









Consultancy Report – Final Report

Client Name: Partnership for Forests

March 2021

Efeca Project Number: P140





Prepared for Partnerships for Forests

For and on behalf of Efeca Ltd

Approved by: Emily Fripp

Position: Director

Signed: Emily Fripp

Date: March 2021

Efeca Project Number: P140

This report has been prepared by Efeca the trading name of Emily Fripp & Associates Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

Efeca Suite 7, Portfolio House 3, Princes Street Dorchester Dorset, DT1 1TP



Contents

Executive summary	1
1. Rationale for intervention	1
1.1 Driving sustainable sourcing and improved transparency	1
1.2 Scoping a sustainable import guarantee	1
2 Guarantees	2
2.1 What is a government guarantee?	2
2.2 How does a government guarantee provide a cost saving?	3
2.3 What is trade finance?	3
3 Estimating the size of the SIG cost saving and green premium	4
3.1 Estimating the SIG cost saving and green premiums	
4 Investigating whether palm oil, soy and cocoa sector can use a SIG	6
4.1 Overview of UK market for palm oil, soy and cocoa	6
4.2 Conclusions from interviews with palm oil, soy and cocoa importers a	nd manufacturers.6
5 UK Banking Sector - driving transparency in commodity supply chain tra	ansactions8
5.1 Bank interest in sustainable incentives	8
5.2 Bank feedback on SIG	8
6 Conclusions	9
6.1 Potential next steps	
7 Glossary	12
Annex 1 – Estimating SIG cost savings, prices and green premiums for palm o	il, soy and cocoa13
Annex 2 – Palm oil	20
Annex 3 - Soy	27
Annex 4 - Cocoa	32



Executive summary

This scoping study is intended to contribute towards the broader evaluation of the proposition for a Sustainable Import Guarantee (SIG) that is being carried out through the SIG Working Group, led by BEIS, Efeca and the Green Finance Institute.

A sustainable import guarantee

The SIG was one of 14 Recommendations of the Taskforce of the Global Resources Initiative (GRI), an industry-led initiative to define recommendations for how the UK and international partners can increase trade in sustainable commodities and reduce the deforestation impact of UK supply chains, which published its Final Recommendations Report in March 2020¹.

The SIG proposal presents an opportunity to develop an innovative green financial product to: incentivise sustainable sourcing; support the banking sector to increase sustainable lending and investment; and to encourage the banking sector to increase transparency and due diligence processes inherent in tracking sustainable supply chains, which could pave the way for wider due diligence across bank portfolios. This mechanism could have applicability across various sectors and commodities.

In this scoping report we looked only at the applicability of the SIG at the 'forest-risk' commodities palm oil, soy and cocoa traded by large companies. Sustainably sourced commodities typically cost more than conventionally sourced commodities and this additional 'green premium' can act as a barrier to the uptake of sustainable commodities in supply chains. A SIG works to reduce the cost of sustainable commodities by reducing the cost of trade finance used to buy and trade sustainably sourced commodities. A guarantor, in the GRI recommendation the Government, provides a guarantee on bank lending (i.e. lending for buying verified sustainable commodities). This reduces the cost of lending for banks, and this saving can then be passed onto importers or buyers of sustainable imported commodities. Government guarantees, such as those delivered by UK Export Finance can offer this reduced cost of financing at no or little cost to the taxpayer.

The SIG is therefore intended to incentivise the import of sustainably produced commodities over 'conventionally' produced commodities, by helping to reduce or eliminate these 'green premium' costs. From a financing perspective, the SIG aims to reallocate capital to more sustainably sourced commodities. It is assumed that a SIG could be applied to certain forms of trade finance such as revolving credit facilities or letters of credit, used to finance commodity procurement.

Scoping methodology

This report investigates:

- whether and how companies in the palm oil, soy and cocoa supply chains (particularly importers, and manufacturers buying imported commodities) use trade finance in the procurement of commodities, and whether a SIG can be used to reduce the cost of this finance;
- whether and how a guarantee could be applied to banks' trade finance transactions; and
- whether a guarantee would drive behavioural change towards greater take up of sustainably produced commodities.

i

¹ https://www.gov.uk/government/publications/global-resource-initiative-taskforce



Efeca interviewed buyers and finance teams within eight large palm, soy and cocoa traders and supply chain organisations, and spoke to a range of other commodity experts and with trade finance bankers. Several manufacturing companies buying imported commodities were subsequently contacted,.

Through a series of workshops and interviews, the Green Finance Institute (GFI) explored whether leading banks and trade financiers in the UK and globally believed that there was a market for such a guarantee and whether clients would avail of it.

Using a SIG to import or buy imported palm oil, soy and cocoa – findings

This study identifies five key findings:

- The market for sustainable commodities is developing but would benefit from an
 incentive to complete the transition to 100% sustainably sourced. There was significant
 interest from traders and manufacturers in the idea of a financial incentive that could reduce the
 cost of a green premium for sustainably sourced agricultural and forestry commodities, in order
 to drive the transition to sustainable commodities.
- 2. Well established sustainable certification systems exist for palm, soy and cocoa that could be used as a basis from which to develop suitable SIG sustainability criteria.
- 3. However, for the most part the large companies which import the vast majority of palm, soy and cocoa in the UK are self-financing and are not significant users of banks for trade finance. Without having relevant lending to apply a guarantee, it may not be possible to apply a SIG to the largest importers of these three commodities. This may limit the scale of uptake and impact of a SIG.
- 4. It is also unclear whether other parts of the supply chain would benefit from a SIG. The potential scope of the SIG was extended beyond these direct importers to include companies further down the supply chain that use imported forest risk commodities. These large ingredients, product and feed manufacturers also reported not using trade finance in a way that a guarantee can easily be applied to. Additionally for these manufacturing companies, commodities are a small proportion of their overall costs, therefore the potential SIG cost saving is smaller.
- 5. On the other hand, banks spoken to unanimously believed the SIG could provide a useful financial benefit for several of their clients and incentivise them to source more sustainably. The banks believed a SIG could provide a useful mechanism to help drive transparency and disclosure within the banks, to strengthen due diligence practices and to better address deforestation risks in their trade finance lending portfolios. Further information is required on the characteristics of bank clients that would potentially be interested in a SIG to better understand this opportunity and to understand whether it is applicable to deforestation commodities or more applicable to other supply chains.

Potential cost saving

This study also provides an estimate of the reduction in lending costs created by a guarantee to understand the potential size of the SIG cost saving. To put this saving in context, it can be compared with an estimation of the 'green premium' for palm oil, soy and cocoa, i.e. the additional cost that



importers must pay for sustainable versus 'conventionally' sourced commodities. The report concludes:

- The estimated potential cost savings derived from a SIG could range from 0.14% to 2.5% of borrowing costs. The size of the potential cost saving depends on the credit risk of the company receiving the loan, the proportion of lending that is guaranteed, and the size of guarantor's costs. The traders (importers) and manufacturers we spoke to confirmed that cost savings of this order would be of interest, given the narrow margins under which they operate.
- The estimated 'green premiums' for palm oil are currently estimated to be of the order of 2-5% (versus a typical cost for conventional palm oil of £500/tonne), 1-3% for soy (versus a typical cost for conventional soy of £300/tonne), and 5-10% for cocoa (versus a typical cost for conventional cocoa of £1,800/tonne). Thus, the SIG cost saving as estimated above does not entirely cover the "green premium" cost of sourcing sustainable commodities. Traders felt that despite this level of SIG savings, combined with other financial and non-financial incentives and drivers, could provide a potentially compelling additional incentive for sustainable sourcing.

Potential next steps

The report proposes possible further avenues to explore or better understand how a guarantee could be used to reduce the cost of sourcing sustainable commodities:

- 1. Wider engagement with a larger sample size, including exploring the potential impact on SMEs
- 2. Widen the scope of the SIG to other commodities which may be linked to environmental degradation at the point of production.
- 3. Consider other financing entry points or markets, such as providing upstream support to farmers, producers and exporters or explore other products at the UK importer level.
- 4. Develop a pilot to build the evidence base and client interest in this product



1. Rationale for intervention

1.1 Driving sustainable sourcing and improved transparency

Land conversion for agriculture is the main driver of global deforestation, driving approximately 70% of tropical deforestation and land conversion (40% commercial agriculture, 33% subsistence farming)², with the production of palm oil, soy, cattle for beef/leather production, rubber, cocoa, timber, paper and pulp associated with the greatest land conversion. 28% of the UK's annual, imported, overseas commodity-driven land footprint (equating to nearly 6 million ha) is concentrated in a relatively small number of countries at high or very high risk of deforestation, weak governance and poor labour standards.³ The UK's share of the global land footprint of these commodities is sizeable, for example the UK consumption of palm oil equates to 5% of the global footprint for palm oil production, for cocoa this is around 9%. This is especially notable considering the UK accounts for slightly less than 1% of the global population and around 2% of global gross domestic product (GDP).³

Currently, the production of commodities to international sustainability standards incurs additional costs. These costs can be due to additional activities at the point of production, and the implementation and maintenance of traceability controls along the supply chain. These additional costs can act as a market barrier to the take up of sustainable commodities. From an economic perspective, it could be said that it is a market failure that negative externalities such as environmental damage are not included in the price of 'conventional' commodities. In this report we refer to these additional costs as a 'green premium' – see **Annex 1** for more consideration of this topic.

The Global Resource Initiative (GRI) Final Recommendation Report⁴ proposed the sustainable import guarantee (SIG) as a financial incentive to help to reduce the cost of sustainably sourced commodities versus conventionally sourced commodities. It is intended that by reducing the price difference between sustainable and conventionally sourced commodities, the SIG will incentivise the switch to more sustainable commodity sourcing. The SIG creates a cost saving by reducing the cost of trade finance used to buy sustainably sourced agricultural/forestry commodities. This rests on an assumption that the price of sustainable commodities contains a lending cost which can be reduced by the use of a government guarantee.

The purpose of this scoping study has been to assess whether a SIG for deforestation commodities is likely to achieve its aims, in particular by identifying whether there is demand for a SIG amongst importers and buyers of imported commodities.

1.2 Scoping a sustainable import guarantee

This report summarises the findings of this scoping study. The study aims to inform and answer three fundamental questions:

² http://www.fao.org/state-of-forests/en

³ https://www.rspb.org.uk/globalassets/downloads/documents/risky-business/risky-business-report-summary.pdf

⁴ https://www.gov.uk/government/publications/global-resource-initiative-taskforce



- whether and how companies in the palm oil, soy and cocoa supply chains (particularly importers, and manufacturers buying imported commodities) use trade finance in the procurement of sustainable commodities, and whether a SIG can be used to reduce the cost of this finance
- whether and how a guarantee could be applied to banks' trade finance transactions
- whether a guarantee would drive behavioural change towards greater take up of sustainably produced commodities.

The analysis focuses initially on three imported commodities linked to deforestation – palm oil, soy and cocoa. These were chosen because of their significance in terms of UK volume usage and land use footprint in deforestation risk geographies. Imported commodities embedded in ingredients and finished goods were excluded from the current scope of the SIG and so have been excluded from this analysis.

The study, conducted by Efeca, with support from colleagues at the Green Finance Institute (GFI), BEIS and members of the SIG Working Group⁵, included the following activities, which are described in the remainder of this report:

- estimating the size of the "SIG cost saving" and comparing this with an estimate of the "green premium" associated with sustainably sourced commodities (i.e. the additional cost of importing certified sustainable commodities versus conventional/uncertified commodities) to help to understand the scale of the SIG incentive
- mapping the companies importing palm oil, soy and cocoa across the commodity supply chains, and understanding whether they utilise trade finance in their buying of palm oil, soy and cocoa. Because no comprehensive data source exists to provide company level import data, the identification of companies importing and using imported commodities has been determined through discussions with experts from these industries and from the trade finance sector. Much of this information and background on these sectors is found in **Annexes 2-4**
- interviewing buyers, finance and sustainability teams within supply chain companies, and from trade finance bankers, to understand: who is importing and purchasing the commodities, whether a guarantee could be applied to existing import operations, whether a guarantee could provide a meaningful incentive to create the desired change within supply chains, and to understand the sustainability practices that the SIG could be supporting (e.g. certification).

