Profundo
Research & advice

EUDR Compliance Costs

Economic analysis of EUDR cost implications for companies and consumers

Gerard Rijk, Barbara Kuepper

5 February 2025

About this report

This report has been commissioned with the support of the Tierra Pura Foundation.

About Profundo

With profound research and advice, Profundo aims to make a practical contribution to a sustainable world and social justice. Quality comes first, aiming at the needs of our clients. Thematically we focus on commodity chains, the financial sector and corporate social responsibility. More information on Profundo can be found at www.profundo.nl.

Authorship

This report was researched and written by Gerard Rijk and Barbara Kuepper. Correct citation of this document: Rijk, G. and B. Kuepper (2024, December), *EUDR Compliance Cost: Economic analysis of EUDR cost implications for companies and consumers,* Amsterdam, The Netherlands: Profundo.

Front page cover photograph by Matt Palmer - Unsplash.

Disclaimer

Profundo observes the greatest possible care in collecting information and drafting publications but cannot guarantee that this report is complete. Profundo assumes no responsibility for errors in the sources quoted, nor for changes after the date of publication. When any error in this report comes to light, Profundo will promptly correct it in a transparent manner.

Contents

List of tables

Summary

The introduction of the European Union Deforestation Regulation (EUDR) has led to discussions about the content and quality of the information companies need to collect, analyse, and provide to the European Commission as well as the costs of compliance. This report focuses on the costs for both large and small companies and the potential impacts on the consumer price of products containing forest-risk commodities.

This study concludes that, as a percentage of annual revenues, the costs of EUDR compliance are negligible, on average 0.10% for the 12 companies investigated (including both large and SME - small and medium-sized enterprises) and 0.32% as the highest outcome for one of them. If companies would pass on these costs down their supply chains, the potential impact on consumer prices would be even less, between 0.001% and 0.07%. In comparison, this potential price increase is a fraction (between 0.05% and 3.5%) of the acceptable annual inflation target of the European Central Bank (ECB) (being 2% inflation).

Annual commodity trading volumes for twelve exemplary companies have been drawn from company publications or estimated based on customs data. On average, the estimated EUDR compliance costs for the group of 12 selected companies are 0.1% of revenues, 1.45% of operating profit, 1.89% of net profit, and 4.33% of employee costs. The costs could amount to an average of 58.77%[i] of the disclosed remuneration of top management of the selected large companies (SMEs in the selection do not provide top executive remuneration).

The EUDR compliance costs for the selected SMEs are on average nearly three times higher as a percentage of revenues than those for large companies, though still only amounting to 0.17% of revenue. As a percentage of profits, the costs of SMEs are half of those of large companies. Regarding personnel costs, the EUDR compliance costs for small companies are, on average, 5.28%, while this is 3.70% for large companies.

The numbers above are based on ongoing or annual expenses. Calculations have been provided for the set-up costs in year 1 for each company. The model shows that these costs are below the recurring annual costs. It needs to be considered that, for instance, data and service providers include the set-up costs in long-term contracts.

Table 1 Summary: EUDR compliance average costs in relative context

%	Company size*	Category	Revenues	Operating profit	Net profit	Personnel costs	Top remuneration
Large							
AAK	Large	Palm oil	0.07%	0.79%	0.82%	0.95%	18.56%
Amaggi (Brazil)	Large	Soy	0.04%	0.72%	0.78%	260.98%	821.51%
Barry Callebaut (CH)	Large	Cocoa	0.04%	0.50%	0.56%	0.45%	11.47%
Bunge (US)	Large	Soy	0.03%	0.52%	0.54%	NA	101.03%
ED&F Man (UK)	Large	Coffee	0.03%	1.18%	1.73%	1.15%	NA
Melitta (DE)	Large	Coffee	0.07%	1.83%	3.27%	0.42%	NA
Olenex (NL)	Large	Palm oil	0.14%	4.01%	4.12%	12.46%	104.02%
Touton (FR)	Large	Cocoa	0.08%	4.16%	7.24%	6.76%	NA
Average Large		**All**	**0.06%**	**1.71%**	**2.38%**	**3.70%**	**58.77%**

[i] Calculation based on an unweighted average of the percentages per company.

%	Company size*	Category	Revenues	Operating profit	Net profit	Personnel costs	Top remuneration
SME							
Ad Hulst (NL)	SME	Leather	0.32%	1.59%	1.41%	3.06%	NA
Frostmeat (DE)	SME	Beef	0.24%	0.45%	0.48%	9.03%	NA
Intervlees (BE)	SME*	Beef	0.12%	1.63%	1.76%	9.03%	NA
Lear Corp (US)	SME*	Leather	0.00%	0.01%	0.01%	0.00%	NA
Average SME		**All**	**0.17%**	**0.92%**	**0.91%**	**5.28%**	**NA**
Average total			**0.10%**	**1.45%**	**1.89%**	**4.33%**	**58.77%**
SME divided by Large (x)			2.75	0.54	0.38	1.43	NA

Source: Table 47; *) The division is between companies with large volumes (large) and small/medium volumes. Lear Corp is a large company in turnover, but its activities in the EU are small. Based on revenues, Intervlees could be considered a large company, but it is classified as an SME as its size is much more comparable to the SME group than to the large group.

If companies choose to pass on these extra costs to downstream companies and consumers, the end price of the relevant commodities will increase by a lower percentage than the compliance costs as a percentage of revenue. This is because in every step of the supply chain a pricing-up of the relevant commodity price occurs. An extra adjustment is necessary as, for instance, palm oil is typically only a small share of the total or whole consumer product (like in peanut butter), and soy is a relatively small cost in the production of animal products (like milk). In the case of animal products based on imported soy, the impact of annual EUDR compliance costs would be 0.001% on the relevant end-product price for the European consumer for milk, cheese, meat and eggs. On imported beef, the impact would be 0.066%.

Table 2 Impact on end product price in retail for the 'whole' product*

	Factor**	Cocoa	Beef	Coffee	Soy	Palm Oil	Leather
EUDR compliance cost as % of revenue	A	0.06%	0.18%	0.05%	0.03%	0.11%	0.16%
Pricing-up, relevant (X)	B	2.70	2.74	2.41	2.72	1.70	2.70
Impact on retail price	C = A/B	0.02%	0.07%	0.02%	0.01%	0.06%	0.06%
Embedded nature***	D	30%	100%	90%	10%	10%	5%
Impact on retail price of the 'whole' product	**E = C x D**	**0.007%**	**0.066%**	**0.018%**	**0.001%**	**0.006%**	**0.003%**

Source: Profundo; *) 'whole' product is the product in which the raw material is processed; **) A is the average of the companies in specific commodities in Table 1, the revenue column; B is based on Table 49; ***) an estimated percentage of the whole product consisting of the raw material (D). As the various commodities are used for many products, it would need in-depth research to calculate a precise % for each commodity. The current estimates are based on various supply chain studies that can be found on www.profundo.nl or chainreactionresearch.com and include milk, cheese, meat, leather, detergents and personal care products (palm oil). Coffee and cocoa still require further investigation. See further footnote iv on page 39.

