chicken	0.88	0.58	0.60
Pork	0.35	0.26	0.33
Cheese	0.15	0.14	0.30
Beef	0.29	0.18	0.40
Margarine	0.66		0.06
Eggs (per unit)	0.03	0.31	0.036
Milk (per litre)	0.017	0.02	0.03

### 3.3. Measuring Progress of Roundtable members

In the preparation of this report, information has been gathered from members using a questionnaire style document called the 'Matrix of Progress'.

The Matrix of Progress is divided into four key areas which enable members to highlight changes and progress made over the course of a year, but also act as a 'pathway' of steps towards the Roundtable Goal. The areas covered are:

- Assessment
- Policy
- Timebound plans
- Transparency

The Matrix of Progress requests a combination of qualitative and quantitative information and aims to recognise the range of different needs and goals of members. The matrix contains

- Core questions, which relate directly to the achievement of the Goal and are mandatory and
- A small number of 'additional' questions to allow those who have been exploring soya longer or wish to approach soya from multiple perspectives to show additional progress not covered in the core questions.

The information from individual member responses has been aggregated to enable Efeca to report on the collective position of members (to ensure individual members' commercially sensitive data is not revealed). To avoid double counting of soya volumes, reporting will be measured against progress over time, rather than by supply volumes. As this is the baseline, it was anticipated that progress would be fairly limited at this stage, as there is a range of understanding and activity within the Roundtable.

While some members are direct buyers and specifiers of soya, others are associations representing buyers and specifiers. For associations, rather than completing the matrix of progress, it was asked that they provide a short statement of their commitment and recent activity to communicate the goal of the Roundtable to their members. Finally, it should also be noted that for the purposes of this report, only publicly declared members of the Roundtable have been reported on. Other organisations that are currently working through the process of declaring their commitment to the Roundtable goal are not included in the findings of this report.

### **3.4. Assumptions**

Due to the complexity of the supply chain, and data currently available, several assumptions have been made.

As well as using publicly available data, some individual Roundtable members have kindly provided data in confidence to support findings at a UK level. We have accepted this information without significant verification.

The total figure of imported soya meal reported varies between the various organisations reporting on soya trading, due to differing methods of data collection, the time of year reporting takes place, and choice of HS codes. For this reason, this report favours ITC data, as HS codes can be selected by the user and any assumptions or corrections made to the data is clearly identified.

Where data has either been unavailable, or too complex to analyse at this time, proxy figures have been used to calculate estimates of soya usage. This is seen in the section regarding embedded soya in products such as compound feed and finished goods.

A rapid analysis of exports showed that exports of soybean, oil and meal were relatively small, and therefore it is assumed that the majority of soya imports are consumed in the UK.

## 4. Main Findings: UK level

### 4.1. Soya meal imports

The UK imports soya beans, meal and oil directly from producer countries and through inter-trade with Europe. Approximately 90% of the EU's soya is used to feed livestock<sup>13</sup>, so the majority of UK imports are soya meal.

The UK imports approximately 2 million tonnes of soya meal per year, from the following countries:

Top exporters (2017)	Share in UK imports (vol) %	Quantity (tonnes)
Argentina	63%	1, 213, 827
Netherlands	15%	295, 843
Paraguay	10%	184, 831
Ireland	4%	78, 985
China	2%	44, 620
Brazil	1%	33, 172
Other countries	5%	67,110
<b>Total</b>		<b>1, 918, 388</b>

Clearly, the majority of UK imported soya is sourced from South American producers' ability to supply soya with a higher protein content (Hi-Pro) in comparison to soya grown in Europe, which makes it more suitable for use in animal feed. Within South America various economic policies have made Argentina the top exporter of soya meal to the UK, whereas Brazil remains the top exporter of whole soya beans.

### 4.2. Soybean imports

In 2017, the UK imported 756,750 tonnes of soya beans from the following countries:

Top exporters (2017)	Share in UK imports (vol) %	Quantity (tonnes)
Brazil	70%	526,018
USA	23%	177,718
Canada	4%	33,677
Belgium	1%	6,491

<sup>13</sup> <https://www.wwf.org.uk/sites/default/files/2017-10/Risky%20Business%20-%20October%202017.pdf>

Ireland	1%	4,350
China	1%	4,030
<b>Total</b>		<b>756,750</b>

The soya beans imported into the UK are crushed, and the resulting meal will also be used in animal feed.

### 4.3. Soya Oil

The UK also imports a relatively small amount of soya oil, approximately 203,345 tonnes in 2017.

<b>Top exporters (2017)</b>	<b>Share in UK imports (vol) %</b>	<b>Quantity (tonnes)</b>
Netherlands	74%	151,642
France	14%	27,778
Spain	4%	8,857
Germany	3%	6,394
Russia	1%	3,000
Finland	1%	2,058
Belgium	1%	1,951
Ireland	1%	1,665
<b>Total</b>		<b>203,345</b>

### 4.4. Inter-Europe trade

Soya is typically imported directly from producer countries as it is more economical. However, some of the UK's soya does come via inter-European trade, the majority coming as soya meal via the Netherlands (particularly via Rotterdam). This is unsurprising given the role of the Netherlands as a hub for international trade. The Netherlands also imports the majority (93%) of its soya directly from South American producers. See Figure 3 below:

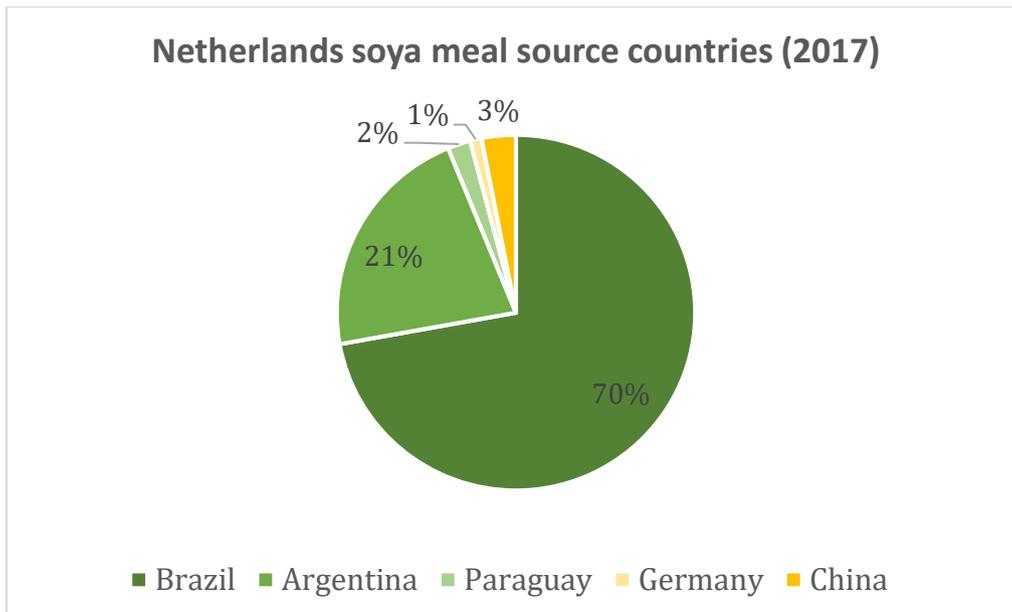


Figure 3 Top sources of soya meal for the Netherlands

#### 4.5 Imported products containing soya: embedded soya

As well as importing soya bean, meal and oil for consumption in the UK, each year the UK also imports products that will have soya ‘embedded’ within them, for example, poultry or pork reared abroad on a diet including soya and then sold to the UK.

To calculate the volume of imported ‘embedded’ soya there are several conversion factors available (for information on conversion factors see page 13), which can be used to calculate a proxy value of soya as part of the whole product. Several of these conversion factors are set out in the table below; as can be seen, there is significant variation between different sources, most notably across beef. This may be a result of differences at a country level e.g. some countries may grass feed animals more and therefore rely on less feed or use an alternative to soya. It is also unclear if this calculation accounts for farmers who home-mix feed as well as those who buy compound feed (though it is likely to just be the latter). Therefore, an average across the different sources has also been provided. This form of data analysis is continually being discussed and refined, and Efeca will be taking part in a European wide discussion before the end of 2018 to share lessons with other countries and attempt to harmonise this analysis across Europe to ensure consistency of data.

	Volume of UK imports (000 tonnes, 2017)	RTRS Conversion factor	WWF Risk Business report (3 Keele, 2017)	Dutch Soy Barometer (2014)
Poultry	413,440	363,827.20	239,795.20	250,131.20
Pork	462,524	161,883.40	120,256.24	155,408.06
Cheese	491,820	73,773.00	68,854.80	148,037.82
Beef	274,606	79,635.74	49,429.08	109,842.40
Margarine	90,274	59,580.84	-	5,958.08
Eggs	90,562	2,716.86	28,074.22	3,260.23
Milk (per litre)	718,292	12,210.96	12,210.96	24,421.93
<b>Soya volumes (estimate)</b>		<b>753,628</b>	<b>518,620</b>	<b>697,059</b>
<b>Average soya volume</b>		<b>656,436.08</b>		

Based on the range of conversion factors above, the UK indirectly imports an estimated 500,000-750,000 tonnes of soya in the form of meat and dairy products, the majority of which is 'embedded' within imported chicken (43%) and pork (22%) see Figure 4 below.

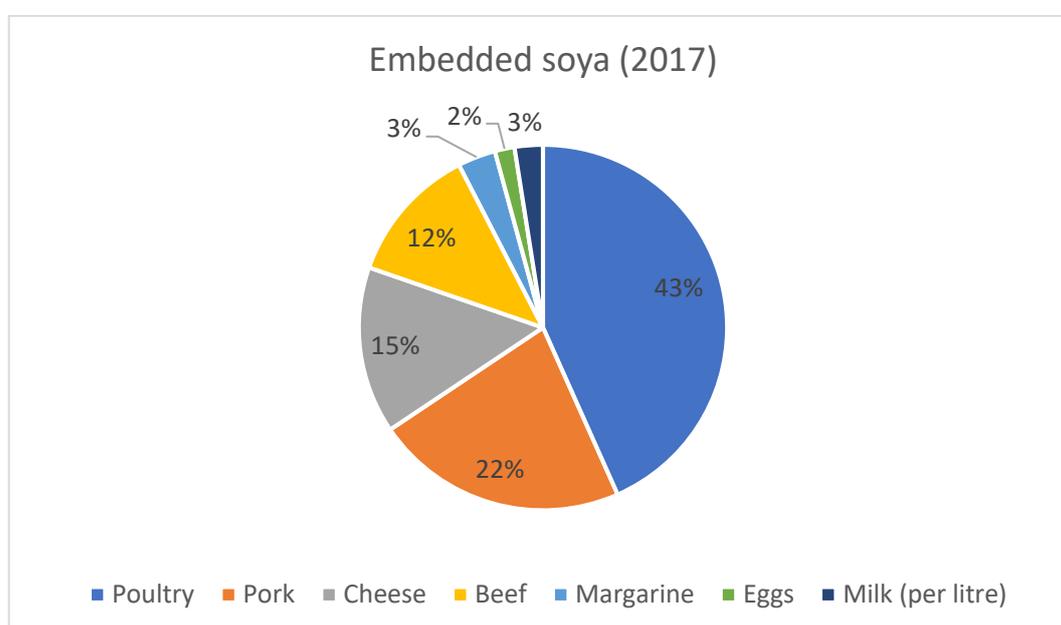


Figure 4 Breakdown of imported embedded soya by product<sup>14</sup>

<sup>14</sup> Calculated by Efeca using UN COMTRADE data and the average of reported proxy figures.

#### 4.6 Conclusion: Total soya

In total the UK annually imports approximately **3.2 million tonnes**<sup>15</sup> of soya bean equivalents directly in the form of soya beans and meal, with at least an additional **0.7 million tonnes** of soya imported indirectly 'embedded' in product.

Typically, soya consumption is reported as 'soya bean equivalents', this is because when a bean is crushed, 80% forms the meal and 20% the oil.