2 Guarantees

2.1 What is a government guarantee?

A government guarantee is a commitment by the government to underwrite certain financing against the risk of default, i.e. the government promises to repay a loan if it cannot be paid back. In the instance of a sustainable import guarantee, it is proposed that the Government would underwrite bank lending used for verified sustainable imported commodities. In theory, it would be possible for financial institutions rather than the Government to act as the guarantor.

⁵ The SIG WG includes BEIS, Efeca, Green Finance Institute, Barclays, as well as representatives attending from other government departments including HMT, DIT, UK Export Finance and DEFRA.



Currently the government provides several guarantees such as through UK Export Finance (UKEF). UKEF's export guarantees cover banks on up to 80% of lending associated with exporting, requiring banks to take on the risk for part of the lending. In the event of the bank's client failing to pay back the loan (i.e. defaulting), UKEF on behalf of the government would agree to pay back the bank up to 80% of the value of the loan.

There are a number of ways that the Government, as guarantor, could pay for these defaults. UKEF charge banks a premium for providing each guarantee to them and these accumulated premiums can be used in the event of defaults – i.e. operating in a similar way to some insurance policies operate. By charging a premium UK Export Finance guarantees aim to be largely cost neutral to the Government⁶. A guarantee which is cost neutral to the government has the benefit of not requiring direct subsidies or resource from government, however charging banks for a guarantee would reduce the cost benefit that banks can pass onto their clients (as can be seen below in table 1). The Government could use its own financial resources to pay for costs associated with defaults. This study did not estimate the potential cost to government of delivering the SIG, nor investigate the precise target operating model for the SIG. This will need to be explored in a future stage of development.

2.2 How does a government guarantee provide a cost saving?

Government guarantees reduce the risk to banks that their capital will not be repaid, which can act as an incentive to lenders to increase lending. A guarantee can also have the benefit of reducing the cost of lending through this reduced risk, which is what the SIG would make use of.

Under international banking regulations, when a financial institution lends money, an amount of capital known as 'risk weighted assets' (RWAs), must be held back in order to reduce the impact of the loan not being paid back (i.e. default). Holding back capital comes at a cost to banks, who cannot use that capital elsewhere. The extent of capital held back by banks depends on the riskiness of the lending activity⁷. Loans backed with government guarantees are considered to be very low risk (or even zero risk) and consequently less (potentially zero) capital has to be held back. This represents a financial benefit to the lending institution. The SIG proposes to make use of this financial benefit by passing this saving, in the form of reduced interest rates, onto the client.

In the case of the SIG, the saving would only be applied to lending associated with sustainably sourced commodities. By providing a cost saving only to verified sustainable commodities, and not to conventionally sourced commodities, this could help commodity importers make a choice in favour of more sustainable commodities.

2.3 What is trade finance?

Trade finance is a form of lending offered by banks to support the cash-flow of companies, particularly where there is a delay between buying inputs and being paid for sold products.

Within commodity trading there is some time delay between a trader buying commodities from its supply chain and receiving payment on an invoice from a customer. During this time, the trader has

⁶ https://www.gov.uk/government/publications/global-resource-initiative-taskforce

⁷ International Banking regulations Basel I, II, III set out rules and guidelines for minimum capital requirements, including the Advanced Internal Rating Based (AIRB) approach to credit risk measurement, and for risk weighted assets (RWA).



paid for the commodity they have grown or purchased, but their cash-flow is locked within the stock until payment is received. Companies may seek bank lending to smooth their cash flow during this period. Banks provide a number of ways to provide this finance, including trade finance.

Trade finance typically comes in the form of:

- a trade loan, i.e. short or medium-term lending for the purpose of covering a cash-flow gap, such as a revolving credit facility.
- as a letter of credit⁸ a letter of credit is often used as security when the buyer and seller are in different countries a bank issuing a letter of credit on behalf of a buyer agree and commit to pay the seller of a product, as long as the seller meets all of the letter of credit requirements.

The SIG is intended to reduce the cost (i.e. the interest rate) of this kind of finance.

3 Estimating the size of the SIG cost saving and green premium

3.1 Estimating the SIG cost saving and green premiums

During the scoping phase, Barclays Open Account Team assisted with modelling the SIG cost saving. The following calculations are illustrative. They should not be considered as Barclays position or as an indication of their market price⁹. These SIG cost savings estimates should only be considered as indicative, actual cost savings may differ.

The improvement in margin, the cost saving on lending of £100m, and additional funding available, are set out for three company credit ratings (AAA to AA-, A+ to A- and BBB+ to BBB- are a range of credit ratings, equivalent to those used by Standard and Poor or Fitch's credit ratings agency taxonomy), for a number of different scenarios. More detail on the assumptions and methodology can be found in **Annex 1**.

Table 1 – SIG cost saving estimate scenarios, setting out for each scenario: 1) % improvement margin, 2) SIG cost saving based on £100m loan, 3) additional funding available

Scenario	AAA to AA-	A+ to A-	BBB+ to BBB-
90% guarantor cost	0.14%	0.36%	0.71%
80% of loan guaranteed	£142,857	£357,143	£714,286
	4x more funding at same risk	4x more funding at same risk	4x more funding at same risk
0% guarantor cost	0.40%	0.99%	1.98%
80% of loan guaranteed	£396,429	£991,071	£1,982,143
	4x more funding at same risk	4x more funding at same risk	4x more funding at same risk
90% guarantor cost	0.50%	1.25%	2.50%
100% of loan guaranteed	£500,000	£1,250,00	£2,500,00
	No limit to funding, zero risk	No limit to funding, zero risk	No limit to funding, zero risk
50% guarantor cost	0.41%	1.02%	2.05%
90% of loan guaranteed	£409,091	£1,022,727	£2,045,455
	9x more funding at same risk	9x more funding at same risk	9x more funding at same risk
0% guarantor cost	0.50%	1.15%	2.50%
100% of loan guaranteed	£500,000	£1,150,000	£2,500,000
	No limit to funding, zero risk	No limit to funding, zero risk	No limit to funding, zero risk

⁸ https://www.thebalance.com/how-letters-of-credit-work-315201

4

⁹ The RWA calculations can differ depending on the bank's methodology



Three key conclusions are drawn from Table 1:

- 1. A SIG cost saving is estimated to be within a range of 0.14% and 2.5%. This could create, for example, a potential saving of between £143k and £2.5m on a £100m loan, which could be used to support sustainable sourcing.
- 2. The lower the costs the guarantor (in this case the Government) charges, the better the SIG cost saving that banks can pass onto their clients.
- 3. These calculations also identify the potential for a SIG to multiply the funds a bank may be prepared to offer for sustainable sourcing at a given risk rate. To manage its risk, a bank will determine how much capital to allocate to different kinds of enterprise. A guarantee allows the bank to offer more funding for the same cost risk. As noted above it is unlikely the guarantor will take on all the risk of the loan, but even at 80% a bank could theoretically provide four times more funding at the same risk level (i.e. increasing the amount a bank may be able to lend on sustainable commodities). The lower the costs that the guarantor charges, the better the SIG cost saving to be passed on.

To put this SIG cost saving range of 0.14% to 2.5% in context, it is relevant to compare to the size of the "green premium", that is, the additional costs associated with sourcing sustainable commodities versus 'conventional' commodities. **Annex 1** provides more detail on green premiums including definitions, assumptions and how estimates of indicative prices and green premiums were made. Table 2 compares indicative commodity prices, indicative green premiums, and indicative SIG cost savings.

Table 2 – indicative commodity prices and indicative 'green premiums', compared with indicative SIG cost saving estimates

cost saving estimates						
	Indicative price per metric tonne	Indicative green premium	SIG cost saving range	Equivalent cost saving if guaranteed loan entirely spent on 1 tonne of		
				commodity		
Crude palm oil	£500	£25 ± £5 (i.e. 5%)	0.14% - 2.5%	£0.70 - £12.50		
Soy bean	£300	£3 to £5 (i.e. 1-2%)	0.14% - 2.5%	£0.42 – £7.50		
Cocoa beans	£1800	£90 ± £10 (i.e. 5%)	0.14% - 2.5%	£2.52 - £45.00		

From these indicative numbers we can conclude that the SIG cost will make a contribution to, but may not fully cover, the green premium costs of crude palm oil or cocoa beans, but is likely to cover a greater proportion of the soy bean green premium. Discussions with buyers and financiers within traders suggest that cost savings on finance of this size would be of interest and a useful incentive for driving further sustainable sourcing with their customers – if these cost savings could be applied to financial arrangements of these companies.



4 Investigating whether palm oil, soy and cocoa sector can use a SIG

4.1 Overview of UK market for palm oil, soy and cocoa

A majority of palm oil, soy and cocoa imported into the UK passes through a small number of very large multinational, often vertically integrated, agricultural traders, refiners and processors. These traders often import commodities on behalf of large ingredient and consumer goods manufacturers. If a SIG could be applied at this tier in the supply chain, with so few actors handling the majority of these commodities, it could be a very effective way of applying a saving at scale.

These large companies operate at scale to source commodities at a competitive price, including accommodating the costs of the logistics and infrastructure needed for importing commodities, and the risks associated with buying and transporting agricultural commodities. There are some smaller artisanal users of cocoa who may be directly importing in smaller quantities, such as where a higher price of cocoa can be accommodated in value-added confectionary or personal care products, but there are unlikely to be many smaller companies importing palm oil and soy (other than a small volume of organic soybean). More details on the structure of the palm oil, soy and cocoa supply chains are provided in **Annexes 2-4**.

Traders and manufacturers spoken to reported raised awareness of sustainability risks from their customers which has led to some increase in demand for sustainably sourced commodities. This was attributed to rising customer and business awareness of deforestation (including due to greater media and NGO activity) and increasing likelihood of legislation and policy interventions (e.g. the emerging due diligence proposals in the UK^{10} (as recommended by the Global Resource Initiative Taskforce¹¹) and in the EU^{12} . Traders and manufacturers felt that a financial incentive in the cost range of a SIG (0.14% - 2.5%) could usefully support or catalyse these trends.

4.2 Conclusions from interviews with palm oil, soy and cocoa importers and manufacturers

Eight large traders and industry experts were initially spoken to within the project. Several manufacturing companies were subsequently contacted. **Annexes 2-4** provide an introduction to the palm oil, soy and cocoa supply chains and record the conclusions from interviews with importers and manufacturers. These conclusions are summarised here:

1. The market for sustainable commodities is developing but would benefit from an incentive to complete the transition to 100% certified sustainable. The UK sustainable palm oil market is relatively mature (70% of imported palm oil certified sustainable¹³). There is still room for improvement but closing the remaining gap¹⁴ is challenging. The UK market for sustainable soy is less mature than for sustainable palm oil but growing, with the UK Sustainable Soy Initiative and other initiatives making efforts to raise awareness and increase demand for

¹⁰ https://consult.defra.gov.uk/eu/due-diligence-on-forest-risk-commodities/

¹¹ https://www.gov.uk/government/publications/global-resource-initiative-taskforce

¹² https://ec.europa.eu/environment/forests/eu comm 2019.htm

¹³ https://www.efeca.com/wp-content/uploads/2020/10/UK-Roundtable-on-Sourcing-Sustainable-Palm-Oil-APR-2020.pdf

 $^{^{14}}$ It is possible that the remaining 30% could already be certified or meet a definition of No Deforestation, No Peatland, No Exploitation (NDPE) 14 – the data is unavailable



sustainably sourced soy. In 2019, approximately 62% of the UK's imported soy volumes were sourced from countries at low risk of deforestation/conversion or covered by a deforestation and conversion free certified soya standard.¹⁵ The progress of the UK market for sustainable cocoa is less clear. IISD (2016) estimated that 29% of the global market was made up of voluntary sustainability standard (VSS) compliant cocoa, 18% of cocoa was "potentially VSS-compliant" and conventional cocoa production accounted for 53%.¹⁶ We extrapolate that a slightly higher proportion of VSS cocoa is imported into the UK. Companies we spoke to felt that a financial incentive (like a SIG) could be a useful mechanism to support this final transition to fully sustainable, particularly in sectors which have been slower to move, such as the animal feed and food service sectors.