Abbreviations

CRR	Chain Reaction Research
CSDDD	Corporate Sustainability Due Diligence Directive
CSRD	Corporate Sustainability Reporting Directive
EC	European Commission
ECB	European Central Bank
EUDR	EU Deforestation Regulation
Gross profit/result	Revenues minus cost of goods sold
NDPE	No Deforestation, No Peat, No Exploitation
Net profit	Profit after tax
NFRD	Non-financial Reporting Directive
Operating profit	Revenues minus operational costs
SME	Small and medium-sized enterprises
Top remuneration	Remuneration of top executives/managers

Introduction

Under the EU Deforestation Regulation (EUDR), EU companies introducing "relevant products" onto the EU market will need to ensure those products comply with the EUDR's requirements, including completing due diligence on their supply chains to prove that their products do not contribute to deforestation. These obligations will apply to small and micro-enterprises six months later. Companies that trade or source coffee, cocoa, palm oil, soy, rubber, timber and beef/ leather will fall within the law's scope. In October 2024, the European Commission (EC) proposed to delay the law's application by one year to the end of 2025 for large and medium enterprises and 30 June 2026 for small and micro enterprises. This proposal was adopted by the EU Council and the EU Parliament in December 2024, with no changes to the substance of the law substance.[1]

In this report, Profundo developed and applied methodologies for assessing two types of effects from the EUDR, with the aim of better understanding the significance of due diligence costs in relation to company turnover and product value. For this, 12 companies active as future 'operators' in one of the supply chains affected by the EUDR were selected as examples. The group contains a mix of companies trading in large and small or medium volumes.

The company size and trading volumes for each example have been based on estimates for actual companies operating in an EUDR-relevant sector. The assessed costs include:

- the expenditures for setting up an EUDR-compliant due diligence system;
- applying that system to the annual volume of products placed on the market by the example company (e.g., conducting due diligence on their supply chains);
- submitting due diligence statements for an estimated number of shipments; and
- meeting public reporting and information retention obligations.

Both transition/set-up costs and ongoing/annual costs have been estimated. The costs have been presented as nominal figures, including a range for each company. The average outcomes per company have been presented in relation to annual turnover, profit, personnel costs, and remuneration of top executives for comparison.

Although the preferred source of information is first-hand data from companies, these are often unable or unwilling to disclose such data. Therefore, secondary data has been used to extract relevant data and estimates and have been corroborated through expert interviews.

EUDR-related due diligence costs will be passed on as the commodities move through the supply chains and reach downstream companies and, ultimately, consumers. The complexity of these supply chains and the number of stages involved differ between different products. The value of imported EUDR-sensitive products increases at every step of the chain due to profit margins and/or activities adding value. Therefore, the EUDR costs as a percentage of the final product's value differ significantly from the EUDR costs as a percentage of the imported or upstream value. This analysis is essential to put the EUDR compliance costs in the context of the costs of living (for EU citizens) and the costs to, for instance, the EU farmers.

For this assessment, it was first necessary to map the different supply chain stages of the six selected commodities (beef, cocoa, coffee, leather, palm oil and soy), as well as the leading actors active in these stages and their key financials. Secondly, the pricing-up of the imported deforestation-sensitive commodity in the supply chain and the profit division between the various actors has been modelled. This input filled the pricing-up model for each of the selected value chains.

1

Selection of companies

For the purpose of this study, twelve companies exposed to different EUDR-relevant supply chains are selected. The aim is to present a mix of commodities and companies trading in large, medium, or small volumes. For each company, annual commodity trading volumes have been drawn from company publications, where available, or estimated based on shipping and customs data for inclusion in the further analysis.

1.1 Background

The EUDR covers meat and leather from cattle, cocoa, coffee, palm oil, rubber, soy, and wood. The options for identifying a selection of EU-based operators exposed to these supply chains are limited because data on product volumes and origins are often difficult to access due to a lack of public disclosure obligations. Moreover, financial data is generally more readily available for large companies than for medium- or small-sized companies, which often only have to submit simplified financial reports.

1.2 Company selection

Twelve companies of different sizes and from different market segments are selected for further analysis. Owing to the lack of comprehensive data disclosure, the commodity volumes are partly estimated. Where they are based on shipment data, the given volumes may be underestimated due to incomplete shipment records or the possibility that commodities are also received via logistics or freight-forwarding companies (that manage the import process for other companies and can be named on the relevant customs or shipment documents as the importer). Especially for more complex supply chains like leather, indirect imports (where products are imported in one country and shipped within the EU to another country), for example, via Italy, may also occur but cannot be quantified from the available information. Therefore, the given volumes are likely to be conservative estimates. Moreover, companies may also be exposed to other EUDR-relevant commodities besides the ones for which they were selected.

Table 3 Company selection

Company	Country	Commodity	Origin	Annual EU volume (est., mt)	Comment	Source
Barry Callebaut	CH	Cocoa	Global	350,816	Est. based on total processed cocoa volume; average 35.04% global grindings in Europe.	2
Touton	FR	Cocoa	Global	116,112	Est. based on total processed cocoa volume; average 35.04% global grindings in Europe.	3
ED&F Man	UK	Coffee	Global	146,746	Est. based on 30.7% of global coffee consumption in Europe.	4

Company	Country	Commodity	Origin	Annual EU volume (est., mt)	Comment	Source
Melitta	DE	Coffee	Global	135,660	Est. based on 71.4% revenues in Europe.	[5]
Bunge	US	Soy	Brazil	1,334,340	Est. based on shipment data; soybeans and- meal.	[6]
Amaggi	BR	Soy	Brazil	337,700	Est. based on shipment data; soybeans and- meal.	[7]
AAK	SE	Palm oil	Global	1,316,260	Est. based on palm oil share in total volume processed.	[8]
Olenex	NL	Palm oil	Global	658,978	-	[9]
Intervlees	BE	Beef	Brazil	2,794	Est. based on shipment data.	[10]
Frostmeat Fleischhandelsges.	DE	Beef	Brazil	1,035	Est. based on shipment data.	[11]
Ad Hulst	NL	Hides	Brazil	407	-	[12]
Eagle Ottawa (Lear Corp.)	US	Hides	Brazil	1,661	Est. based on imports by Eagle Ottawa Hungary.	[13]

2

EUDR compliance costs

This chapter analyses which cost items are relevant to consider for the costs of EUDR implementation. The next step includes investigating existing research on cost estimates, data on costs provided by companies active in commodity-sensitive supply chains, and expert interviews. The chapter concludes with a model that has been developed by combining data from various sources.

2.1 Introduction

2.1.1 EUDR compliance costs

This chapter focuses on the various approaches and methodologies for calculating the EUDR compliance costs for individual companies in specific supply chains. In the current study, the relevant EUDR costs include:

- The expenditures for setting up an EUDR-compliant due diligence system.
- The annual costs of maintaining the system: applying that system to the annual volume of products placed on the market by the example company, submitting due diligence statements for an estimated number of shipments, and meeting public reporting and information retention obligations.

Thus, data on both transition and ongoing/annual costs has been collected, forming the basis for a cost model.

2.1.2 Overlap with costs for EU CSRD and EU CSDDD compliance - methodology

The methodology for the EUDR cost calculation needs to consider that companies may simultaneously be setting up systems to comply with the EU Corporate Sustainability Reporting Directive (CSRD), which amends the reporting requirements under the Non-financial Reporting Directive (NFRD) and the upcoming EU Corporate Sustainability Due Diligence Directive (CSDDD). The question is how to handle the potential overlap of obligations and reporting requirements for these different pieces of legislation.