To convert the volume of soya meal into soya bean equivalents, you must therefore account for the oil that was also part of the original soya bean. In the case of the UK:

1,918,388 (soya meal) / 0.8 =	2,397,985
756,750 (soya beans) =	756,750
<b>Total</b>	<b>3,154,735</b>

*Note: the volume of soya oil imported to the UK is covered in the soya meal calculation, so there is no need to add the imported oil volume to this total*

When this total soya bean equivalents figure is added to the average estimated volume of soya embedded in imported products, **the total volume of soya consumed in the UK is estimated to be 3.8 million tonnes.**

#### 4.7 Use of soya in the UK

While soya oil can also be used to produce biodiesel, only 3% of the UK's transport fuel is biofuel and none of this has been sourced from soya.<sup>16</sup> Therefore, this report will focus on animal feed, which as stated above accounts for 90% of Europe's soya usage.

Within the UK, the Agricultural and Horticultural Development Board (AHDB), with the support of the Department for Environment, Farming and Rural Affairs (DEFRA) gathers information on the volume of soya imported into the UK and how compound feed<sup>17</sup> use is split across sectors.

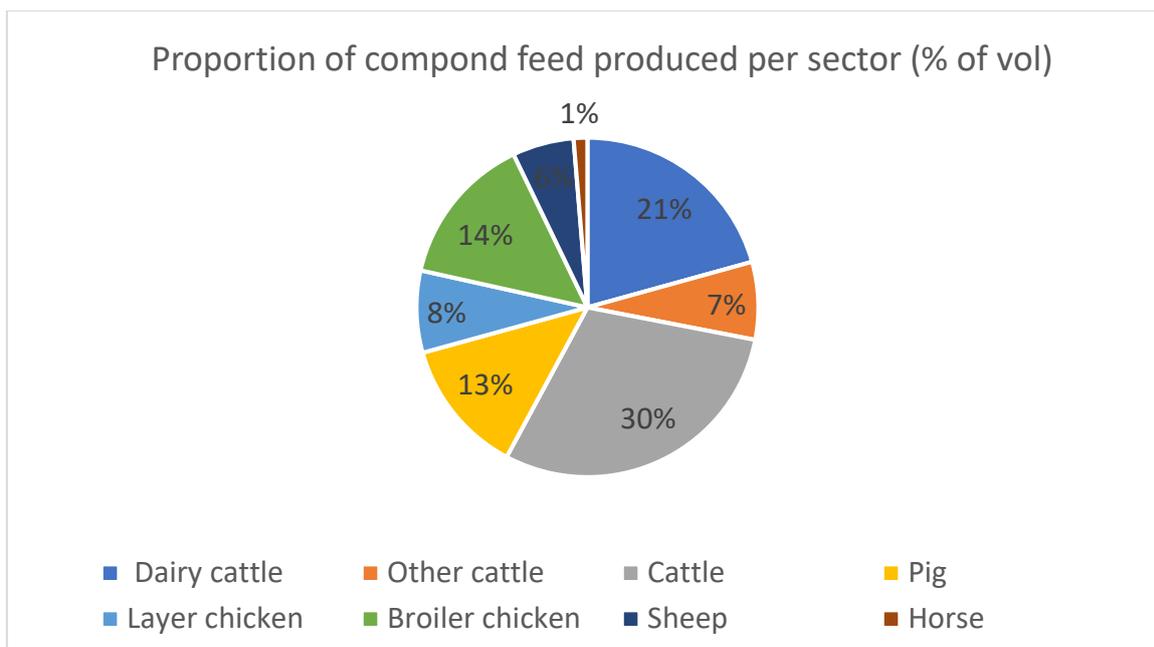
Feed production is split into the following proportions by volume (tonne) - see Figure 5 below:

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<sup>15</sup> When a soya bean is crushed, 80% becomes meal and 20% becomes oil. Therefore a 'soya bean equivalent' figure is given to account for the oil and meal produced.

<sup>16</sup> <https://www.gov.uk/government/collections/biofuels-statistics#obligation-year-9-biofuels-data>

<sup>17</sup> Compound feed is fodder that is blended from various raw materials and additives. These blends are formulated according to the specific requirements of the target animal. They are manufactured by feed compounders as meal type, pellets or crumbles



*Figure 5 Proportion of compound feed production by sector*

While the graph shows the dairy cattle sector has the highest consumption of compound feed, the proportion of soya in animal feed differs for each sector. According to the latest compound feed data from Defra (2017) soya typically makes up approximately 9.3% of compound feed on average.

Calculation of soya consumption by sector is complicated further as farmers and producers in the UK often use a 'home mix', i.e. farmers buy and blend their own mixes of animal feeds. As an example, a recent report from the Pig Health and Welfare Council (PHWC) estimated that up to half of all pork farmers use a home mix feed<sup>18</sup>. Therefore, the proportion of soya used in compound feed may not provide an accurate reflection of soya consumption by sector.<sup>19</sup>

For these reasons, we are currently not able to accurately breakdown the split of soya usage across different sectors at a UK level, however previous research suggests the largest volume of

<sup>18</sup> <http://pork.ahdb.org.uk/media/273917/phwc-biennial-report-2015-16.pdf>

<sup>19</sup> <http://pork.ahdb.org.uk/media/273917/phwc-biennial-report-2015-16.pdf>

soya consumption is within the poultry and pork sectors. This is supported by a recent study undertaken by four large UK retailers, and involving 39 different suppliers.