- 2. Existing sustainability frameworks could provide a basis for SIG sustainability criteria. Well-established certification systems exist in the palm oil, soy and cocoa supply chains. These could provide a useful basis from which to develop suitable SIG sustainability criteria.
- 3. Limited use of trade finance by large importers and manufacturers may hinder application of a SIG. Palm oil, soy and cocoa is imported by a small number of large trading companies and refiners/processors. Importers spoken to reported that because they are very large with good financial ratings and sufficient liquidity, they are able to fund commodity trades from their balance sheet, using cash or raised finance, without using bank lending to finance their commodity trading (including using trade finance products). The large ingredients manufacturers spoken to, who use a significant volume of palm oil and soy, also reported not using trade finance or other bank finance in a form that a SIG could easily be applied to. If palm oil, soy and cocoa importers and large manufacturers are not using trade finance, as our initial discussions suggest, it may not be possible to apply a SIG as currently conceived. However, Efeca has not spoken with all traders/refiners and large manufacturers who import palm oil and soy, so it is possible some do use trade finance instruments that could apply a SIG. Additionally, although one large branded chocolate manufacturer was spoken to during the importer phase, we have not spoken with any finance teams in cocoa manufacturers about their financing arrangements. This could be a next step.
- 4. The cost of finance on commodity usage is a relatively small proportion of overall cost for some manufacturers. Four large food manufacturers reported that the cost of finance on commodity usage was a relatively small proportion of their overall manufacturing costs this is because commodities are just one of many input costs.. For this reason, these companies questioned whether a SIG could therefore create an impactful cost saving for them. It is possible that smaller manufacturers may benefit from SIG, particularly those for whom palm oil/soy/cocoa purchases make up a large proportion of their costs, who do not have the same economies of scale as the large importers, and who have higher costs of finance. This could be investigated further.
- **5. Other opportunities may exist for applying a SIG elsewhere in the supply chain.** Two importers felt it could be worth investigating whether a SIG could usefully be applied further up the cocoa or soy supply chains (to provide lower cost financing to farmer and supplier groups) –

Efeca

¹⁵ https://www.efeca.com/wp-content/uploads/2020/10/UK-RT-on-Sustainable-Soya-APR-19_20-final.pdf

¹⁶ https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf



it may also be worth considering for palm oil supply chains too. They also suggested it may be worth expanding the scope of the SIG to include semi-processed products containing a high proportion of imported cocoa, such as cocoa butter (a significant volume of raw cocoa is semi-processed in the Netherlands before being imported into the UK for further processing).

5 UK Banking Sector - driving transparency in commodity supply chain transactions

5.1 Bank interest in sustainable incentives

Banks have expressed much interest in a SIG as an incentive.

Whilst banks are increasingly offering preferential lending rates linked to sustainability criteria, the market demand for these financial products is currently small, albeit growing. A report by the Bankers Association for Finance and Trade (BAFT) ¹⁷ suggests that there are currently few financial incentives that exist that reward banks for offering sustainable lending. Incentives, or preferential lending linked to sustainability criteria, offered by banks tend to be structured and subsidised by the bank themselves, rather than because there is a financial benefit from increased sustainable behaviours. For example, if a bank offers a lower interest rate to a client for improved sustainability, the bank's own returns reduce if the client increases the proportion of sustainably sourced cocoa it sources.

A SIG could provide banks with a financial benefit to pass onto their clients to incentivise sustainable sourcing and a mechanism to help drive transparency and disclosure within their businesses to strengthen due diligence practices and reduce the sustainability risks that banks themselves carry, i.e. the risk that they are lending money which is facilitating unsustainable behaviours.

5.2 Bank feedback on SIG

Through a series of workshops and interviews, the Green Finance Institute (GFI) explored the appetite for a SIG with the UK's leading banks and trade financiers. These conversations suggested that the SIG has the potential to encourage adoption of sustainable practices and disclosure on forest risk commodity imports to the UK. Banks seemed increasingly aware of their responsibility, to clients and society more widely, to 'green' their assets and processes.

The key findings are:

1. Banks are unanimous in their support for the SIG and have said they have clients who use trade finance in a way the SIG could be applied. There was unanimous agreement by the banks that a financial incentive, in the form of a reduced interest rate of trade finance product, would be attractive to clients and enable banks to request additional sustainability disclosures from clients. The Green Finance Institute are working with product teams within the banks to identify clients who they can approach pre-pilot stage. Furthermore, the GFI is working with the banks to attain anonymised data on suitable clients which would be beneficial to scoping a pilot.

¹⁷ https://baft.org/committees/future-leaders-program/papers "Sustainable finance: can green be profitable"



- 2. The SIG has a potential role in developing financial sector due diligence. Banks noted that that the SIG could support increased disclosure, reporting and transparency across their client's supply chains and thought a SIG would encourage more sustainable imports, through additional lending and retained client revenue being deployed on sustainable activities. They also believed the SIG could be a lever to change internal bank processes and enhance information and sustainability requests on all trade finance transactions.
- 3. There is a need for sustainability standardisation. Banks had some concerns that without a standardised definition of 'sustainability', such mechanisms may not achieve their full potential. An external quasi-governmental organisation to set the standards on a 'sustainable trade import' was broadly welcomed. They suggested that verification of an import's sustainability could be integrated into their internal processes, for instance at the point of onboarding a client, especially for Letters of Credit. Several banks noted that third-party independent verification may be necessary (including using sustainable certification schemes such as Roundtable on Sustainable Palm Oil, Roundtable on Responsible Soy), as banks are not currently set up to take on additional internal processes. A further suggestion was that it may be fruitful to consider whether a SIG, if taken forward, could support a 'kite mark' approach that could be used to signal where trade finance meets a guaranteed level of sustainability.

Further work is required to better understand this opportunity. The GFI is continuing to liaise with the banks to further understand these opportunities and what types of companies use trade finance.

6 Conclusions

This report pulls together a number of useful foundational insights on how a SIG could work, whether a SIG would be used by importers and buyers of imported palm oil, soy and cocoa, and whether it could drive a behavioural change towards greater uptake of sustainably produced commodities.

Modelling of the potential SIG cost saving, that is, the reduced interest rates that a SIG could produce, indicates a potential savings range of 0.14% and 2.5% on the cost of finance used to buy commodities. The size of the potential cost saving depends on the credit risk of the company receiving the loan, the proportion of lending that is guaranteed, and the size of the SIG guarantor's costs. Traders we spoke to confirmed that cost savings of this order would be of interest, given that traders operate on narrow margins.

The estimated green premiums of sourcing sustainably (certified) over conventionally sourced commodities are of the order of 2-5% for palm oil, 1-3% for soy, and 5-10% for cocoa prices. Thus, the SIG cost saving would contribute towards, but may not entirely cover, the "green premium" costs of sourcing sustainable commodities. Importers and manufacturers felt that a SIG saving of this size, combined with other financial and non-financial incentives and drivers, could provide a potentially compelling incentive for sustainable sourcing, particularly for those sectors yet to commit to sustainably sourced palm oil, soy and cocoa (e.g. the out of home food sector).

A majority of UK palm oil, soy and cocoa imports come through a few identifiable large traders and refiners/processors. Discussions to date with buyers, finance and sustainability experts within these traders suggest that these large companies are not significant users of trade finance (such as trade



loans or letters of credit). Rather than using bank lending, these companies fund their trading through the company's working capital (cash, savings, capital from the company's balance sheet). Without having relevant lending to apply a guarantee to, it may not be possible to apply a SIG to importers of these three commodities, at least not as the SIG is currently conceived. Large ingredients, feed and consumer goods manufacturers, with strong balance sheets, also reported that they are similarly not using bank finance in a way that a SIG could easily be applied to. The manufacturing companies contacted also reported that financial costs associated with importing commodities were not a large proportion of their overall costs – for these companies, commodities are only one of many input costs, so finance costs associated with commodity procurement is only a small overall cost. Efeca were not able to speak with all relevant importers or manufacturers using imported commodities, thus further discussions could be explored.

Efeca did not speak to any SMEs as a part of this study and focused on the largest importers and manufacturers with the greatest commodity usage. This opportunity could be explored further. It is possible that small and medium sized importers and manufacturers may be interested in a SIG, particularly those for whom palm oil, soy or cocoa purchases make up a large proportion of their costs (e.g. oils and fats manufacturers, or artisan chocolate producers), who do not benefit from the same economies of scale as the large importers, or who have higher costs of finance. These smaller companies would likely receive a higher SIG discount saving as they would have a lower credit rating (higher risk of defaulting) than large companies. It is unclear whether there are a significant number of companies for whom this is the case.

The report also identifies that there are widely understood and recognised sustainability certification schemes, traceability systems and definitions for sourcing palm oil, soy and cocoa. These could be used as a basis for developing the SIG's sustainability criteria. These existing frameworks could be a way to ensure the criteria are clear, robust and straight forward to administer.

6.1 Potential next steps

There are several possible further avenues to explore and better understand how a guarantee could be used to reduce the cost of sourcing sustainable commodities:

1. Wider engagement, with a larger sample size, including exploring the potential impact on SMEs

- Undertake additional engagement work to further explore whether and how trade finance is or could be used to fund the import of agricultural and forestry commodities into the UK.
- The potential impact of a guarantee when used by SMEs could be further explored, only a small proportion of the UK's palm, soy and cocoa are imported by smaller companies.
- Small and medium sized companies make up a larger proportion of the manufacturing sector than the importing sector, however commodities tend to make up a smaller percentage of costs for manufacturers and therefore the SIG saving would be less significant. Further exploration would be needed to test whether there are a significant number of companies for whom a SIG would provide a significant enough saving.



• Given the views of traders on the applicability of the SIG it would be helpful to better understand the characteristics of the type of companies which banks consider would be interested in a SIG, in order to target engagement

2. Widen the scope, of the SIG to other commodities which may be linked to environmental degradation at the point of production.

• Investigate whether a SIG could be applied to companies using trade finance to buy other agricultural and forest commodities (e.g. rubber, timber), commodities from other ecosystems (e.g. fish), mined commodities (metals, minerals) or other commodities which may also linked to risks of environmental degradation at the point of production. Sustainability verification systems for these commodities would need to be explored.

3. Consider other financing entry points or markets, such as providing upstream support to farmers, producers and exporters or explore other products at the UK importer level.