All three focus on similar topics and require risk assessment procedures, creating opportunities to achieve efficiency in preparing for the compliance obligations. The risk assessments and included topics required for the CSRD and CSDDD align with the previously described requirements of the EUDR. Businesses could, therefore, pre-assess the efforts and processes that are required for CSRD, EUDR and CSDDD and look for the overlap for their assessments and risk mitigation activities.[14]

However, the three regulations differ in timing, reporting, and the scope of companies that need to comply:

- For EUDR, EU and non-EU companies that put deforestation-risk commodities on the EU market must comply, regardless of where they are based, their size, turnover, or whether they are listed.[15] For traders, SME (small and medium-sized enterprises) reporting requirements are much lower than those for large traders.[16]

- The 'listed' status of companies is important under the CSRD. The CSRD is meant to accelerate the greening of company and sector financing, which leads to a strong focus on the EU Taxonomy. Large non-EU companies (> € 150 million in revenues on the EU market) also need to report.
- For CSDDD, the number of companies is limited as only large companies (EU and non-EU with more than € 450 million in revenues) need to comply,[17] while SMEs are exempt.

The EUDR was agreed on 29 June 2023 and planned to come into force from 30 December 2024 onwards for large companies and 30 June 2025 for SMEs. In December 2024, these deadlines were extended by 12 months, to the end of 2025 for large and medium enterprises and 30 June 2026 for small and micro enterprises. The CSRD will first apply in the 2024 financial year for reports published in 2025, and the CSDDD even later.

Conclusion: Implementing EUDR, CSRD, and CSDDD can help a group of large companies achieve cost efficiencies. However, not all companies can benefit from this, particularly SMEs. In the model used in this report, the implementation of EUDR will be treated as a 'stand-alone' activity. This means that no efficiencies with CSRD and CSDDD will be considered.

2.2 Costs included in the estimate

As indicated in section 2.1.1, the relevant EUDR compliance costs consist of the implementation/set-up costs and the ongoing/annual costs of EUDR compliance.

Operators and traders need to:

- Collect information, documents and data from each supplier about the relevant commodities and products subject to EUDR that they intend to place on the EU market.
- Verify and analyse the relevant information.
- Carry out a risk assessment and adopt risk mitigation measures if necessary. Companies must investigate whether the products were produced on land subject to deforestation or forest degradation, and that they were produced in accordance with local laws like legislation on nature protection and restoration, legislation on conservation of wildlife and biodiversity, legislation on endangered species, legislation on land development, forest-related rules, and laws relevant to the legal status of the area of production, Indigenous land rights and labour rights). In countries with a high level of corruption, further verification may be needed.
- Products made with commodities sourced from more than one geolocation must be risk-assessed for all geolocations.[18] [19]

The next sections in this chapter provide an overview of the approaches to estimate the costs, or a range of the costs, of all these steps.

2.3 Available studies on costs of EUDR and other compliance costs

2.3.1 European Commission, BIICL, CIVIC, LSE (2020)

In the *Study on Due Diligence Requirements Through the Supply Chain (2020)*[20], the costs for companies reporting on the NFRD were calculated based on surveys and the costs of value chain due diligence requirements for environmental and human rights risks were assessed (for the preparation of the CSDDD). The EC commissioned the study to the British Institute of International and Comparative Law (BIICL), CIVIC Consulting, London School of Economics and Political Science (LSE). There were two separate surveys, one for companies and one for all other stakeholders, with 631 responses in total. The surveys had a deadline in 2019. In addition, 35 interviews with businesses and other stakeholders were conducted, also in 2019. The businesses consisted of companies in various sectors, of which 87% were from the EU.

The following table provides cost estimates for each step.

Table 4 Summary of company costs for the EU's NFRD

€	Large companies	SMEs
Training costs	< 5,000	NA
Collection of new data	8,000-23,000	NA
Report drafting	18,000-109,000	3,000-5,000
Report design (external)	10,000-100,000	1,000-2,000
Report processing (external)	< 97,000	<20,000
Report publication	1,000-131,000	<1,000
External assurance	22,000-114,000	NA
Total	155,000-604,000	8,000-25,000

Source: BIICL, CIVIC, LSE (2020), page 299-300.

Compared to the NFRD, value chain due diligence as contemplated under the CSDDD would lead to higher costs per company. It would add additional information and mitigation requirements to companies' value chain management, reporting, and general due diligence activities, resulting in additional costs.

The study concluded that large companies could see 0.005% of their revenues as additional costs, excluding overhead and auditing. Including those indirect costs, total compliance costs could double to 0.01% of revenues.

Table 5 Company costs for mandatory due diligence

	% of revenues	Revenue (€ million)	Annual cost (€)
Large companies	0.005%	50,000	2,504,598
	0.005%	10,000	500,917
	0.005%	1,000	50,092
	0.005%	100	5,009
SMEs			
	0.074%	50	36,990
	0.074%	25	18,495
	0.074%	10	7,398
	0.074%	1	740
Economies of scale factor	14.8		

Source: BIICL, CIVIC, LSE (2020).

The annual costs, including overhead and auditing, were projected to be 0.009% of revenues for large companies and 0.139% for SMEs. The report applied a 25% mark-up for overheads relative to labour costs. Empirical mark-ups for outsourced activities/audits have been taken from the survey replies. The inconsistency in these costs between a smaller 'large' company and a large SME is due to different assumptions of complexities between companies and differences in business models.

Table 6 Company costs for mandatory due diligence including overhead and auditing

	Revenue (€ million)	Annual cost (€), excluding overhead, auditing	Annual cost (€) including overhead, auditing	As % of revenue
Large companies	50,000	2,504,598	4,696,122	0.009%
	10,000	500,917	939,224	0.009%
	1,000	50,092	93,922	0.009%
	100	5,009	9,392	0.009%
SMEs				
	50	36,990	69,356	0.139%
	25	18,495	34,678	0.139%
	10	7,398	13,871	0.139%
	1	740	1,387	0.139%
Economies of scale factor (x)				14.8

Source: BIICL, CIVIC, LSE (2020).

The ratios of 0.009% for large companies and 0.139% for SMEs will be one of the five methodologies included in the model to calculate the annual EUDR costs (section 2.7). By using five methodologies, consideration has been given that:

- The above-mentioned ratios need to be adjusted to the EUDR requirements.
- The starting point in 2020 (in the EC report) might be different than it is in 2024. In five years' time, many initiatives to support the implementation of EUDR will have emerged, and digitalisation, artificial intelligence, and competition could have had an impact on the costs of setting up and running a compliance system.

Set-up costs

The EU has also analysed the costs of setting up a due diligence system. It has compared the set-up costs under the EU Conflict Minerals Regulation (2014), which were, on average, € 13,500 per company. Included in its analysis of the set-up costs are the estimates by various stakeholders subject to Section 1502 of the US Dodd-Frank Act, (disclosure requirement for conflict minerals) leading to very different outcomes between US companies (high), EU companies (much lower), and Claigan Environmental (testing consultancy).[21] The first two cost lines of Table 4 could refer to these set-up costs.

2.3.2 WWF UK

In 2022, WWF-UK released a report titled *Designing Due Diligence*.[22] The report focused on how policymakers and companies can effectively turn legislation into action on deforestation and ecosystem conversion. The report investigated cost items of various legislation, including the estimates of the European Commission report (see 2.3.1) and its own interpretation. It also gave estimates of set-up costs. The WWF report outcomes have been added to the cost model in this study as one of the four methodologies for calculating annual costs and set-up costs.

For the annual ongoing costs, the percentages of 0.074% and 0.005% will be added to the model in section 2.7. These are numbers based on the EC study but excluding auditing and overhead costs. The choice to include these EC-based data in the model in this study is also based on:

- The weight that WWF UK gave to the EC report as a reference for action on deforestation.