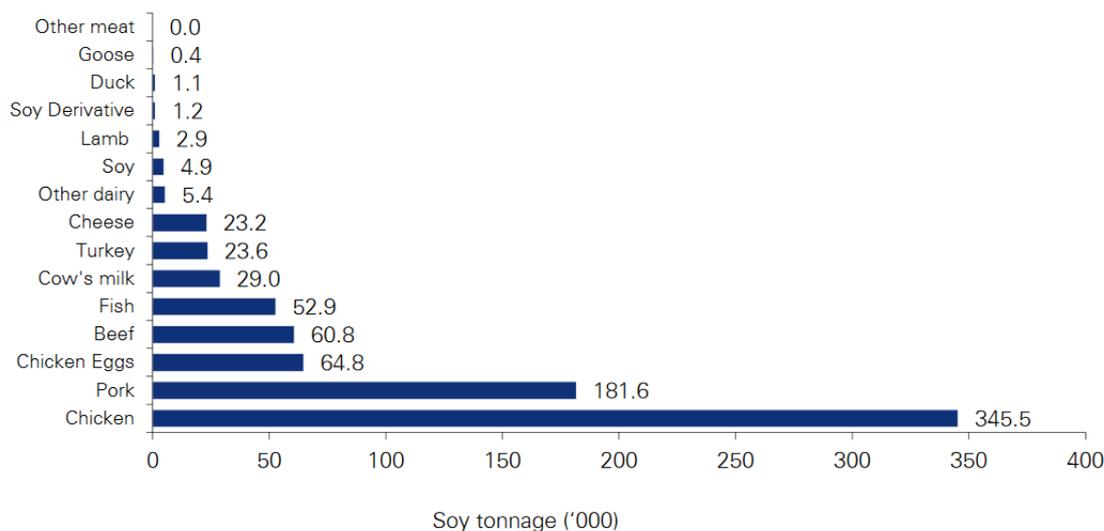


Figure 6: Soya tonnage by protein type (Source: KPMG, IDH 2017<sup>20</sup>)

It is anticipated that while this information is currently not available at a country level, it is possible to calculate through individual supply chains. This is therefore an area that can continue to be explored with members (whom represent a significant proportion of the UK market).

#### 4.8 Sustainability

Estimating the proportion of soya imported into the UK that can be considered as being from a 'sustainable' source is problematic as there is currently no consensus on the definition of 'sustainable' in relation to soya.

The approach taken by Efeca was to look for measurable indicators that imply the application of sustainability criteria to sourcing decisions, in support of the Goal of the Roundtable, namely ensuring legality and the protection of forests and valuable native vegetation. An initial step generally considered by industry is to refer to certification schemes benchmarked to the FEFAC Soy Sourcing Guidelines. For more information on certification schemes, see the Annex of this report.

<sup>20</sup> <https://www.idhsustainabletrade.com/uploaded/2017/06/Soy-reporting-initiative-Final-IDH-Report-May-2017.pdf>

### FEFAC Sustainable Soy Sourcing Guidelines

FEFAC is the independent spokesman of the European Compound Feed Industry at the level of the European Institutions. FEFAC membership consists of 23 national associations in 23 EU Member States as full members as well as Associations in Switzerland, Turkey, Norway, Serbia and Russia with observer/associate member status.

The FEFAC Soy Sourcing Guidelines<sup>21</sup> are a professional recommendation to operators in the European feed industry who wish to purchase soya that is considered to be responsibly produced. The Guidelines consist of a set of minimum requirements related to the good environmental, social and agricultural practices of soy production. Currently, 17 schemes have met the benchmarking process, and these are listed on the FEFAC website, and the ITC Standards Map webpage.

Efeca worked with traders and the feed sector and on the basis of confidential data submissions has been able to estimate that in 2017 between 20-30% of soya meal consumed in the UK was purchased to a certified or verified standard (meeting the benchmark of the FEFAC Soya Sourcing Guidelines) with a 'sustainable' or 'responsible' claim. Of this volume, it is estimated that more than half is linked to a trader scheme, with the remaining being linked to Proterra or RTRS, see Figure 7 below.

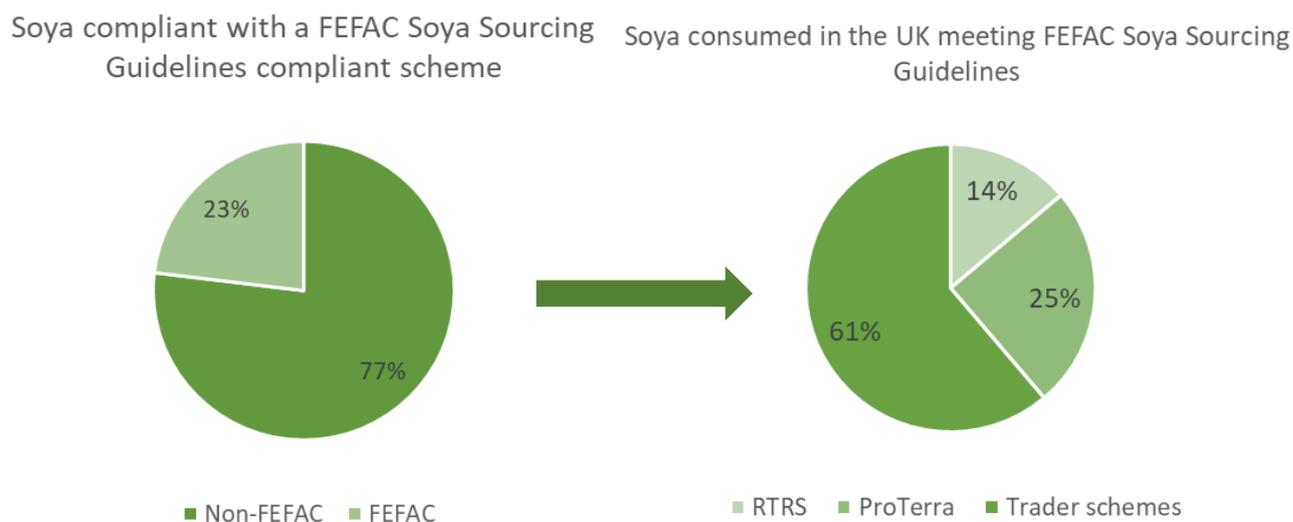


Figure 7 Breakdown of FEFAC compliant soya consumed in the UK

It should be noted that a study of four UK retailers<sup>22</sup> use of soya in 2016 showed a much higher proportion (60%) of soya being sourced sustainably.<sup>23</sup> A reason for this difference may be where in the supply chain the data is taken, as credits can be purchased at any point in the

<sup>21</sup> FEFAC Soy Sourcing Guidelines <https://www.fefac.eu/file.pdf?FileID=65744>

<sup>22</sup> Asda, Marks & Spencer's, Tesco and Sainsbury's.

<sup>23</sup> Soy reporting initiative, March 2017. KPMG and IDH, <https://www.idhsustainabletrade.com/uploaded/2017/06/Soy-reporting-initiative-Final-IDH-Report-May-2017.pdf>

supply chain as the sustainable soya purchased is not physically supplied to the buyer. This is supported by Roundtable members own submissions (see below).