- Investigate opportunities to use a guarantee further up the supply chain, such as using a guarantee to reduce the cost of finance to farmers, producers and exporters in the country of origin. A guarantee in this form would have a different operating model and require additional considerations. For instance, it may be fruitful to consider the benefits of supporting an export guarantee in producer countries.
- It may also be useful to investigate whether there are opportunities for importers and manufacturers to use alternative banking arrangements in such a way that the SIG could be applied (e.g. whether a company's existing financing could be replaced by trade finance discounted by a SIG).
- It would also be possible to investigate whether there are other financial instruments that could be applied at the importer tier of the supply chain to reduce the costs of sourcing sustainably. With the majority of commodity trade passing through a few major actors in this tier of the supply chain, finding a way to apply an incentive at this point could be an effective way of applying a saving at scale, maximising impact, and minimising administrative burden.
- It is possible that the SIG may work well for importers in emerging consumer markets (e.g. India), if their trade finance is more likely to be provided by banks
- One trader offered the suggestion that there may be a way that Government could support insurance related to their counterparty risk (i.e. the risk that their clients cannot pay), which could create cost saving benefits in a similar way to a SIG.

4. Develop a pilot to build the evidence base and client interest in this product

An alternative approach would be to run a pilot for the SIG product with leading banks who
can identify clients willing to join. This approach has already been well received with the
GFI's partner banks and could provide a first evaluation of impact across identified clients. A
guarantor would need to be identified to underwrite the loan reductions.



7 Glossary

- BEIS Department for Business, Energy and Industrial Strategy
- CIF Cost, Insurance and Freight (CIF) this is a way of quoting the cost of a commodity or product that includes the insurance and freight costs. This is useful when comparing the price of commodities/products at the point of receipt in the UK. A number of other costs metrics are quoted which include or exclude other costs
- Deforestation and conversion free (DCF) standard a sustainability framework which verifies that a product was not sourced on land which had been deforested on converted¹⁸
- DIT Department for International Trade
- Efeca the specialist sustainability consultancy that led the GRI Secretariat and is part of the group leading the SIG scoping activity.
- GFI Green Finance Institute, led by Rhian-Mari Thomas, member of the GRI Taskforce
- Guarantee A guarantee is a financial commitment by a guarantor (typically a government or financial institution) to underwrite certain loans against the risk of default, that is, the guarantor promises to repay a loan if it cannot be paid back.
- GRI Global Resource Initiative¹⁹
- Green premium the additional costs associated with sourcing sustainable commodities versus 'conventional' commodities, see Annex 1 for more detail
- HMT Her Majesty's Treasury
- NDPE No deforestation, no peat, no exploitation. A framework which ensures palm oil is not sourced from land which was deforested, nor grown on peatlands, nor which exploited workforce or indigenous people²⁰
- RWA risk weight assets these assets that banks must put aside to protect against the risk of default. International Banking regulations (Basel I, II, III) set out rules and guidelines for minimum capital requirements
- SIG Sustainable Import Guarantee a guarantee that reduces the cost of finance for importing sustainable commodities, a GRI recommendation
- SIG WG Sustainable Import Guarantee Working Group, a working group of interested stakeholders led by BEIS, Efeca and Green Finance Institute, includes representatives from DIT, UKEF, HMT, Barclays.
- Trade finance is a form of lending, typically offered by banks, that supports the cash-flow of companies where there is a delay between buying inputs and being paid for sold products.
- UKEF UK Export Finance, the UK's export credit agency and a Ministerial department overseen by DIT
- Vertically integrated company a company which undertakes activity in several parts of the supply chain, including owning farms, distribution overseas, trading, manufacturing and local distribution.

¹⁸ https://accountability-framework.org/how-to-use-it/resources-library/advancing-deforestation-free-and-conversion-free-supply-chains-in-brazil-argentina-and-paraguay/

¹⁹ https://www.gov.uk/government/publications/global-resource-initiative-taskforce

²⁰ https://ndpe-irf.net/



Annex 1 – Estimating SIG cost savings, prices and green premiums for palm oil, soy and cocoa

Estimating SIG Cost Savings

As members of the SIG working Group, Barclays undertook to model the SIG cost saving for three different company risk rating levels using a typical risk weighted asset (RWA) pricing model, based on an assumption that banks aim to achieve a RWA return of 2.5%. The model estimates the percentage improvement in margin created by using a guarantee, i.e. the lower interest rate the bank would be able to charge their client because of the guarantee: this is the "SIG cost saving" that can be passed on by the bank.

The SIG cost saving was estimated by varying three parameters:

- **Company risk levels** the SIG cost saving has been estimated for three different company credit risk levels, AAA to AA-, A+ to A-, BBB+ to BBB- rated companies (equivalent to S&P or Fitch's rating agency taxonomy). Smaller companies, particularly those not listed on a stock exchange, may not have a rating agency credit rating. Smaller companies may have good credit ratings equivalent to one of these risk ratings, but equally may be lower than BBB-. Most large commodity importers will be rated.
- **Guarantor cost** the SIG costs have been estimated if the guarantor (assumed to be HM Government) varies the costs they charge for providing a SIG. In the model, the 'guarantor cost' was modelled at 90%, 50% and 0%. UK Export Finance (UKEF) Guarantee (which provides a useful operating model that the SIG could draw on) charges 90% on guarantees they provide. If the SIG guarantor were to require 90% of the SIG cost saving, it would substantially reduce the incentive of a SIG cost saving. It is hoped that the SIG guarantor cost could be reduced in order to increase the cost saving that can be passed on and it would be useful at a later stage to investigate with UKEF the basis for the 90% charge.
- **Proportion of loan guaranteed** the SIG costs were also estimated by varying the proportion of any loan that the guarantor is prepared to guarantee, i.e. if the guarantee is applied on 80%, 90% or 100% of the loan. This means the bank applying for the SIG would still take on the lending risk of 20%, 10%, and 0% (and would have to set aside RWAs for the proportion of the loan it takes on the risk for). The UK Export Finance (UKEF) Guarantee provide a guarantee on 80% of a loan. Whilst higher cost savings can be achieved for guarantees that cover a greater amount of the lending, it is likely the guarantor would want a bank to take on some of the risk in order to incentivise appropriate risk taking behaviour. Reducing this proportion would have the impact of increasing the amount of lending a bank could undertake at the same risk level, potentially expanding the trade finance market.

Estimating Green Premiums

Green premium is defined for the purposes of this study as the difference in price that an importer may pay for verified sustainable commodities compared with the price for uncertified commodities (commonly referred to as 'conventional 'commodities). Uncertified or conventional commodities are not unsustainable per se but will not have been independently verified as meeting specified sustainability standards for example, free from links to deforestation. Defining the cost of



sustainability in these terms is deemed a reasonable proxy for the additional costs of sustainable sourcing for these purposes.

Table 2, in section 3.1, presents indicative commodity prices, indicative green premiums, and SIG cost savings. Commodity prices fluctuate daily, seasonally, annually, due to pressures from supply and demand so the indicative prices given are an estimate that several traders have reached consensus on. The green premium ranges have been estimated by two or more traders for each commodity (see below for more on how the commodity price and premium numbers were estimated). The contribution to the green premium that a SIG cost saving could deliver is estimated in the final column, using the minimum and maximum SIG cost saving range, and assuming that the entire trade loan is spent on purchasing commodities (so if 2.5% of £1,800/metric tonne = £45).

An alternative way of thinking about the SIG cost saving was considered during the development of the SIG modelling. Rather than comparing the small SIG cost saving to the entire volume imported, it would be possible to compare the total SIG cost saving derived from the entire trade finance facility, against just the new/additional sustainable sourcing (so not compared against commodity volumes the company would already have bought sustainably). For example, if a company was already buying 75% sustainable commodities, the SIG cost saving would only need to be applied to support the remaining 25% A2.5% saving on the remaining 25% is a much bigger incentive than 2.5% on 100%. In this way, the more sustainable commodities a company is already buying, the greater benefit the relative benefit of the SIG saving. This is described in more detail in the later section, *Another way of looking at the SIG cost saving*. Because we were unable to speak with any companies that were using trade finance and could use a SIG, we were unable to test this way of thinking with banks or traders. This could be something that could be considered at a later stage.

Typical import prices

As noted above, there are some difficulties in estimating a "typical" price of imported commodity.

- Commodity spot and future market prices fluctuate hourly, daily, seasonally, with the vagaries of international supply and demand (seasonal crop growth, changes in stored commodities, trade wars, trade flows, as well as financial commodity speculation).
- Different commodity exchanges include/exclude different costs, typically pricing the delivery of the commodity in the US, or before export. These international price metrics do reflect the costs of transport/freight and travel insurance need to deliver to UK ports ideally, we would use CIF (Cost, insurance and Freight, i.e. costs quoted include cost of product as well as freight and insurance) prices to UK, or to Rotterdam (from our discussions, traders typically compare Rotterdam prices). UK and Rotterdam prices have been more difficult to come by.
- Additionally, there are issues to be aware of when with converting prices into GBP per metric tonne, including ensuring they're being compared in the same exchange rate, and using the same weight or other metrics (e.g. \$/kg, Ringgits per ton, or cents/lb).

For the purposes of this study we have based our estimates on Indexmundi.com data. This has been free and easy to obtain, it provides Rotterdam prices in pounds sterling (GBP), and the estimates drawn from it marry up with the prices our industry experts have quoted.

There may be some benefit from buying price data in the future to check these estimates.



Estimating palm oil prices and green premium

Reuters and Bloomberg provide crude palm oil futures prices from the Bursa Malaysian Derivatives Berhad, quoted in Malaysian Ringgits or US Dollars per metric tonne – the figures apply to palm oil delivered into Malaysia and don't include the full insurance and transport costs to the UK. A more representative indication of UK import prices are Rotterdam CIF refined palm oil prices (that is, including costs of insurance and freight), but this data is less easily available publicly and we were unable to find UK delivered (CIF) refined prices.

In estimating palm oil prices we have ignored palm kernel oil, but this may also be worth investigating in the future.

In the Indexmundi data below (fig 1), the monthly crude palm oil price has ranged between £340 – £670/metric tonne in the last five years (daily prices have seen more volatile price movements). A reasonable average price for the last 5 years is approximately £500/metric tonne. There may be additional transport and insurance costs on top of this Rotterdam price, but the two palm oil industry experts we spoke to suggested this was a reasonable indicative price.

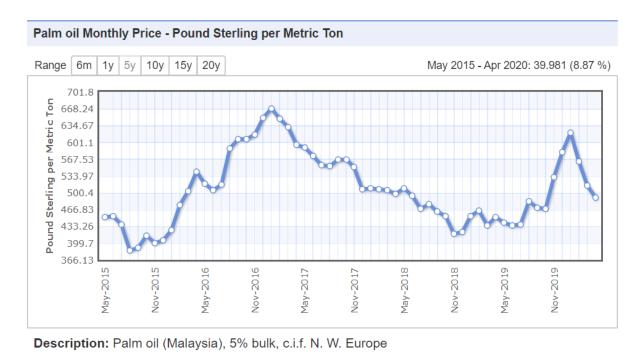


Figure 1: indexmundi.com 21 summary of palm oil prices (recorded in June 2020), GBP/Metric tonne for last 5 years

Interviews with two industry palm oil experts provided indicative estimates for a green premium for palm oil to be in the range of £20-£30 per metric tonne, an average of £25 per metric tonne. This is the difference in price between 'conventional' uncertified palm oil and RSPO segregated refined palm oil.

~

Unit: Pound Sterling per Metric Ton

Currency: Pound Sterling

²¹ https://www.indexmundi.com/commodities/?commodity=palm-oil&months=60¤cy=gb



On this basis indicative estimate of the green premium might be 25/500 = 5%.

More than one trader noted that certain certified fractions of refined palm have a much higher premium because volumes are limited and market demand is high

Estimating soy prices and green premium

Bloomberg and Reuters and other free commodity data quote the globally used Chicago Board of Trade figures, which provides prices for soy beans, meal, oil for "any origin" soy delivered into a US port – again this doesn't give a full sense of the UK price after transport to Rotterdam and/or into the UK. More typically the UK purchases from Brazil, Argentina, Paraguay or direct from Rotterdam. Rotterdam prices are given below (fig 2).