- The choice by WWF to focus only on the direct costs, excluding the estimated overhead and auditing costs, gives weight to the argument that some EUDR compliance costs are likely already covered by several existing practices in companies.
- By adding the WWF UK outcomes to the model, the weight between methodologies of EC + WWF UK, Chain Reaction Research methodologies (discussed in section 2.3.3) and data providers (see section 2.4) is respectively 40%, 40% and 20%, which seems fair and balanced (see Table 10).

For the EUDR compliance set-up costs, the percentages of 0.14% and 0.005% will be added to the cost model for the High-Low range of costs. The ongoing annual costs of EU Conflict Minerals Regulation compliance of 0.011% are not used as this number does not differentiate between small and large companies.

Table 7 Company costs of mandatory due diligence including overhead and auditing

Legislation	Reported/estimated costs	€ per company	% of average turnover
EU Conflict Minerals	Set-up costs	13,500	**0.014%**
	Ongoing annual costs	2,700	0.011%
Modern Slavery Act	Costs negligible as reporting requirements already exist under Companies Act 2016		
EU Non-Financial Reporting Directive	Set-up + training costs	5,000	**0.005%**
	Ongoing annual costs	33,000-604,000	
EU CSDDD	Annual labour costs, mitigation activities	36,990 for Co with € 50 million turnover	**0.074%**
		500,000 for companies with € 10 billion turnover	**0.005%**

Source: WWF UK (2022), Profundo.

2.3.3 Chain Reaction Research (CRR)

In a 2020 report on voluntary No Deforestation, No Peat, No Exploitation (NDPE) requirements, CRR conducted interviews and executed desk research about the steps in NDPE execution.[23] The following cost items and cost estimates were distinguished, with the bullets below providing a summary of a cost analysis based on annual reports, information from Carbon Disclosure Project and the internet, and interviews with businesses active in verification:

1. Internal auditing costs: ten to several hundred thousand US Dollars.
2. External audit costs: ten to several hundred thousand US Dollars at most.
3. On-site investigation: tens of millions of US Dollars, in case of materiality (at most tens of thousands per site).
4. Monitoring by third parties/due diligence/collective: tens of thousands to one million US Dollars.
5. Blockchain and other technologies: these solutions can reduce existing administration costs.
6. RSPO-certified palm oil: buying certified palm oil might cost USD 30 per ton or a premium of more than 5%. This cost is related to the costs for palm oil producers which pay at least US$ 8-12 per ton to gain certification, excluding additional expenses from audit fees, logistics, and environmental assessments.

A summary of the 2020 cost estimates for palm oil are presented in Table 8. In the model used in this study, described in section 2.7, the CRR analysis is used in two of the five methodologies for assessing annual costs:

- The total € 50,000 costs for an SME and € 1.2 million for a large company are included.
- As a separate volume-based methodology, a compliance cost of € 30 per ton will be used for all investigated commodities in this report: the palm oil-specific certified price-premium of € 30 per ton has been deducted from the best-in-class € 60 per ton.

Table 8 CRR: company compliance costs in NDPE palm oil

€	SME	Large	Comment
Internal auditing	10,000	>100,000	
External auditing	10,000	>100,000	
On-site investigation	10,000 per site	10,000 per site	Technological change**
Monitoring by third parties	>10,000	1,000,000	
RSPO certified palm	€ 30 per ton CPO	€ 30 per ton CPO	For palm oil
Total	**>50,000**	**> 1,200,000**	
Best-in-class*	60 per ton CPO	60 per ton CPO	Including palm oil price premium

Source: Chain Reaction Research, based on CDP, company data, interviews. NDPE = No Deforestation, No Peat, No Exploitation; *) including € 30/ton CPO price premium for certification; **) The take-off of geo-location data utilisation and AI has reduced costs dramatically since 2020.

2.4 Organisations providing services with satellite data and artificial intelligence

Since the adoption of the EUDR and as the start for EUDR compliance approaches, an increasing number of companies have become active in offering support to companies to prepare for the EUDR compliance process. In this section, three of them are discussed.

2.4.1 PEFC and Live EO

PEFC (The Programme for the Endorsement of Forest Certification), an NGO that promotes sustainable forest management through independent third-party certification, is offering companies support to comply with EUDR through cooperation with LiveEO. On 27 June 2024, PEFC and LiveEO announced a partnership directed at EUDR compliance. The two organisations have combined their expertise in satellite analytics (LiveEO) and modular chain of custody monitoring (PEFC) to devise a programme that guides PEFC-certified companies towards EUDR compliance using a customised version of LiveEO's online platform, TradeAware.

This cooperation is focused on the timber supply chain and does not work for the other supply chains subject to the EUDR. LiveEO presents "special launch prices" for various clients. For these annual fees, LiveEO offers the following services:

- Unlimited geolocation upload.
- Unlimited connections with buyers and suppliers.
- Unlimited plot-level analysis using open-source data.
- Unlimited due diligence statements.
- An unlimited number of users.
- Unlimited access to layers to navigate your supply chain challenges.
- Collection of supplier compliance information.
- Complete risk assessment and risk mitigation capabilities.

- Evidence retention for 5 years.
- Export and integration with the EU information system.

The numbers and costs presented by LiveEO (set out below) seem low, though when 1,000 trades per day are to be uploaded, additional discussions on tariffs will be needed.

Table 9 LiveEO/PEFC cost proposal for EUDR compliance

	Revenues (million)	Package prices (€)	Package price (€)/million revenues
Tier #1	> € 10 mln	(contact us)	1,000*
Tier #2	€ 5-10 mln	10,000	1,333
Tier #3	€ 1-5 mln	5,000	1,667
Tier #4	< € 1 mln	2,000	2,000

Source: PEFC, LiveEO. *) Profundo estimate.

2.4.2 Source Intelligence / ChainPoint

Chain Reaction Research wrote about ChainPoint in 2020. In 2020, ChainPoint was active in supply chain mapping, traceability, audit management, supplier assessment, and blockchain.[24] In 2023, the company was acquired by Source Intelligence.

Source Intelligence is a company that supports operators in the whole process of EUDR implementation. This includes data collection on deforestation, human rights and the rights of Indigenous people, land ownership and endangered species, risk analysis, risk mitigation, and the submission of all materials to the European Commission.

An interview with a company representative clarified that the cost estimates of the European Commission in its 2020 report (see 2.3.1) for smaller 'large' companies might be under-estimated, but that indications given by Satelligence in an interview in a newspaper (see 2.4.3) are in the right direction. In addition to this indication, the level of costs is related to the number of suppliers and/or the size of the total supply chain. Other observations discussed:

- Including size and complexity, Source Intelligence admits that the compliance costs as a percentage of revenues are low. At this moment and in the current phase of EUDR introduction, it is difficult to say how the ongoing costs will differ from the set-up costs.
- Companies seem to be more concerned about the risks that prices of the relevant commodities might rise due to the scarcity of 'EUDR-compliant' commodity material, although this might be temporary.
- It should be considered that the compliance costs per ton of cocoa will be higher than the costs per ton of palm oil as the same work needs to be done on a small area of cocoa farms and a large palm oil plantation.
- A benefit of the introduction of EUDR, CSRD, and CSDDD is that there might be an overlap. There is a small overlap with CSRD and more with CSDDD. Also, there is overlap with work that has already been done by companies because of their own risk management.