It is important that we are able to meaningfully measure progress towards the sustainability Goal of the Roundtable. We can do this through our member submissions (see below) but we will continue to build on and explore indicators at a UK level that enable us to corroborate the conclusions from members' submissions against the UK's total soya footprint.

#### **4.9 Impact of UK soya consumption: land use**

According to USDA reports for Brazil and Argentina, on average one hectare of land can produce 3 tonnes of soya.<sup>24</sup> Using the figure of 3.8million tonnes of soya outlined above, the UK's land footprint associated with imported soya consumed in the UK equates to 1.3million hectares of land. To put this in context, this area represents 60% of the land area of Wales.

Several tools are in development that provide traceability of global soya trade flows that can be linked to indicators of impact in producing countries. TRASE is one example, developed to help governments, companies and investors understand their exposure by linking exported commodities with countries and production areas, overlaying agricultural, environmental and social risk criteria. The tool currently supports data for four countries (Brazil, Paraguay, Argentina and Indonesia) across three commodities (soya, beef and palm oil) but is undergoing continual updates and developments. Soya data is currently available at a national level in Argentina, a sub national level in Paraguay and a municipality level for Brazil.

The goal of the UK sustainable soya initiative is not to simply create a 'clean' UK supply chain, but to ensure meaningful impact on the ground. This includes understanding the areas the UK is sourcing from, and if there is any forest or native vegetation loss occurring in these areas because of UK soya production.

The maps below are an example of how Trase can be used to support monitoring impact on the ground. These maps (taken from the online tool) show Brazilian soya production in 2015, and highlights in blue the volume of soya produced (the darker the colour the greater the volume of soya produced). Using Trase, it is also possible to highlight areas that have restricted human usage, such as national parks and legal reserves, where soya should not be cultivated (green).

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<sup>24</sup> <https://www.fas.usda.gov/commodities/soybeans>

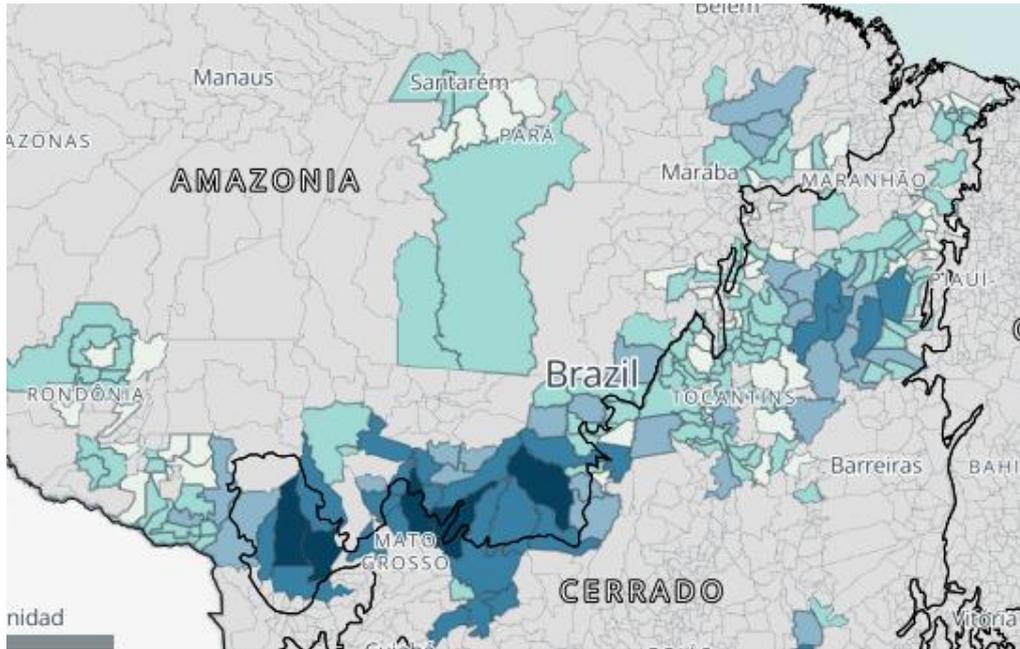


Figure 8 Map showing Brazilian municipalities with the highest production of soya, via Trase

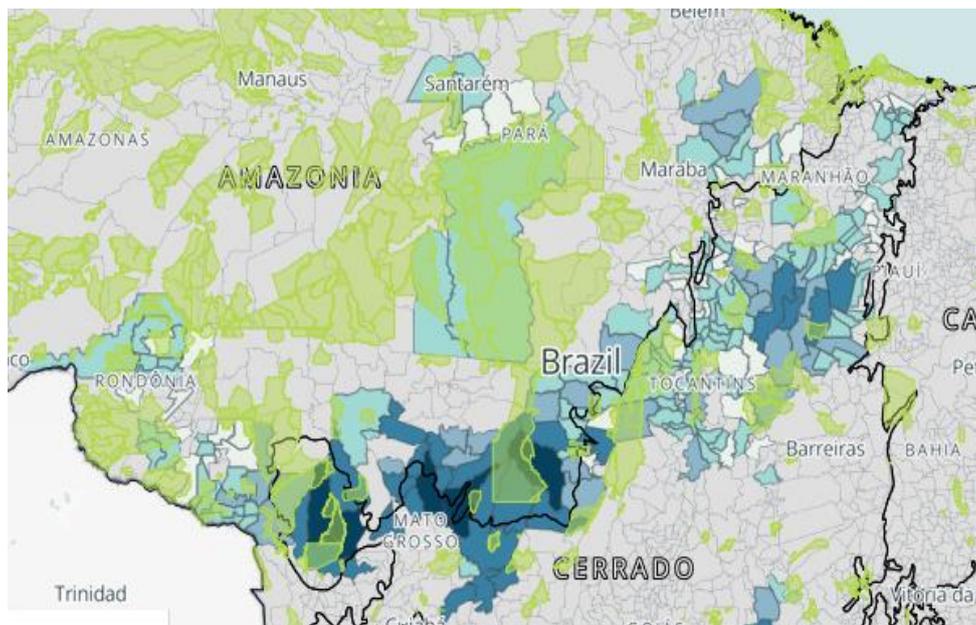


Figure 9 Map showing municipalities with the highest soya production (blue), with protected areas highlighted in green, via Trase

Using the bills of lading trade data, Trase is able to cross reference areas of high soya production (blue) with soya traded under a zero-deforestation commitment (red). Thus, allowing the areas of highest risk to be identified.