Figure 2: indexmundi.com²² summary of soybean prices (recorded in June 2020), US soybeans CIF Rotterdam, GBP/Metric tonne for last 5 years

A reasonable estimated average price for the last 5 years is around £300/metric tonne. There may be additional insurance and transport costs to add to this, but industry experts interviewed felt £300/metric tonne was a reasonable soybean estimate. These same experts offered a view that the green premium for certified soy may be around £3-£5/metric tonne. That would amount to around a green premium of around 1-2% on top of a £300/metric tonne import price.

Prices for soy meal are typically just below the price of soybeans, whereas soy oil prices are typically at least double that for soybean. Soy oil prices are driven to some degree by European demand for soy oil derived biodiesel. The UK does not import a large volume of soy biodiesel, this is in part

-

 $^{{}^{22}\,\}underline{https://www.indexmundi.com/commodities/?commodity=soybeans\&months=60\¤cy=gbp}$



because biodiesel derived from wastes (such as used cooking oil) receives a larger subsidy support from the UK's Renewable Transport Fuel Obligation (RTFO).

Estimating cocoa prices and green premium

Bloomberg's cocoa contract prices are "for the physical delivery of exchange-grade product from a variety of African, Asian and Central and South American origins to any of five US delivery ports"²³. As with soy and palm oil, cocoa is largely traded through Rotterdam as well as direct into the UK.



Description: Cocoa (ICCO), International Cocoa Organization daily price, average of the first three positions on the terminal markets of New York and London, nearest three future trading months.

Unit: Pound Sterling per Kilogram

Currency: Pound Sterling

Figure 3: indexmundi.com²⁴ summary of cocoa bean prices (recorded in June 2020), ICO daily price averaged over New York and London positions, GBP/Metric tonne for last 5 years

These prices are GBP per kilogram so need multiplying by 1,000 to give metric tonnes. A reasonable estimate for a tonne of $\cos \sim £1800/\text{metric}$ tonne. A trader and a $\cos \approx 1800/\text{metric}$ tonne of $\cos \approx 1800/\text{metric}$ tonne. A trader and a $\cos \approx 1800/\text{metric}$ tonne of $\cos \approx 1800/\text{metric}$ tonne. A trader and a $\cos \approx 1800/\text{metric}$ tonne of the $\cos \approx 1800/\text{metric}$ or $\cos \approx 1800/\text{metric}$ tonne. A trader and a $\cos \approx 1800/\text{metric}$ tonne of the $\cos \approx 1800/\text{metric}$ or $\cos \approx 1800/\text{m$

²³ https://www.theice.com/products/7/Cocoa-Futures

²⁴ https://www.indexmundi.com/commodities/?commodity=soybeans&months=60¤cy=gbp



Another way of looking at the SIG cost saving

During the research another way of looking at this cost saving was explored (though further consideration is required). Where a company is already buying a proportion of their commodities sustainably, they are already paying a green premium on this proportion of their purchases so arguably do not need the SIG cost saving to discount this existing sustainably sourced commodity. However, theoretically, it would be possible for the company to receive a SIG on all the commodity purchases they finance, but for the SIG saving *earned on commodities that are already being bought sustainably* to subsidise new/additional sustainably sourced commodities.

Table 3 illustrates this point against the cost saving applicable to a BBB rated company (90% guarantor cost, 80% of loan guaranteed), cost savings used here are taken from Table 1 in section 3.1.

- In each scenario the proportion of SIG saving is estimated that could be applied *to new* sustainable sourcing, and if the cost saving on what would normally have been bought is used to subsidise new sustainably sourced commodity.
- In the scenario where a company didn't previously source any commodity sustainably, the £7,142 of SIG saving (earned on £1m of trade finance) would have to be shared across the entire £1m commodity imports, so the SIG cost saving equates to a 0.71% saving, which is a long way from the 5% green premium we have seen most commodities have.
- But if the company previously sourced 50% of their commodity sustainably, this £7,142 is shared across the remaining £500k previously unsustainable crop (rather than the full £1m), so the SIG cost saving equates to a 1.42% saving.
- For a company that previously sourced a larger amount of sustainable commodity, say 90%, the £7,142 shared across the £100k (rather than the full £1m) previously conventional crop would create a 7.1% saving, exceeding the 5%.
- In this way, the more sustainable the company is already, the greater the value of the SIG cost saving to them. Whilst there may be concerns about subsidising a very large highly rated company to potentially do something they would already be doing, there may be a justified case where progress can be accelerated that helps to drive the broader industry transition to sustainable sourcing.

Table 3: assuming BBB company, 90% guarantor cost, 80% of loan guaranteed, i.e. 0.71% cost saving. So borrowing £1m, gives a cost saving of £7,142

_		. 0					
	SIG cost	Borrow	SIG cost	% previously	% previously	Cost saving	additional
	saving %		saving £	sustainable	unsustainable	shared against	% sourced
						previously	sustainably
						unsustainable	
Ī	0.71%	£1,000,000	£7,142	0%	100% (£1m)	£7,142/£1m	0.71
ſ	0.71%	£1,000,000	£7,142	50%	50% (£500k)	£7,142/£500k	1.42
Ī	0.71%	£1,000,000	£7,142	75%	25% (£250k)	£7,142/£250k	2.85
	0.71%	£1,000,000	£7,142	85.8%	14.2% (£142k)	£7,142/£142k	5
	0.71%	£1,000,000	£7,142	90%	10% (£100k)	£7,142/£100k	7.14

Taking this analysis a step further, it is possible to estimate what additional sourcing could be afforded for different SIG cost saving so that it fully covers an assumed green premium of 5% (for



some commodities this premium may be <5%, but using 5% for illustrative purposes). Table 4, below, estimates this for our minimum and maximum SIG cost range.

Table 4: identifying what % of sustainable production would deliver a 5% saving (equal to an assumed 5% green premium) for our high and low SIG scenario

- 7. 8 F						
SIG cost	Borrow	SIG cost	% previously	% previously	Cost saving	additional
saving %		saving £	sustainable	unsustainable	shared against	% sourced
					previously	sustainably
					unsustainable	
0.14%	£1,000,000	£1,429	97.1%	2.9% (28.6k)	£1,429/£28.6k	5%
0.71%	£1,000,000	£7,142	85.8%	14.2% (£142k)	£7,142/£142k	5%
2.50%	£1,000,000	£25,000	50%	50% (£500k)	£25k/£500k	5%
	0.14% 0.71%	saving % 0.14% £1,000,000 0.71% £1,000,000	saving % saving £ 0.14% £1,000,000 £1,429 0.71% £1,000,000 £7,142	saving % saving £ sustainable 0.14% £1,000,000 £1,429 97.1% 0.71% £1,000,000 £7,142 85.8%	saving % saving £ sustainable unsustainable 0.14% £1,000,000 £1,429 97.1% 2.9% (28.6k) 0.71% £1,000,000 £7,142 85.8% 14.2% (£142k)	saving % saving £ sustainable unsustainable shared against previously unsustainable 0.14% £1,000,000 £1,429 97.1% 2.9% (28.6k) £1,429/£28.6k 0.71% £1,000,000 £7,142 85.8% 14.2% (£142k) £7,142/£142k

Put another way, for a company that already has 50% of their commodity sustainably sourced, a 2.5% SIG cost saving would fully cover the cost of sourcing the rest sustainably (if the green premium cost was 5%). Similarly, for a company with 85.8% of their commodity already sourced sustainably, a 0.71% SIG cost saving would allow the company to fully cover the cost of sourcing the rest of their commodity sustainably (14.2%), again assuming a green premium cost of 5%. However, as noted, it may not be necessary to fully cover the green premium cost to be an effective incentive for sourcing sustainably.

It would be useful to test this understanding with a company that can utilise a SIG on the trade finance they used to finance their commodity procurement.



Annex 2 - Palm oil

This annex provides:

- A background on the palm oil industry, to better understand how palm oil flows through the supply chain;
- A consideration of who is importing palm oil, whether they are using trade finance and could utilise a SIG;
- A summary of existing palm oil sustainability practices which may be useful to inform how SIG sustainability criteria are developed.

Conclusions about applicability of SIG as incentive for palm oil

Four main conclusions have been drawn from this study:

- 1. A financial incentive (such as a SIG) could provide support to move industry to 100% sustainable palm oil. Indonesia and Malaysia are the largest global palm oil producers, users and exporters of palm oil, but it is increasingly being produced in south and central America, and western Africa (albeit at significantly lower volumes, and often used for domestic use). The UK sustainable palm oil market is relatively mature (70% of imported palm oil certified sustainable¹). There is still room for improvement, although it is possible the remaining 30% could already be certified or meet a definition of No Deforestation, No Peatland, No Exploitation (NDPE)¹ the data is unavailable. Ensuring that remaining gap is closed is challenging. Companies spoken to felt that an incentive like a SIG could be a useful mechanism to support this final transition, particularly in sectors which have been slower to move, such as the food service sector.
- 2. Limited use of trade finance by importers might hinder uptake of a SIG. As noted above, palm oil is imported by a small number of large trading companies and refiners. Importers spoken to reported that because they are very large with good financial ratings and sufficient liquidity, they are able to fund commodity trades from their balance sheet, using cash or raised finance, without using trade finance in a significant way. The large ingredients manufacturers spoken to, who use a significant volume of palm oil, also reported not using trade finance or other bank finance in a form that a SIG could easily be applied to. If palm oil importers and large manufacturers are not using trade finance, as our initial discussions suggest, it may not be possible to apply a SIG as currently conceived. However, Efeca has not spoken with all traders/refiners and large manufacturers who import palm oil, so it is possible some do use trade finance instruments that could apply a SIG.
- 3. Cost of finance on commodity usage is a relatively small proportion of overall cost for some manufacturers and could limit SIG uptake. Several manufacturers reported that the cost of finance on commodity usage was a relatively small proportion of their overall manufacturing costs this is because commodities are just one of many input costs, and the cost of finance on this portion of costs is therefore a small proportion of overall costs. For this reason, these companies questioned whether a SIG could therefore create an impactful cost saving for them. It is possible that smaller manufacturers may benefit from a SIG, particularly those for whom palm oil (or soy and cocoa) purchases make up a large proportion of their costs, who do not have the same economies of scale as the large importers, and who have higher costs of finance. This could be investigated further.
- 4. Existing sustainability frameworks could provide a basis for SIG sustainability criteria. Wellestablished certification systems exist in the palm oil supply chain. These could be a basis for developing suitable SIG sustainability criteria.



Introduction to the palm oil industry

Growing palm oil

Palm oil is the most widely grown oil crop globally. It is native to West and Central Africa and is now extensively grown in South East Asia. Indonesia (36.8 million tonnes in 2017 – 54% of global production) and Malaysia (19.9 million tonnes in 2017 – 29% of global production)²⁵ are the largest global producers, users and exporters of palm oil, but it is increasingly being produced in South and Central America, and western Africa.

As well as large commercial plantations (including operated at scale by integrated international traders and governments), an estimated three million smallholders grow oil palms, accounting for approximately 40% of total global oil palm production²⁶. In 2017 smallholders accounted for 70-90% of oil palm production across Africa²⁷.

UK import of palm oil

Palm oil is almost exclusively imported by very large international traders and refiners. Many of these traders are vertically integrated, often growing and processing palm oil in source country as well as having operations in the UK. All traders also buy palm oil from other palm oil producers and palm oil traders to meet demand or to take advantage of beneficial market prices.