2.4.3 Satelligence

Satelligence is a Netherlands-based satellite-powered geo-data analytics company that delivers real-time insights into global agricultural production and supply chain risks, including deforestation and carbon. It empowers leading companies like LDC, Neste, Mondelez, Bunge, and Cargill to measure, manage, and mitigate nature and climate commitments. In 2024, the EU Agency for the Space Programme (EUSPA) recognised Satelligence with the "Best Product" award for its innovative digital solution supporting EUDR compliance.

With offices in Utrecht, Jakarta, Abidjan, and São Paulo, Satelligence supports clients to comply with regulations such as the EUDR, the UK Environment Act, the FOREST Act in development in the USA, and even upcoming regulations in China. Like LiveEO and Source Intelligence, Satelligence can assist compliance with the EUDR.[25]

In an interview with the newspaper *Het Financieele Dagblad* in October 2024, the Business Development Director Nanne Tolsma indicated that small companies might need to budget 1 FTE to cover the work required to ensure EUDR compliance.[26] Satelligence has set up the EUDR Cocoa & Coffee Coalition to unite companies and improve data collection efficiency, which could reduce the number of indicated FTEs even further.

Most clients of Satelligence have contracts for multiple years, and the costs per year do not differ much, meaning that there are no real differences between set-up costs and annual/ongoing costs. Only when experts at some stages are needed for extra risk assessments, the costs might increase. Large clients with multiple EUDR sensitive commodities, could have contract values/prices which are in line with, or under-estimated, by earlier research from the EC and WWF.

The strong growth in the application of artificial intelligence leads to further quality improvement in data analysis, but the real costs are in the process of data communication with the client.

There is a potential overlap of work between CSRD, CSDDD and EUDR, however, the reality is that cooperation between the relevant company departments responsible for the various regulations' compliance will largely determine the opportunities to streamline compliance processes and reduce costs.

2.4.4 Data and service providers: input for the EUDR cost model

When combining the cost indications of several data providers, including anonymising indications by two companies, the following cost will be used for the input of data and service providers in the EUDR cost model, contributing 20% to the estimate for annual costs:

- Large companies: package price of € 450 per Euro million of revenue.
- SMEs: package price of € 2,389 per Euro million of revenue.

2.5 Companies' guidance

There are two companies which gave indications of the costs of some steps in creating a sustainable supply chain similar to complying with EUDR.

Barry Callebaut says it has spent more than CHF 2 million (approx. € 2.15 million), together with its partners, on GPS mapping of cocoa farmers alone. This commodity accounts for 81-90% of the company's revenue. The company says via CDP that it has 1.5 million tons of cocoa in its supply chain. The 'cost of response'[ii] for palm oil is CHF 0.7 million, and for soy, CHF 0.4 million.[27] Note that these volume data differ from Table 3 and the annual report of Barry Callebaut.

Unilever's cost of response in palm oil is € 100 million, which includes monitoring costs but also RSPO sourcing, community support, and investments to shorten the supply chain to enable procurement more directly. Unilever sources 0.78 million tons of palm oil and kernel. In soy, the costs are € 10 million (sourcing: 0.31 million tons). In cocoa, € 10 million (sourcing: 0.066 million tons). Timber € 5 million (sourcing: 1.04 million tons).[28]

Interestingly, for 2021 Unilever gave a break-down of its € 60 million costs of response in palm oil and indicated that 75% was for higher-priced RSPO-certified products, 15% for investments in smallholders, landscapes, impact programs, monitoring & technology, 5% invested in other funds &

[ii] 'Cost of response' is used by CDP and refers to the costs made by companies to raise a supply chain's transparency, traceability, and sustainability.

programs to drive a multiplicative investment in the broader industry, and 5% for investments in supply chain monitoring and new technology-based due diligence systems. This 5% is € 3 million. Unilever's sourcing of palm oil (derivatives) was 0.80 million tons.[29]

These indications are not applied in the EUDR cost model of section 2.7, but they confirm the level of costs that have been calculated for the companies in Chapter 3.

2.6 Impact of artificial intelligence and other factors on EUDR costs

Due to the entry of companies in the market which use geolocation data, artificial intelligence, and further support to enable the application to EU's relevant compliance websites, the cost estimates from the various sources (EC report, WWF UK, CRR) might have declined in the last few years.

However, as indicated by Satelligence (section 2.4.3), most of the costs are in communicating the relevant data between the data and service provider and the forest-risk commodity sourcing companies. Therefore, the model does not include a provision for efficiency improvements between 2020 and 2024, also due to a strong increase in labour costs.

2.7 Summary – input for the EUDR compliance cost model

Based on the data above, a model has been developed that will be applied to each company in this report. The following factors are key and can vary per company size and/or volume. The model contains separate lines for annual/ongoing costs and set-up costs.

The annual costs are based on five methodologies, and depend on the size of the company:

1. Costs based on the EC's ratios: 0.009% of revenues for large companies, 0.139% for SMEs (see Table 6).
2. Costs based on indications by a group of geolocation data and service suppliers: costs per support package per million Euros of revenue: € 2,389 for SMEs, € 450 for large companies.
3. Costs based on research executed by WWF UK: 0.005% for large companies, and 0.074% for SMEs.
4. Costs based on Chain Reaction Research's estimates: € 1.2 million for large companies and € 50,000 for SMEs.
5. Costs based on volume: € 30 per ton for all commodities (CRR).

Based on these five outcomes, an average per company will be calculated as well as a Low-High range.

The set-up costs will be based on the indications from WWF UK and re-calculated by Profundo, and will be applicable for small and large companies:

- 0.014% of revenues, based on EU Conflict Minerals regulation set-up costs for the High scenario, and 0.005% of revenues based on the set-up and training costs for EU NFRD compliance.

For each company investigated, 'average', 'low' and 'high' outcomes will be calculated.

Subsequently, the average outcomes will be shown as percentages of revenues, operating profit, personnel costs, wages and salaries, and remuneration of top managers for comparison. For each company, a range of the annual and set-up costs will also be provided.

Table 10 EUDR compliance cost model

	% of revenues	Package price (€)/million revenues	€ (million)	€ per ton*
Annual costs (€ million)				
EC report 2020 - Large	0.009%			
EC report 2020 - SME	0.139%			
Data and service suppliers - Large		450		
Data and service suppliers - SME		2,389		
WWF UK - Large	0.005%			
WWF UK - SME	0.074%			
CRR - Large			1.2	
CRR - SME			0.05	
CRR - All				30
Set-up costs (€ million)				
WWF UK - High	0.014%			
WWF UK - Low	0.005%			

Source: Profundo based on European Commission, WWF, CCR, and interviews; *) applied to all commodities.

3

EUDR compliance costs in absolute and relative terms

In this section, the EUDR compliance costs for the selected 12 companies, including annual costs and set-up costs, are estimated. The estimate for each company comprises an average and a low-high range. Subsequently, the average outcomes for each company have been calculated versus revenues, operating profit, net profit, personnel costs, and the remuneration of top executives for comparison.

3.1 Introduction

Chapter 1 identifies 12 selected companies, large and small, active in importing and processing forest-risk commodities. Chapter 2 has developed an EUDR compliance cost model. This chapter contains estimates of each company's compliance costs. The costs will be presented as an average, and in a low-high range.

The averages of the EUDR compliance costs are also compared to revenue, operating profit, net profit, personnel costs and remuneration of top executives. For smaller companies and some larger companies, no data on personnel costs and/or remuneration of top executives is available or could be deducted. A summary table presents the outcomes of the various companies. All data is given in Euros for comparison reasons.