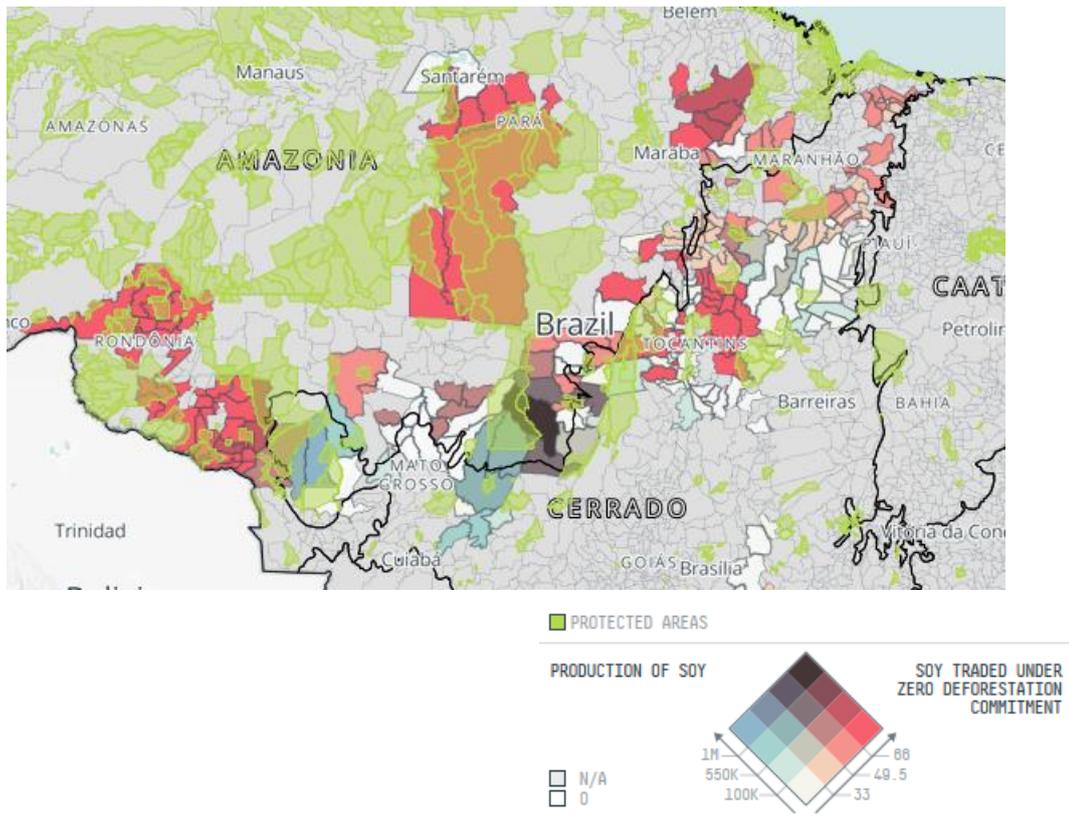


Figure 10 Map of Brazilian municipalities, showing levels of soya produced (blue), volume of soya traded under a zero-deforestation commitment (red) and protected areas (green), via Trase.

This work is ongoing. Efeca is currently finalising work with Trase to produce UK specific data and maps based to provide for the first time, a UK soya footprint showing sourcing countries/regions over laid with risk factors (including those identified above for example restricted human usage, forest loss etc). The findings of this will be shared with members. This reporting will continue into the annual report, along with other collaborative work with partners exploring ways to measure and report on the impacts in producing countries from the actions of the UK Roundtable on Sustainable Soya.

## 5. Main findings: UK Roundtable on Sustainable Soya

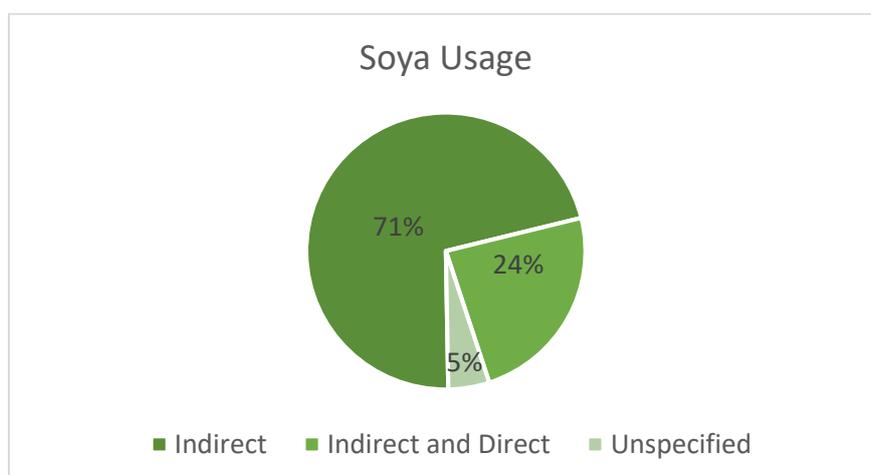
Of the publicly listed members of the Roundtable at the time of this publication, 60%<sup>25</sup> responded with a completed Matrix of Progress or submitted statement. This can be broken down into 80% of buyers and specifiers, and 40% of associations.

### 5.1 Assessment

75% of businesses have already conducted a risk and priority assessment of their soya usage and a further 13% intend to conduct an assessment in the future, mainly by the end of the current year. A risk and priority assessment is a preliminary review of soya usage within an organisation (or its supply chain) to better understand the organisation's 'soya footprint'. The aim is to identify where (in which products) soya may be used, approximate volumes and an understanding of countries of origin. This information can be refined over time but helps organisations to prioritise actions.



All the businesses involved use soya and/or soya derivatives, with the majority (69%) using soya 'indirectly' only (e.g. soya used in feed mix for animal products) and the rest both 'indirectly' and 'directly' (e.g. soya milk or as an ingredient in margarine, chocolate).