For companies using palm oil as an ingredient, very few will have the infrastructure to handle imports directly, nor be able to afford to import palm oil directly (e.g. taking on the insurance and logistics costs of purchasing palm oil abroad and transporting to the UK). Almost all ingredient manufacturers and product manufacturers purchase imported palm from traders and refiners.

Discussion with buyers and experts in the market confirm Efeca research that it is unlikely there are many SMEs directly importing palm oil.

In the EU, Rotterdam and Hamburg serve as major trade hubs for palm oil, importing, refining and re-exporting crude, refined and fractionated palm oil across Europe. In the UK, palm oil is handled at Hull, Purfleet/Erith (Kent) and Liverpool in the UK, trading palm oil direct from origin as well as with Europe. From this point it is further refined (at the UK's four refiners) and processed by ingredients manufacturers and consumer goods manufacturers before use.

Palm oil also enters the UK embedded within many ingredients and finished goods, though embedded commodities are excluded from this analysis as this is outside the current scope of how the SIG is intended to be applied.

End use

Palm oil is extremely versatile and used in a wide variety of products including cooking oil, food products (e.g. biscuits, bakery products, chocolate), healthcare and other non-food products such as soaps, detergents and in animal feed.

²⁵ Oil World Annual 2018.

²⁶ https://www.rspo.org/smallholders/rspo-smallholders-definition

²⁷ https://www.wwf.org.uk/riskybusiness



Palm oil and palm oil wastes/residues from the industry are also used for transport biofuel production but the UK does not import a large volume of palm derived biofuel²⁸ – palm derived biofuels are already subsidised through the UK's Renewable Transport Fuel Obligation (RTFO). There are a number of sustainability concerns associated with crop derived biofuels, which do not need to be discussed in this report, though, in developing sustainability criteria for a SIG, there are lessons to be learned from the approach to sustainability used by these government renewable transport, heat and power subsidy schemes.

Investigating who is importing palm oil and whether they could utilise a SIG

Mapping the specific importers in the palm oil sector

The UN's Comtrade data provides a useful indicator of the direct imports of palm oil into the UK. As can be seen in figure 4, Indonesia, Malaysia, Papua New Guinea and Solomon Islands make up the bulk of UK imports. The UK also sources palm oil from Guatemala, Ghana, Colombia, Sierra Leone, Ecuador, Nigeria and others, who are developing their palm oil production and export facilities.

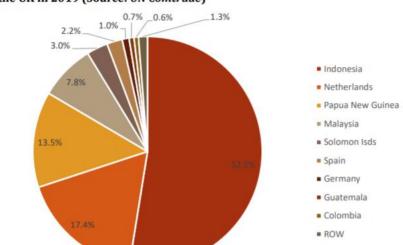


Figure 10. Main exporter countries of palm oil, palm kernel oil and palm kernel meal to the UK in 2019 (Source: *UN Comtrade*)

Figure 4: direct palm oil imports, 2019 UN Comtrade import data²⁹

Netherlands also features in figure 4 despite not being a producer of palm oil. Netherlands, particularly through the ports of Rotterdam and Amsterdam, is a key European importer, processor and re-exporter of palm oil. It would be possible to estimate the *source* country of imports via Netherlands by analysing Dutch palm oil imports and making an assumption about what the UK receives.

In 2019 the UK imported 490k tonnes of crude and refined palm oil, and 500k tonnes of palm kernel meal ("expeller"), for use in animal feed²⁹.

²⁸ https://www.gov.uk/government/collections/renewable-fuel-statistics

²⁹ Source: UN Comtrade, 2019; last accessed June 2020, https://comtrade.un.org/data/ taken from https://www.efeca.com/wp-content/uploads/2020/10/UK-Roundtable-on-Sourcing-Sustainable-Palm-Oil-APR-2020.pdf



The main UK importers of crude and refined palm oil are the large traders. The UK has four refineries processing palm oil. There are three major refineries in the UK: Olenex (ADM and Wilmar) (Purfleet/Erith), AAK (Hull), and Sime Darby (Liverpool). Olam (Goole) also operates a smaller facility. Refined palm oil and palm oil derivatives are imported directly into UK refiners from European based refiners and storage in Netherlands (Rotterdam), Germany and other European countries. It is possible that some of the largest consumer goods manufacturers are importing refined palm oil into the UK.

Figure 5 provides a schematic of the palm oil supply chain schematic, detailing the different subsectors buying, using and selling palm oil and products containing palm oil. Discussion with buyers in the industry suggests it is unlikely there are many other significant importers of palm oil.

Although biofuels supply chain is included in the schematic, it has otherwise been excluded from the scope of this study. The UK derives little biofuel from crude palm oil, though does use some palm oil industry by-products and wastes to make biofuels, as noted above.

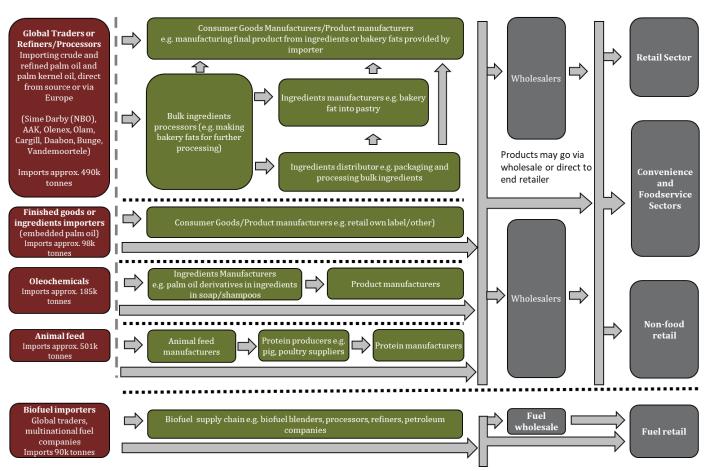


Figure 5: the palm oil supply chain



Understanding Trade Finance use in the palm oil sector

Our research concludes that little palm oil is directly imported into the UK by companies other than the largest traders and refiners. From discussions with a number of buyers within these traders and refiners, as well as with industry experts, there is a view these trading companies or refiners use little or no trade finance. This is because these very large companies fund their trading using working capital, that is, using cash the company has earned, saved or raised through treasury bills, rather than through borrowing from banks.

Food and feed manufacturers contacted also reported not using trade finance in a way that a SIG could easily be applied to. Several also reported that the cost of finance on commodity usage was a relatively small proportion of their overall manufacturing costs (because commodities are a small proportion of their input costs, and the cost of finance on this portion of costs is therefore a small proportion of overall costs) – on this basis some questioned whether a SIG could have an impactful cost saving for them.

This means that, at this time, we do not have evidence that an importing palm oil trader, or a manufacture buying imported palm oil, could make use of a SIG applied on trade finance.

The companies spoken to have expressed an interest in further reducing the cost of commodities to drive further sustainable sourcing. The refiners spoken to stated they already have zero deforestation (NDPE) and sustainability commitments and have extensive chain of custody and traceability systems being developed or in place. This may limit the change that a SIG can influence within the UK palm sector.

Sustainability concerns, initiatives and traceability systems

A significant quantity of palm oil consumed in the UK comes from countries with high risks of deforestation and social issues, including Indonesia and Malaysia³⁰. These countries have converted, and continue to convert, forest to palm oil plantations, with significant carbon, environmental and social impacts. Forest clearance associated with palm oil expansion has raised concerns about the land rights and protections of indigenous peoples who have been moved off their land.

Independent sustainability schemes have developed to help to address social and environmental impacts of palm oil production. The major certification scheme for palm oil is the Roundtable on Sustainable Palm Oil (RSPO).

Additionally, the Governments of Indonesia and Malaysia have both developed palm oil certification systems in recent years, the Indonesian Sustainable Palm Oil Standard (ISPO) and the Malaysian Sustainable Palm Oil (MSPO) standard. Consideration should be given to whether these standards are sufficiently rigorous in their definitions, criteria or indicators.

Many global companies have adopted their own commitments to sustainable palm through a Nodeforestation, No-peat and No-exploitation (NDPE) framework. The NDPE Implementation Reporting Framework (NDPE IRF)³¹ is a new reporting tool in its early stages of implementation which is designed to help companies to systematically understand and track progress in delivering

³⁰ https://www.rspb.org.uk/globalassets/downloads/documents/risky-business/risky-business-report-summary.pdf

³¹ https://ndpe-irf.net/



NDPE commitments. All UK refiners have commitments to source NDPE palm oil, equivalent to 79% of UK imported palm oil.

A high volume of palm oil in the UK already meets a sustainable or zero-deforestation requirement, whether through NDPE or RSPO commitments (see below). This has been driven by rising reputational risks, growing demand for sustainable commodities from retailers and manufacturers and consumers, emerging legislative provisions and other factors. A SIG which creates a meaningful price differential (i.e. reduce the cost of sustainably sourced palm oil) could be useful to closing the remaining gap, if it can be applied.

Volumes of sustainable palm oil: size of the SIG market opportunity

In 2019 the UK imported 490,000 tonnes (metric tonnes)³² of palm oil. The refineries reported 332,132³³ tonnes, (70% of total UK palm oil) already meets either a sustainability certification standard for palm oil (RSPO certified palm oil (Mass Balance, Segregated, and Identity Preserved) and 43,411 tonnes (9% of total supply) is covered by a company commitment to source sustainable palm oil (e.g. a No deforestation, No planting on peatland, No exploitation policy (NDPE))³⁴. This means that the majority of palm oil used in the UK is already traceable back to source (mill) and to sustainable production methods avoiding deforestation.

It is estimated that 99,457 tonnes of palm oil (21% of total imported palm oil) are imported by organisations other than refineries and is not tracked. It is possible that a large part of this 21% is covered by RSPO certification or an NDPE policy, given that 84%³⁵ of European palm oil is covered by a NDPE claim. These imports will be coming most likely from European refiners via Rotterdam directly into ingredients manufacturers and consumer goods manufacturers.

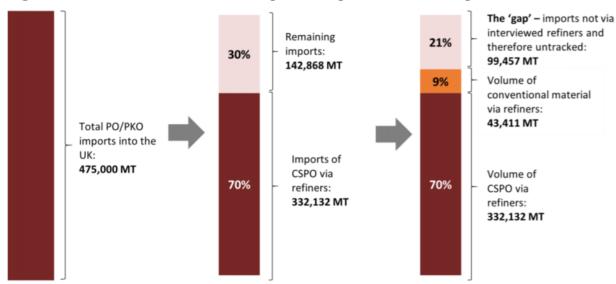


Figure 4. Breakdown of UK 2019 palm and palm kernel oil imports

Figure 6: proportion of sustainable and non-sustainable palm oil imports, and the remaining gap – data taken from UK Sustainable Palm Oil Initiative 2020 Annual Progress Report³⁶.

 $^{{}^{32}\,}Eurostat\,Fedoil,\,taken\,from\,\,\underline{https://www.efeca.com/wp-content/uploads/2020/10/UK-Roundtable-on-Sourcing-Sustainable-Palm-Oil-APR-2020.pdf}$

³³ Excludes RSPO credits, derivatives and embedded palm oil in finished goods.

³⁴ NDPE polices ensure no deforestation takes place within the supply chain.

³⁵ www.idhsustainabletrade.com/uploaded/2019/01/EPSO Vormgeving2019 DEF 31012019.pdf

³⁶ https://www.efeca.com/wp-content/uploads/2019/12/UK-RT-on-Sourcing-Sustainable-Palm-Oil-APR-2019..pdf



The companies spoken to acknowledge that price remains an important driver in the demand for sustainable palm oil but that there are also a number of other factors at play which are increasing demand for sustainable commodities which a SIG could support, for example:

- Reputational risks are rising the need to address climate change is rising up business agendas;
 NGO focus on deforestation is adding pressure; the Global Resource Initiative³⁷ is one of many initiatives raising the profile and importance of sourcing sustainably
- Legislative risks are rising the UK is currently consulting on mandatory due diligence legislation for forest risk commodities and the EU are also proposing legislation in this area too that require minimum sustainability sourcing requirements
- Growing demand for sustainable sourcing manufacturers and retailers are increasingly requiring sustainably sourced palm oil in their ingredients and products, particularly large visible companies in supply chain.