3.2 Barry Callebaut (Switzerland) – importer/processor of cocoa beans

Barry Callebaut is a mid-sized company with global revenues of € 8.6 billion in 2023. Operating profit was € 672 million, and net profit available for Barry Callebaut shareholders was € 453 million. The remuneration of top executives was € 29.4 million in 2023 (see Table 11).[30]

Table 11 Barry Callebaut: financials

€ million	**2022 (August 31)**	**2023 (August 31)**
Revenues	7,856	8,644
Raw materials	6,675	7,267
Gross profit	1,182	1,377
Operating profit	537	672
Net profit	350	453
Personnel costs	748	742
of which wages/salaries*	606	610
Annual remuneration top executives		
Top executives	23.1	29.4

Source: Barry Callebaut (2023), *Annual Report 2023*.

As the company is a large operator in the EU market, the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 3.4 million, with a range of € 0.4 million to € 10.5 million. The estimate for set-up costs is € 0.8 million as an average of five methodologies, with a range of € 0.45 million to € 1.2 million. Note that the annual ongoing costs are four times higher than the set-up costs (see table below).

Table 12 Barry Callebaut: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					8,644
EU share (metric tons)					350,816
Annual costs (€ million)					
EC report 2020	0.009%				0.81
Data and service suppliers		450			3.89
WWF UK	0.005%				0.43
CRR			1.2		1.20
CRR				30	10.52
Average	***0.039%***				***3.37***
Low					0.43
High					10.52
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.83***
Low	0.005%				0.45
High	0.014%				1.21

Source: Profundo based on Table 10 and Table 11.

In relative terms, the ongoing EUDR compliance costs are 0.04% of revenues, 0.5% of operating profit, and 0.6% of net profit. The annual costs equal 0.45% of personnel costs and 11.5% of the remuneration of Barry Callebaut's top executives (see below).

Table 13 Barry Callebaut: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.04%	0.05%
Operating profit	0.12%	0.50%	0.62%
Net profit (25% tax rate)	0.14%	0.56%	0.70%
Personnel costs	0.11%	0.45%	0.57%

%	Setting-up	Ongoing	Total year-1
of which wages/salaries*	0.14%	0.55%	0.69%
Remuneration top executives	2.82%	11.47%	14.29%

Source: Profundo, preceding tables.

3.3 Touton (France) – importer/processor of cocoa beans

Touton is a smaller company than Barry Callebaut with global revenues of € 1.4 billion in 2022/23. Operating profit was € 27 million, and net profit available for Touton shareholders was € 11 million. The level of remuneration of top executives is not available. Personnel costs in 2023 were € 16 million[31] (see below).

Table 14 Touton: financials

€ million	2021/22 (per 31 March)	2022/23 (per 31 March)
Revenues	1,277	1,385
Raw materials	1,224	1,368
Gross profit	53	17
Operating profit	12	27
Net profit	4	11
Personnel costs	19	16
of which wages/salaries*	10	10
Annual remuneration top executives		
Top	NA	NA

Source: Touton (2023), *Annual Report 2022/23*.

As the company is a large operator in the EU cocoa bean market, the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 1.1 million, with a range of € 0.07 million to € 3.5 million. The estimate for set-up costs is on average € 0.13 million, with a range of € 0.07 million to € 0.19 million. Note that the annual ongoing costs are eight times higher than the set-up costs (see below).

Table 15 Touton: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					1,385
EU share (metric tons)					116,112
Annual costs (€ million)					
EC report 2020	0.009%				0.13
Data and service suppliers		450			0.62
WWF UK	0.005%				0.07

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
CRR			1.2		1.20
CRR				30	3.48
Average	***0.080%***				***1.10***
Low					0.07
High					3.48
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.13***
Low	0.005%				0.07
High	0.014%				0.19

Source: Profundo based on Table 10 and Table 14.

In relative terms, the ongoing EUDR compliance costs are 0.08% of revenues, 4.2% of operating profit, and 7.2% of net profit, much higher than for Barry Callebaut. The ongoing costs are 6.8% of personnel costs (see next table).

Table 16 Touton: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.08%	0.09%
Operating profit	0.50%	4.16%	4.66%
Net profit (25% tax rate)	0.87%	7.24%	8.12%
Personnel costs	0.82%	6.76%	7.57%
of which wages/salaries*	1.34%	11.12%	12.47%
Remuneration top executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.4 Intervlees (Belgium) – importer chilled/frozen beef (Brazil)

Intervlees is a company with revenues of € 91.4 million in 2022 (2023 data were not yet available). Operating profit was € 6.7 million, and net profit available for owners was € 4.7 million. The level of remuneration of top executives is not available. Personnel costs in 2022 were € 1.2 million.[32]

Table 17 Intervlees: financials

€ million	2021	2022
Revenues	81.5	91.4
Raw materials	71.5	82.2
Gross profit	10.0	9.2
Operating profit	7.6	6.7
Net profit	5.3	4.7

€ million	2021	2022
Personnel costs	1.3	1.2
of which wages/salaries*	NA	NA
Annual remuneration top executives		
Top	NA	NA

Source: Intervlees (2023), *Annual Report 2022*.

As the company is a relatively small operator in the EU import beef market and, although it would be officially classified as a large company given its annual turnover as most likely over € 50 million, its size is much more comparable to the SME group than to the large group in this study and the annual costs are calculated based on the input for SMEs. This results in an average estimate of EUDR compliance costs of € 109,000, with a range of € 50,000 to € 218,000. The estimate for set-up costs is on average € 9,000, with a range of € 5,000 to € 13,000. Note that the annual ongoing costs are twelve times higher than the set-up costs.

Table 18 Intervlees: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					91.4
EU share (metric tons)					2,794
Annual costs (€ million)					
EC report 2020	0.139%				0.127
Data and service suppliers		2,389			0.218
WWF UK	0.074%				0.068
CRR			0.05		0.050
CRR				30	0.084
Average	***0.120%***				***0.109***
Low					0.050
High					0.218
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.009***
Low	0.005%				0.005
High	0.014%				0.013

Source: Profundo based on Table 10 and Table 17.

In relative terms, the ongoing EUDR compliance costs are 0.12% of revenues, 1.6% of operating profit, and 1.8% of net profit. The ongoing EUDR compliance costs are estimated to be 9.0% versus personnel costs.

Table 19 Intervlees: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.010%	0.120%	0.129%
Operating profit	0.13%	1.63%	1.77%
Net profit (25% tax rate)	0.14%	1.76%	1.90%
Personnel costs	0.72%	9.03%	9.76%
of which wages/salaries*	NA	NA	NA
Remuneration top executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.5 Frostmeat (Germany) – importer of chilled/frozen beef (Brazil)

Frostmeat had revenues of € 10.6 million in FY 2022 (2023 was not yet available). Operating profit was € 5.7 million, and net profit available for owners was € 4.0 million. The level of remuneration of top executives is not available. Personnel costs in 2022 were € 1.5 million.[33]

Table 20 Frostmeat: financials

€ million	2021 (end of June)	2022 (end of June)
Revenues	6.0	10.6
Operating profit	1.8	5.7
Net profit	1.0	4.0
Personnel costs	1.1	1.5
of which wages/salaries*	0.9	1.4
Annual remuneration top executives	NA	NA

Source: Frostmeat (2023), *Annual Report FY 2022*.

As the company is a small operator in the EU import beef market, the annual costs are calculated based on the input for SMEs. This results in an average estimate of EUDR compliance costs of € 26,000, with a range of € 8,000 to € 50,000. The estimate for set-up costs is on average € 1,000, with a range of € 600 to € 1,500. Note that the annual ongoing costs are 25 times higher than the set-up costs.