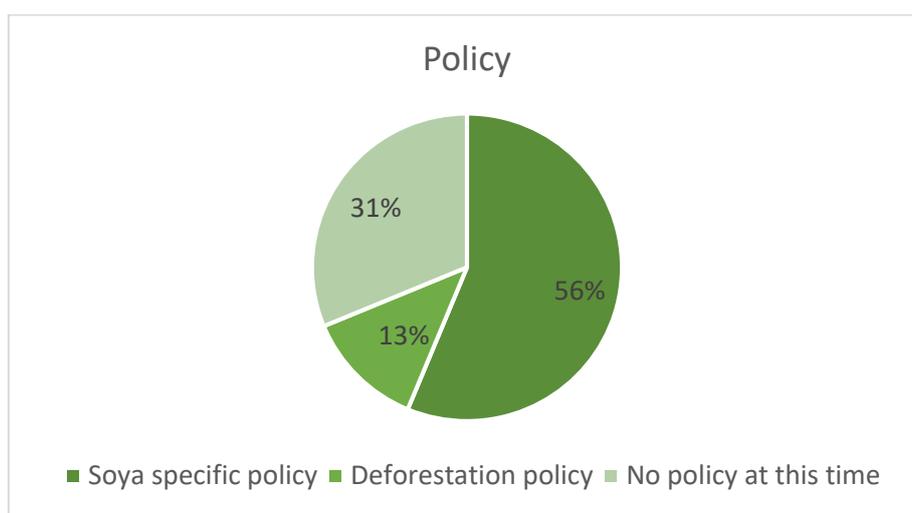


<sup>25</sup> It should be noted that some members have had key staff changes during the reporting window, and so while being active members of the Roundtable were unable to submit data for the baseline review.

Every member identified its key suppliers of soya and/or users of soya in their supply chain. Around 75% of businesses have also identified the countries and/or geographical regions from which their soya comes from, and some members stated a desire to take this further to a regional level. Countries include Brazil, Argentina, Paraguay, US, Canada, and Uruguay.

## 5.2 Policy

Approximately 70% of respondent organisations have (or will soon have) a policy in place to address deforestation-free soya. 56% of businesses have formulated soya specific policies, while 13% have deforestation policies that cover multiple commodities including soya.



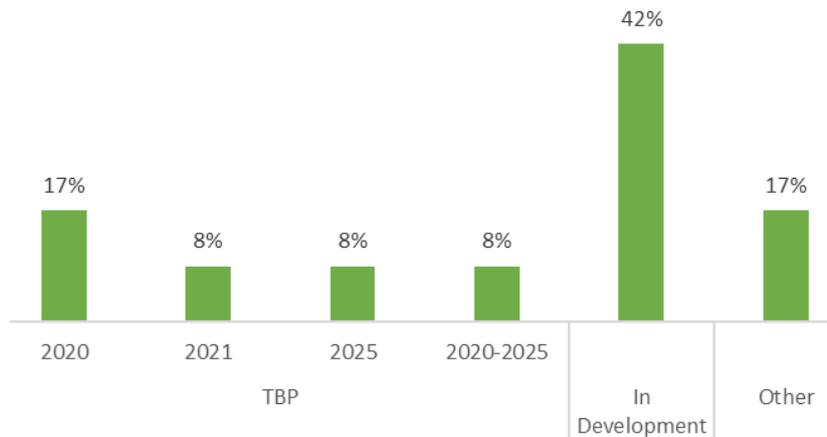
About 60% of businesses have committed to the Amazon Soy Moratorium specifically and approximately 67% of businesses' policy commitments to sustainable soya also include a commitment to support wider social/human rights improvements. In addition, about 60% of businesses have explored alternatives to soya, but none have formally committed to reducing their soya consumption at this time.

Of those with a policy in place, on 72% specify a cut of date, after which they will not accept soya from land that has been converted. Reasons for not having a cut-off date included a reliance on standards which have cut off dates built in, or not stating a cut-off date has been a deliberate choice in order to allow for flexible working with customers and their soya policies.

## 5.3 Timebound plans

About 30% of businesses have a timebound plan in place, and a further 30% have a plan in development, setting out the timescales over which they intend to progressively increase volumes of deforestation free soya in line with the Roundtable Goal and their own policy. Approximately 67% of businesses are on track to achieve meaningful and demonstrable progress against the Goal of the UK Roundtable by 2020, and all others are currently working towards this objective.

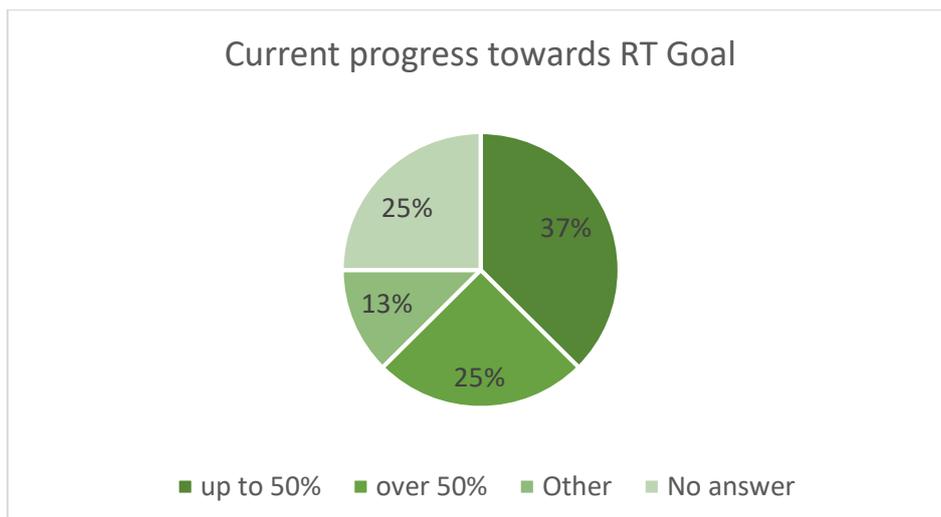
## Time bound plans



Approximately 30% of businesses have an estimated date in place by when they aim to achieve 100% compliance with their soya policy. The majority expect to achieve this by 2020, but no one later than 2025. Others are still developing their policy and intend to release time bound plans in line with this before the April 2019 milestone.