More than one company noted that there are specific sectors where the take up of sustainable sourcing is moving more slowly for example the food service sector.

27

https://www.gov.uk/government/publications/global-resource-initiative-taskforce, https://www.gov.uk/government/publications/global-resource-initiative-taskforce-government-response/government-response-to-the-recommendations-of-the-global-resource-initiative



Annex 3 - Soy

This annex provides:

- A background on the soy industry, to better understand how soy flows through the supply chain;
- A consideration of who is importing soy, whether they are using trade finance and could utilise a SIG:
- A summary of existing soy sustainability practices which may inform how SIG sustainability criteria are developed.

Conclusions about applicability of SIG as incentive

Four main conclusions have been drawn from this study

- 1. A financial incentive (such as a SIG) could provide support to move industry to 100% sustainable soy. The soy market is also highly developed, with well-established global supply chains. The soy supply chains have points of concentration at the trading level, led by a small number of large companies. The majority of soy is grown in Latin America, with North America also a large grower. Approximately 90% of the EU's soya is used to feed livestock a price support like a SIG could be particularly relevant support to this sector¹. The market for sustainable soy is slightly less mature than for sustainable palm oil, thus there is greater potential scope for a SIG to support sustainable practices here. It is estimated that in 2019, approximately 32% of imported soy (in the form of oil, beans or meal) was covered by a deforestation and conversion free¹ soy standard. In addition, approximately 16% of imported UK soybean meal imported was compliant with Amazon Soy Moratorium contracts and approximately 15% was sourced from a country where the risk of deforestation is low (e.g. USA, Canada)..¹ The market for sustainably sourced soy is growing, with the UK Sustainable Soy Initiative and other initiatives making efforts to raise awareness and increase demand for sustainably sourced soy.
- 2. Limited use of trade finance by importers might hinder uptake of a SIG. Soy traders, manufacturers and industry experts spoken to believe a SIG cost saving, if it could be applied, could be helpful in driving uptake of certified soy. However, as with palm oil, the importers of soy are small in number and tend to be very large well-funded organisations. These large international soy trading companies also appear to have sufficient liquidity to be able to fund their soy trades without using bank finance (such as 'trade finance' instruments). If this proves to be the case for all importers, a SIG may not be applicable for soy importers as currently conceived.
- 3. Limited use of trade finance by manufacturers might hinder uptake of a SIG. The large feed and meat production companies spoken to also reported they did not use bank finance in a form that a SIG could easily apply to. The manufacturers interviewed reported that the cost of finance was only a small proportion of overall costs (e.g. because soy is only a small part of feed or manufacturing input costs, and finance is only a small part of their soy costs).
- 4. Existing sustainability frameworks could provide a basis for SIG sustainability criteria. Soy also has well established certification systems that could be a basis for developing suitable SIG sustainability criteria.



Introduction to the soy industry

Growing Soy

Soy (this report refers to 'soy' for consistency, but soya and soybean are synonymous) is a legume crop grown across Asia and America. Production of soy has grown over 800% in the last fifty years with Argentina, Brazil, USA and China dominating production. The UK does not grow significant quantities of soy, though some new soy seed varieties have been developed which can grow in UK climatic conditions³⁸.

UK soy imports

Soy is traded through the large EU ports, refiners and processors, particularly from Amsterdam, Rotterdam, Antwerp (known collectively as ARA) and Germany, as well as direct into the UK. Much like palm oil, soy is typically imported at scale by large traders who have the infrastructure in place to move bulk soy hygienically, safely, and economically (because of economies of scale) – including taking on the risks and costs of insurance and freight.

End use

Soy has a high protein content (\sim 38%) and is used in the food and feed sector as a key ingredient. The majority (70%) of soy imported into the EU is processed for animal feed. Soy is also a direct ingredient in a variety of foods, e.g. soy sauce, tofu, soy milk, edamame and other vegetable proteins. Soy oil is refined and used as a vegetable oil for cooking and as an ingredient in processed food. More recently soy is also used as a biofuel (biodiesel) for use as a diesel replacement in cars. Soybeans typically derive 79% soybean meal, 18% soy oil, and 3% waste³⁹.

Investigating who is importing soy and whether they could utilise a SIG

Import volumes and provenance

In 2019 the UK imported approximately 3.5 million metric tonnes of soybean equivalents directly in the form of soybeans and meal (including soy embedded in other products)⁴⁰. Of this figure, most soy is sourced from South America either directly or via the Netherlands, or is produced in North America.

Efeca

³⁸ https://akcagric.co.uk/blog/soya-uk-real-option

³⁹ https://ussec.org/resources/conversion-table/

⁴⁰ https://www.efeca.com/wp-content/uploads/2020/10/UK-RT-on-Sustainable-Soya-APR-19_20-final.pdf



2019 UK soya import sourcing data, based on UN Comtrade database

	Soybean meal equivalents (Tonnes)	Soybean equivalents (Tonnes)	Share of UK imports ⁶
Argentina	1,093,703	1,508,556	42%
Brazil	702,878	969,488	27%
N America (USA and Canada)	363,173	500,928	14%
Paraguay	202,610	279,463	8%
China	62,621	89,812	2%
Other countries	155,838	214,947	6%
Total	2,580,823	3,563,194	

Figure 7 Breakdown of imported soybean equivalents by country of export

Mapping importers

The UK's soy supply chain begins with production in the Americas, with a significant amount of processing in the country of origin. Although the four largest global commodity traders in South America are ADM, Bunge, Cargill, and Louis Dreyfus (commonly referred to as 'ABCD'), the main UK soy importers are the traders Cargill, Cefetra, Glencore and ADM. Many of these large traders source soy direct from farms in South America, some from their own farms. Specialist feed brokers and wholesalers may also be importing a quantity of soy, including organic soy. A number of the major ingredients manufactures may also be importing and handling soy.

After this point, the supply chain fragments as the processed commodities are sold on for different purposes: further processing/refining, oleochemicals, livestock feed manufacturers, and in food etc. soy. The feed manufacturers, some of the biggest users of soy, largely rely on importers to bring in soy on their behalf.

Figure 8 below provides a schematic of the soy supply chain, detailing the different subsectors buying, using and selling soy and products containing embedded soy. .

As with palm oil, biofuel producers feature in the schematic but have been excluded from the scope of the SIG.

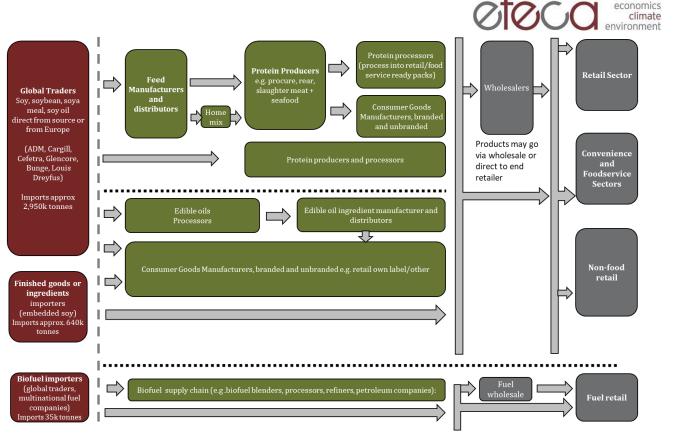


Figure 8: soy industry supply chain schematic

Understanding Trade Finance use in the soy sector

From discussion with a number of buyers and finance teams within importers and manufacturers (as well as from discussion with industry experts) we believe most soy is imported by the large trading companies detailed above. As with palm oil, we understand these large importers and manufacturers (including ingredients manufacturers, feed and meat producers) fund commodity trading using their own resource rather than through bank lending (i.e. using cash generated from revenue, saving, or from money borrow through the issuing of bonds/treasury bills). A SIG (as currently conceived) provides a cost saving derived from the reduced cost of trade finance to banks, so it will not be possible to apply a SIG to these importers if they are not using banks' trade finance.

Our research to date of the largest importers and manufacturers has not yet found any importers using trade finance – if this proves to be the case for all importers, a SIG may not be applicable for soy imports – at least as the SIG is currently conceived.

A number of manufacturers contacted also felt that the cost of finance on commodities was a small proportion of their overall costs (including because commodities are only a limited proportion of their input costs, and financial costs are a small proportion of those costs).

The Green Finance Institute continue to liaise with banks and their clients to further investigate whether any companies are importing using trade finance, and whether a SIG could be applied in a way to support sustainable sourcing of soy.

Nevertheless, during our discussions with traders, manufacturers and their finance teams, suggestions were put forward for alternative ways in which a guarantee could be applied in such a



way as to reduce price and help drive demand for sustainably sourced commodities. One company felt it would be worth investigating whether a guarantee could be applied further up the supply chain, such as to reduce the cost of finance to their suppliers (e.g. to individual or groups of farmers or traders). Another trader wondered if there was a way to use a guarantee between traders and their clients (manufacturers) to reduce the cost of finance, perhaps using an insurance product that Government underwrote to reduce a trader's 'counterparty risk'. It is unclear precisely how these could be administered or applied and the associated risks, costs and benefits have not yet been scoped up or investigated as they are currently outside of scope of how the SIG is currently conceived. This may be an interesting avenue to explore.

Sustainability concerns, initiatives and traceability systems

Soy has been associated with deforestation, land conversion and other habitat destruction⁴¹, particularly in South American countries where much is grown.

Similar to palm oil, independent sustainability schemes have developed to help to address social and environmental impacts of soy production. The most prominent soy certification schemes are the Roundtable on Responsible Soy (RTRS) and ProTerra. Other sustainability standards for soy production include: Danube Soy (Donau Soja), ISCC+ (International Sustainability and Carbon Certification Plus – primarily for biofuels), Cefetra CRS (Certified Responsible Soy standard), Cargill Triple S and ADM Responsible Soybean Standard.

Volume of sustainably sourced soy: size of the SIG market opportunity

It is estimated that in 2019 approximately 32% of imported soy (in the form of oil, beans or meal) was covered by a deforestation and conversion free soy standard. In addition, approximately 16% of imported UK soybean meal imported was compliant with Amazon Soy Moratorium contracts and approximately 15% was sourced from a country where the risk of deforestation is low (e.g. USA, Canada).⁴² Work is underway within the UK Sustainable Soy Initiative and elsewhere to increase the proportion of imported soy that deforestation and conversion free and this is expected to increase as the new or strengthened sustainability commitments from major retailers and manufacturers are implemented in the next 1-5 years.

In comparison to the palm oil sector in the UK, which has already established a high certification coverage, there is a larger opportunity here for SIG to support industry efforts to increase the take up of deforestation and conversion free sustainable soy, including certified.

Similar to the palm oil sector, the companies spoken to acknowledge that price remains an important driver in the demand for sustainable soy but that there are also a number of other factors at play which are increasing demand for sustainable commodities which SIG could support including reputational risk, emerging legislative risk, growing customer awareness etc.

Creating a SIG sustainability criteria

Soy has well regarded certification and traceability systems in place. SIG sustainability criteria could be developed to utilise and build upon these.