Table 21 Frostmeat: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					10.6

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
EU share (metric tons)					1,035
Annual costs (€ million)					
EC report 2020	0.139%				0.015
Data and service suppliers		2,389			0.025
WWF UK	0.074%				0.008
CRR			0.05		0.050
CRR				30	0.031
Average	***0.243%***				***0.026***
Low					0.008
High					0.050
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.0010***
Low	0.005%				0.0006
High	0.014%				0.0015

Source: Profundo based on Table 10 and Table 20.

In relative terms, the ongoing EUDR compliance costs are 0.24% of revenues, 0.45% of operating profit, and 0.48% of net profit, all for 2022. The ongoing EUDR compliance costs are estimated to be 1.69% versus personnel costs.

Table 22 Frostmeat: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.010%	0.243%	0.253%
Operating profit	0.02%	0.45%	0.47%
Net profit (25% tax rate)	0.02%	0.48%	0.50%
Personnel costs	0.07%	1.69%	1.75%
of which wages/salaries*	NA	NA	NA
Remuneration top executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available

3.6 ED&F Man (United Kingdom) – coffee (bean) importer

ED&F Man had revenues of € 6.2 billion in 2022 (2023 was not yet available). Operating profit was € 158 million, and net profit available for owners was € 81 million. The level of remuneration of top executives is not available. Personnel costs in 2023 were € 162 million.[34]

Table 23 ED&F Man: financials

€ million	2021	2022
Revenues	4,664	6,225
Raw materials	4,387	5,858
Gross profit	276	368
Operating profit	117	158
Net profit	28	81
Personnel costs	140	162
of which wages/salaries*	121	142
Annual remuneration top executives		
Top	NA	NA

Source: ED&F Man, *Annual Report September 2022.*

As the company is a large operator in the EU import coffee (bean) market, the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 1.9 million, with a range of € 0.3 million to € 4.4 million. The estimate for set-up costs is on average € 0.6 million, with a range of € 0.3 million to € 0.9 million. Note that the annual ongoing costs are three times higher than the set-up costs.

Table 24 ED&F Man: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					6,225
EU share (metric tons)					146,746
Annual costs (€ million)					
EC report 2020	0.009%				0.58
Data and service suppliers		450			2.80
WWF UK	0.005%				0.31
CRR			1.2		1.20
CRR				30	4.40
Average	***0.030%***				***1.86***
Low					0.31
High					4.40
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.60***
Low	0.005%				0.32
High	0.014%				0.87

Source: Profundo based on Table 10 and Table 23.

In relative terms, the annual EUDR compliance costs are 0.03% of revenues, 1.18% of operating profit, and 1.73% of net profit, all for 2023. The annual EUDR compliance costs are estimated to be 1.15% of personnel costs.

Table 25 ED&F Man: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.03%	0.04%
Operating profit	0.38%	1.18%	1.55%
Net profit (25% tax rate)	0.55%	1.73%	2.28%
Personnel costs	0.37%	1.15%	1.52%
of which wages/salaries*	0.42%	1.31%	1.73%
Remuneration top executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.7 Melitta (Germany) – importer and roaster of coffee (beans)

Melitta had revenues of € 1.9 billion in 2021 (no data for 2022/23). Operating profit was € 70 million, and net profit available for owners was € 30 million. The level of remuneration of top executives was € 3.3 million. Personnel costs in 2021 were € 306 million.[35]

Table 26 Melitta: financials

€ million	2020	2021
Revenues	1,759	1,947
Raw materials	854	1,012
Gross profit	905	935
Operating profit	74	70
Net profit	32	30
Personnel costs	301	306
of which wages/salaries*	242	248
Annual remuneration top executives		
Top		3.3

Source: Melitta (2022), *Annual Report 2021*.

As the company is a large operator in the EU import coffee (bean) and roasting market, the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 1.3 million, with a range of € 0.1 million to € 4.1 million. The estimate for set-up costs is on average € 0.19 million, with a range of € 0.10 million to € 0.27 million. Note that the annual ongoing costs are seven times higher than the set-up costs.

Table 27 Melitta: EUDR compliance cost estimate

	% of revenues	Package price (€)/million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					1,947
EU share (metric tons)					135,660
Annual costs (€ million)					
EC report 2020	0.009%				0.18
Data and service suppliers		450			0.88
WWF UK	0.005%				0.10
CRR			1.2		1.20
CRR				30	4.07
Average	***0.066%***				***1.29***
Low					0.10
High					4.07
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.19***
Low	0.005%				0.10
High	0.014%				0.27

Source: Profundo based on Table 10 and Table 26.

In relative terms, the annual/ongoing EUDR compliance costs are 0.07% of revenues, 1.83% of operating profit, and 3.27% of net profit, all for 2021. The ongoing EUDR compliance costs are estimated to be 0.42% of personnel costs.

Table 28 Melitta: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.07%	0.08%
Operating profit	0.27%	1.83%	2.09%
Net profit (25% tax rate)	0.47%	3.27%	3.74%
Personnel costs	0.06%	0.42%	0.48%
of which wages/salaries*	0.08%	0.52%	0.59%
Remuneration top executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.8 Bunge (US) – importer of soy (Brazil)

Bunge's global revenues in 2023 were € 53.6 billion. Operating profit was € 2.8 billion, and net profit available for owners was € 2.0 billion. The level of remuneration of top executives was € 14.5 million, including € 10.8 million in bonuses.[36] Personnel costs were not available.

Table 29 Bunge: financials

€ million	2022	2023
Revenues	56,976	53,640
Raw materials	53,856	49,275
Gross profit	3,120	4,365
Operating profit	1,960	2,820
Net profit	1,364	2,021
Personnel costs	NA	NA
of which wages/salaries*	NA	NA
Annual remuneration top executives		
Top Base		3.7
Top additional		10.8
Total	NA	14.5

Source: Bunge (2024), *Annual Report 2023*.

As the company is a large operator in the EU import soy market (soy from Brazil), the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 14.6 million, with a range of € 1.2 million to € 40.0 million. The estimate for set-up costs is on average € 5.2 million, with a range of € 2.8 million to € 7.5 million. Note that the annual ongoing costs are three times higher than the set-up costs.

Table 30 Bunge: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					53,640
EU share (metric tons)					1,334,340
Annual costs (€ million)					
EC report 2020	0.009%				5.04
Data and service suppliers		450			24.12
WWF UK	0.005%				2.68
CRR			1.2		1.20
CRR				30	40.03
Average	***0.027%***				***14.62***
Low					1.20
High					40.03
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***5.15***
Low	0.005%				2.78

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
High	0.014%				7.51

Source: Profundo based on Table 10 and Table 29.

In relative terms, the ongoing EUDR compliance costs are 0.03% of global revenues, 0.52% of operating profit, and 0.54% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 101% versus the top management remuneration.

Table 31 Bunge: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.03%	0.04%
Operating profit	0.18%	0.52%	0.70%
Net profit (25% tax rate)	0.19%	0.54%	0.73%
Personnel costs	NA	NA	NA
of which wages/salaries*	NA	NA	NA
Remuneration top executives	35.56%	101.03%	136.60%

Source: Profundo, preceding tables; NA = Not available.