### 5.4 Transparency

38% of policies and timebound plans on soya are publicly available and some members also choose to produce progress reports. The proportion of soya from legal and deforestation-free sources (in line with the Roundtable Goal) in individual member supply chains is variable, with most members fall within the 30-40% range. Of those who submitted their data, 37% of members have already started to apply their soya policy and are up to 50% in line with the Roundtable goal. 25% of members are more than half way to having all soya compliant with their policy aim and goal of the Roundtable. All respondents chose certification as their method of verification.



## 6. Conclusions

This baseline report has shown in total the UK annually imports **3.2 million tonnes** of soya bean equivalents directly in the form of soya beans and meal, with at least an additional **0.7 million tonnes** of soya imported indirectly 'embedded' in product. A significant proportion (~88%) of the UK supply of soya comes from South America, specifically Argentina, Brazil and Paraguay, though in some instances this can come via inter European trade such as via the Netherlands. The majority of soya (~90%) is used indirectly as part of animal feed.

This report has also allowed Efeca to identify several challenges to be addressed if sustainable soya uptake is to be accurately calculated, monitored and reported on:

- It is difficult to accurately monitor the volume of sustainable soya purchased and consumed in the UK at a national level, due to the lack of publicly available reports, at least in comparison to other commodities such as timber and palm oil.
- More work is needed to accurately capture data and calculate the volume of soya embedded in products.
- There is insufficient data at a national level to show the proportion of soya used by the various animal sectors, due to the prevalence of home mixing feed and the lack of centralised data gathering by sector (as per other countries), with data instead being gathered across feed.

Efeca is working closely with key partners and other national initiatives to ensure an aligned approach to monitoring and reporting and will provide an update in the first annual progress report.

Roundtable members show clear commitment to the Roundtable goal, and this baseline has shown that many UK businesses are already exploring responsible sourcing and turning plans into action. The majority of members (~75%) have already completed a risk and priority assessment, with other members planning to have completed an assessment by early 2019. A significant proportion of public members already have a policy, be it a soya specific policy (~56%) or a broader, deforestation free policy which covers multiple commodities including soya (~13%). While the detail within each policy will vary to best suit the needs of members, the majority go beyond a basic policy to include linkages to wider commitments (such as the Amazon Soy Moratorium) or going beyond deforestation to explore other sustainability issues such as social impact. There is also evidence of the positive outlook of members, as 67% of respondents claimed to be confident and on track to achieve meaningful and demonstrable progress against the Goal of the UK Roundtable by 2020. This covered a wide range of members, from those with a policy in place to those currently undertaking their risk assessment.

The next report will be the annual progress report, which will provide an update on the UK's consumption of soy and Roundtable member progress. The report will also aim to explore the impact of the UK Roundtable on Sustainable Soya, in partnership with tools such as Trase and producer focused initiatives. The next report will be published in Summer 2019.

## Annex

There are many certification schemes that offer verified sustainable soya sourcing. While there are too many available to list here, these are some of the schemes used in the UK.

### **RTRS**

The Roundtable on Response Soy (RTRS) has been working to enable soya producers, civil society and industry to have a global dialogue on sustainable soya production since 2006. Stakeholders membership is made up of participant members (producers, industry, trade and finance and civil society organisations) who have voting rights and observer members. In 2016, RTRS certified just over 3 million tonnes of soya, and sold 1.9 million credits and 95,000 tonnes of mass balance soya in 2016.<sup>26</sup>

### **ProTerra**

ProTerra aims to demonstrate transparency and commitment to sustainability throughout the supply chain, and specifically non-GMO status. In 2016, Proterra certified 3.8 million tonnes of soya globally. The ProTerra Standard for Social Responsibility and Environmental Sustainability is based on the Basel Criteria for Responsible Soy Production and is applicable to all stages of the supply chain (production, transport and storage, processing and chain of custody). The standard contains requirements designed to protect the Amazon and other HCV areas, promote good agricultural practice and ensure rigorous non-GMO requirements. The standard also aims to support good labour practices, including equal opportunities, the protection of the rights of communities, indigenous people and smallholders.

### **ISCC PLUS**

ISCC PLUS is a certification system for traceable and deforestation free supply chains for all types of agricultural and forestry raw materials, waste and residues, non-bio renewables and recycled carbon materials and fuels. Sustainability requirements include the protection of land with high biodiversity value or high carbon stock and more generally the protection of soil, water and air. The ISCC PLUS requires safe working conditions, compliance with human, labour and land rights, as well as compliance with laws and international treaties. In addition, for companies interested in Non-GMO soya, ISCC offers the possibility to extend the certification to Non-GMO for the whole supply chain, whereas GHG emission calculation can also be added on a voluntary basis under ISCC PLUS.

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<sup>26</sup> <http://www.responsiblesoy.org/wp-content/uploads/2018/06/InformeGestion-ING.pdf>

### **Trader schemes**

Increasingly traders selling business to business are required to demonstrate the environmental merits of their soya, and ADM, Bunge, Cargill and Cefetra all offer soya produced to their own sustainability standard. Generally, trader schemes are, third party-assessed, but the standard is operated and governed by the trader as opposed to a multi-stakeholder group.

All four standards cover areas relating to environmental, social, economic and ethical impacts of soya production. All four require legal compliance as a compulsory prerequisite and are benchmarked against the FEFAC soy sourcing guidelines. The degree to which deforestation and conversion of 'valuable native vegetation' is addressed varies, particularly with relation to conversion of valuable native vegetation (non-forest landscapes), for example, the Cerrado.

In October 2018, on behalf of Roundtable members Efeca created a short piece of work to "provide comparative information on how each of the most prevalent sustainable soya certification schemes addresses the issue of forests and native vegetation conversion, which is the agreed core initial focus of interest for the UK Roundtable on Sustainable Soya".

The work was not intended to provide a 'ranked' listing of schemes or a selection of 'approved' schemes for the UK RT but to help those members wishing to adopt a standard(s) to make an informed choice as part of their overall soya sourcing plans and in line with the Goal of the UK Roundtable on Sustainable Soya. For more information, please contact [info@efeca.com](mailto:info@efeca.com)