⁴¹ https://www.wwf.org.uk/riskybusiness

⁴² https://www.efeca.com/wp-content/uploads/2020/10/UK-RT-on-Sustainable-Soya-APR-19 20-final.pdf



Annex 4 – Cocoa

This annex provides:

- A background on the cocoa industry, to better understand how cocoa flows through the supply chain;
- A consideration of who is importing cocoa, whether they are using trade finance and could utilise a SIG;
- A summary of existing cocoa sustainability practices which may inform how SIG sustainability criteria are developed.

Conclusions about applicability of SIG as incentive

Five main conclusions have been drawn from this study:

- 1. A financial incentive (such as a SIG) could provide support to move industry to 100% sustainable cocoa. The global cocoa market has well developed supply chains, which have highly invested in infrastructure, logistics and brands. The majority of cocoa is produced by smallholders. Cocoa production is centred in West Africa, with growing production in Indonesia and some production in Latin America. IISD (2016) estimated that 29% of the global market was made up of voluntary sustainability standard (VSS) compliant cocoa, 18% of cocoa was "potentially VSS-compliant" and conventional cocoa production accounted for 53%.¹ We extrapolate that a slightly higher proportion is imported into the UK.
- 2. Limited use of trade finance might hinder uptake of a SIG. As with palm oil and soy (above), cocoa importers are small in number and are large well-funded traders, processors and manufacturers. Importers' interviewed felt that a financial incentive could be helpful in supporting the transition to sustainable supporting, however they also reinforced a view that these large organisations are funding their cocoa trading without significantly using banks' trade finance. At this time, we do not have any clear examples of cocoa traders that are using trade finance in a way that could apply a SIG at the point of import. It may be useful as a next step to speak to a range of cocoa manufacturers, including smaller scale artisan manufacturers.
- 3. Other opportunities may exist for applying a SIG elsewhere in the supply chain. One importer felt it could be worth investigating whether a SIG could usefully be applied further up the cocoa supply chain (to provide lower cost financing to farmer and supplier groups). They also suggested it may be worth expanding the scope of the SIG to include semi-processed products containing a high proportion of imported cocoa, such as cocoa butter (a significant volume of raw cocoa is semi-processed in the Netherlands before being imported into the UK for further processing).
- 4. Existing sustainability frameworks could provide a basis for SIG sustainability criteria. The use of sustainably sourced cocoa is growing. The precise coverage of VSS is less clear than for soy and palm oil. There are a number of well recognised cocoa VSS that could be built upon to develop suitable SIG sustainability criteria.

Introduction to the cocoa industry

Growing cocoa

The cocoa tree is also grown in tropical regions with global cocoa production centred in West Africa, with growing production in Indonesia and some production in Latin America.



The majority of cocoa is produced by smallholders; more than six million smallholders produce cocoa on 2-3 hectares, contributing around 70% of global cocoa production⁴³ with 70% of cocoa produced by smallholders living on less than USD 2 per day.⁴⁴

End use

Cocoa is imported into the UK directly as beans, with some limited processing to form cocoa butter, liquor, paste for use as components in chocolate production. Cocoa pod husks and bean shells are imported in smaller volumes for use as animal feed. Cocoa is ultimately used to produce chocolate and chocolate goods including confectionery, drinking chocolate. There are also non-food uses, in cosmetics and personal products such as moisturisers and creams.

Investigating who is importing cocoa and whether they could utilise a SIG

Import volumes and provenance

Most processing of cocoa beans occurs outside of the UK. Approximately one third of cocoa imports to the UK are cocoa beans⁴⁵, while the rest comes to the UK in the form of processed or partly processed cocoa products, at either the manufacturing or retailer stage. A SIG which only applies to raw commodities may therefore be limited in the proportion of cocoa it can cover.

In 2019, the UK imported 201,358 tonnes of cocoa beans, husks, paste, butter, and powder with a trade value of USD 686.5 million. This is compared to imports of 447,894 tonnes of chocolate and chocolate products with a trade value of USD 2.01 billion. The United Kingdom is one of the main chocolate consumers in Europe – responsible for 9% of the total global land footprint of cocoa, according to WWF's most recent Riskier Business report⁴⁶. Because of the large amount of inter EU trade and re-export of cocoa, UN Comtrade data⁴⁷ assesses that 43% of UK imported cocoa⁴⁸ comes from Côte d'Ivoire, Ghana and Indonesia, with 57% from other EU countries including Netherlands, Belgium, Spain, Germany and Italy.

Most of the EU's imports of cocoa beans also come from Côte d'Ivoire and Ghana, followed by Nigeria, Cameroon and Ecuador. This implies that the semi-finished products entering the UK via the EU also can be sourced back to these countries.

Mapping the specific importers in the cocoa sector

As noted, most production of cocoa takes place in West Africa, while most processing of cocoa takes place in Europe. Once cocoa raw material has arrived in the EU, a large amount of further trading occurs within the EU as cocoa is processed and manufactured into various end products and reexported across Europe. Chocolate producers tend to fall into two broad categories:

Traders and processors that supply most of their output of couverture chocolate products to
third parties (market suppliers); the same processors may also produce finished chocolate
products. The biggest traders include Barry Callebaut, ECOM, Cargill, ADM and Bloomer. Some of

⁴³ https://www.wwf.org.uk/riskybusiness

⁴⁴ https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

⁴⁵ https://comtrade.un.org/

⁴⁶ https://www.rspb.org.uk/globalassets/downloads/documents/risky-business/risky-business-report-summary.pdf

⁴⁷ Source: UN Comtrade, 2019; last accessed June 2020, https://comtrade.un.org/data/

⁴⁸ Cocoa beans, butter, fat, oil, paste, powder, other cocoa wastes



these large international companies are vertically integrated and either own cocoa farms or work closely with cooperatives of growers.

- Branded groups which produce industrial chocolate (also known as couverture) and mainly use it in-house to make consumer products. They will be involved in the direct import of some cocoa and chocolate products, but will also use the traders/processors.
- There are a number of artisanal producers of specialist chocolate, some of whom may directly import small volumes of specialist cocoa, often directly from cooperatives of cocoa growers. The amount of cocoa or chocolate from these producers is a very small amount of the UK's total cocoa and chocolate supply.

Figure 9 sets out a scheematic for the cocoa supply chain. Like palm oil and soy, importing of cocoa beans and semi processed cocoa products is dominated by large traders, also supplying he large consumer goods and ingredients manufacturers. There are artisanal processors and retailers of cocoa products that are importing small quantities directly⁴⁹.

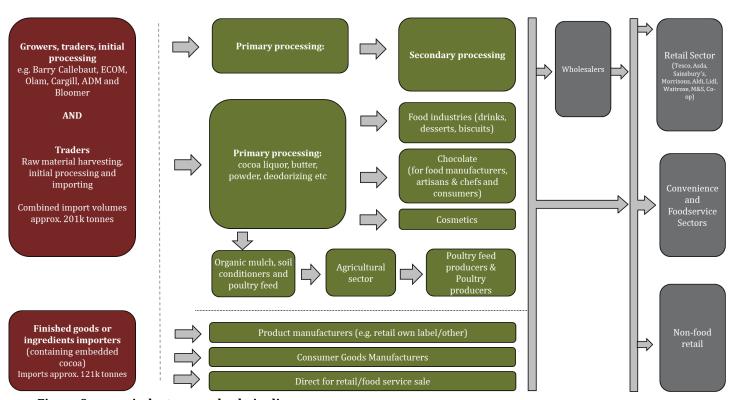


Figure 9: cocoa industry supply chain diagram

Understanding Trade Finance use in the cocoa sector

Discussion with buyers in importers and manufacturers have confirmed that most cocoa beans are imported by the listed large trading companies, with traders and the largest brands importing some semi-processed cocoa (e.g. cocoa powder, liquor, butter etc) directly. As for palm oil and soy, it appears that these companies fund commodity trading from their own balance sheet, rather than through bank lending (i.e. using cash generated from revenue, saving). If trade finance isn't significantly used by the importers, it may not be possible to apply a SIG at scale in the manner the SIG is currently scoped.

⁴⁹ https://www.cbi.eu/market-information/cocoa/united-kingdom



However, during our discussions with traders, suggestions were put forward for alternative ways in which a guarantee could be used to reduce price and drive demand for sustainably sourced commodities. It was felt it would be useful to investigate whether a guarantee could be applied further up the supply chain to support their farmers and suppliers, or whether it could be applied further up the supply chain to reduce the trader's counter party risk (e.g. with a manufacturer or retailer, such as using a form of insurance). It was also that suggested it may be worth considering whether a guarantee could be applied on semi-processed cocoa products that contain high proportions of cocoa (e.g. cocoa powder, liquor, butter etc which are 80-100% cocoa etc) and which may not have come direct to the UK from producer country but via processing in Europe. Further investigation would be required to understand how this could be administered and to consider the associated risks, costs and benefits.

As for palm oil and soy, the cocoa traders also recognised that price is a key driver in the demand for sustainable commodities, but that non-price pressures are also becoming ever more important drivers (particularly reputational and legislative risks).

Sustainability concerns, initiatives and traceability systems

Cocoa has been linked to deforestation in the major producing countries in West Africa, including Ghana, Côte d'Ivoire, and reported in South America.⁵⁰

Smallholder growers have in recent years experienced low incomes combined with difficulties in obtaining high yields (owing to small farm size, lack of training and knowledge, and lack of infrastructure or ability to invest in production improvements), as well as price volatility.⁵¹ In July 2019 Côte d'Ivoire and Ghana imposed a fixed "living income differential" of USD400 per tonne, on all cocoa sales for the 2020/21 season in a bid to tackle pervasive farmer poverty and deforestation – effectively creating a minimum floor price for cocoa of USD 2,600.⁵² Efforts are being made to address the widespread use of child labour in West Africa as well as health and safety of all workers.

Percentage certified imports of cocoa to the UK

Certification schemes covering cocoa include the newly merged Rainforest Alliance (RA) and UTZ, Fairtrade (FT) and Organic. RA/UTZ is the largest scheme worldwide, followed by Fairtrade and Organic, in terms of volume produced.⁵³ The UK is the largest consumer of Fairtrade cocoa products in the world⁵⁴.

The precise percentage of *certified* cocoa products imported to the UK is unknown. According to an article by Confectionery News, the British sustainable cocoa market reached around 20% in 2017, this includes chocolate.⁵⁵ However, in 2016 IISD estimated that 29% of the global market was made up of voluntary sustainability standard (VSS) compliant cocoa, 18% of cocoa was "potentially VSS-compliant" and conventional cocoa production accounted for 53%.⁵⁶ We may extrapolate that a similar proportion of VSS is imported into the UK. However, UK VSS cocoa may exceed the global

⁵⁰ https://www.wwf.org.uk/riskybusiness

⁵¹ https://www.wwf.org.uk/riskybusiness

⁵² https://www.reuters.com/article/us-ivorycoast-ghana-cocoa-sustainability/ivory-coast-ghana-looking-to-regulate-cocoa-industrys-sustainability-schemes-sources-idUSKCN1VV28J

⁵³ https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf

⁵⁴ https://www.cbi.eu/market-information/cocoa/united-kingdom

⁵⁵ https://www.confectionerynews.com/Article/2017/09/11/The-pendulum-is-swinging-towards-in-house-sustainable-sourcing

⁵⁶ https://www.iisd.org/sites/default/files/publications/ssi-global-market-report-cocoa.pdf



averages. Discussions with traders and manufacturers suggest that a large amount of cocoa is also covered by verified corporate sustainability requirements which may further increase the amount of cocoa covered by verified sustainable commodity.

What is clear from discussion with traders is that they felt an incentive like the SIG could be useful to help with the transition to sustainable production and sourcing.

As for palm oil and soy, it is clear that well developed and robust sustainability practices already exist that can be used as a basis to develop SIG sustainability criteria.