3.9 Amaggi Europe/Amaggi (US) – importer of soy (Brazil)

Amaggi Europe, a subsidiary of Amaggi (Brazil), is a large operator with € 693 million in revenues in 2022.[37] This was 7.9% of Amaggi's global revenues in 2022. In 2023, Amaggi realized € 8.3 billion in revenues globally.[38]

Global operating profit was € 453 million in 2023 and € 503 million in 2022. Amaggi Europe had a negative operating result of € 3.5 million in 2022. The operating margin (operating profit divided by revenues) in 2022 was 5.8% on the global level versus -0.5% in Europe. This might be due to tax optimisation, and therefore, the analysis is now focused on global numbers. Global net profit available for Amaggi owners was € 314 million in 2023.

The level of remuneration of top executives was not given on a global scale. In Europe, the director earned € 0.4 million and personnel costs were € 1.2 million for 9 FTEs (2022).

Table 32 Amaggi: financials

€ million	2022	2023
Revenues	8,721	8,293
Raw materials	8,197	7,686
Gross profit	523.7	606.3
Operating profit	502.6	453.3
Net profit	329.7	313.7
Personnel costs (9FTEs)	1.6	1.2
of which wages/salaries*	1.3	1.0
Annual remuneration top executives		

€ million	2022	2023
Top Base	0.5	0.4
Top additional	0.0	0.0
Total	0.5	0.4

Source: Amaggi Participações (2024), *Annual Report 2023*; personnel costs and remuneration are for Amaggi Europe.

As the company is a large operator in the EU market for soy imports (soy from Brazil), the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 3.3 million, with a range of € 0.4 million to € 10.1 million. The estimate for set-up costs is on average € 0.8 million, with a range of € 0.4 million to € 1.2 million. Note that the annual ongoing costs are four times higher than the set-up costs.

Table 33 Amaggi: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					8,293
EU share (metric tons)					337,700
Annual costs (€ million)					
EC report 2020	0.009%				0.78
Data and service suppliers		450			3.73
WWF UK	0.005%				0.41
CRR			1.2		1.20
CRR				30	10.13
Average	***0.039%***				***3.25***
Low					0.41
High					10.13
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.80***
Low	0.005%				0.43
High	0.014%				1.16

Source: Profundo based on Table 10 and Table 32.

In relative terms, the ongoing EUDR compliance costs are 0.04% of global revenues, 0.72% of operating profit, and 0.78% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 822% versus the top management remuneration of the European organisation.

Table 34 Amaggi: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			

%	Setting-up	Ongoing	Total year-1
Revenues	0.01%	0.03%	0.05%
Operating profit	0.18%	0.72%	0.89%
Net profit (25% tax rate)	0.19%	0.78%	0.97%
Personnel costs	63.85%	260.98%	324.84%
of which wages/salaries*	77.58%	317.06%	394.64%
Remuneration top executives	201.00%	821.51%	1022.51%

Source: Profundo, preceding tables; NA = Not available.

3.10 AAK (Denmark) – importer of palm oil

AAK is a large operator with global revenues of € 4.0 billion in 2023. Operating profit was € 359 million, and net profit available for shareholders was € 257 million. The level of remuneration of top executives was € 3.6 million, and total management € 15.2 million. Personnel costs were € 297 million in 2023.[39]

Table 35 AAK: financials

€ million	2022	2023
Revenues	4,758	4,040
Raw materials	3,742	2,919
Gross profit	1,016	1,121
Operating profit	239	359
Net profit	167	257
Personnel costs	278	297
of which wages/salaries*	229	247
Annual remuneration of top executives		
Sweden top	4.9	3.6
Sweden, rest	0.5	0.5
Other	10.5	11.1
Total	15.9	15.2

Source: AAK (2024), *Annual Report 2023*.

As the company is a large operator in the EU import palm oil market, the annual costs are calculated based on the input for ‘large’ companies. This results in an average estimate of EUDR compliance costs of € 2.8 million, with a range of € 0.2 million to € 10.5 million. The estimate for set-up costs is on average € 0.4 million, with a range of € 0.21 million to € 0.57 million. Note that the annual ongoing costs are seven times higher than the set-up costs.

Table 36 AAK: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					4,040
EU share (metric tons)					350,816
Annual costs (€ million)					
EC report 2020	0.009%				0.38
Data and service suppliers		450			1.82
WWF UK	0.005%				0.20
CRR			1.2		1.20
CRR				30	10.52
Average	***0.070%***				***2.82***
Low					0.20
High					10.52
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.39***
Low	0.005%				0.21
High	0.014%				0.57

Source: Profundo based on Table 10 and Table 35.

In relative terms, the ongoing EUDR compliance costs are 0.07% of global revenues, 0.79% of operating profit, and 0.82% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 18.56% versus the top management remuneration of the European organisation.

Table 37 AAK: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.07%	0.08%
Operating profit	0.11%	0.79%	0.89%
Net profit (25% tax rate)	0.11%	0.82%	0.94%
Personnel costs	0.13%	0.95%	1.08%
of which wages/salaries	0.16%	1.14%	1.30%
Remuneration of executives*	2.55%	18.56%	21.10%

Source: Profundo, preceding tables; NA = Not available; *) all executives.

3.11 Olenex (Netherlands) – importer of palm oil

Olenex is a joint venture of ADM and Wilmar, operating in Europe, with revenues of € 3.2 billion in 2023. Operating profit was € 114 million, and net profit available for shareholders was € 83 million. The level of remuneration of top executives was € 4.4 million. Personnel costs were € 37 million in 2023.[40]

Table 38 Olenex: financials

€ million	2022	2023
Revenues	3,946	3,223
Raw materials	3,835	2,884
Gross profit	111	339
Operating profit	44	114
Net profit	35	83
Personnel costs	38	37
of which wages/salaries	30	29
Annual remuneration of top executives		
Top	1.0	1.2
Key management	2.1	2.0
Board of Directors	1.0	1.2
Total	4.1	4.4

Source: Olenex (2024), *Annual Report 2023*.

As Olenex is a large operator in the EU import palm oil market, the annual costs are calculated based on the input for 'large' companies. This results in an average estimate of EUDR compliance costs of € 4.6 million, with a range of € 0.2 million to € 19.8 million. The estimate for set-up costs is on average € 0.31 million, with a range of € 0.17 million to € 0.45 million. Note that the annual ongoing costs are 15 times higher than the set-up costs.

Table 39 Olenex: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					3,223
EU share (metric tons)					658,978
Annual costs (€ million)					
EC report 2020	0.009%				0.30
Data and service suppliers		450			1.45
WWF UK	0.005%				0.16
CRR			1.2		1.20
CRR				30	19.77
Average	***0.142%***				***4.58***

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Low					0.16
High					19.77
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.31***
Low	0.005%				0.17
High	0.014%				0.45

Source: Profundo based on Table 10 and Table 38.

In relative terms, the ongoing EUDR compliance costs are 0.14% of revenues, 4.01% of operating profit, and 4.12% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 104% versus the top management remuneration of the European (Olenex) organisation. As Olenex is a joint venture of Wilmar and ADM, comparing the EUDR compliance costs with the joint revenues and profits of these two companies would lead to much lower percentages.

Table 40 Olenex: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.14%	0.15%
Operating profit	0.27%	4.01%	4.28%
Net profit (25% tax rate)	0.28%	4.12%	4.40%
Personnel costs	0.84%	12.46%	13.30%
of which wages/salaries	1.07%	15.91%	16.99%
Remuneration of executives*	7.03%	104.02%	111.04%

Source: Profundo, preceding tables; NA = Not available; 8) all executives.

3.12 Ad Hulst (Netherlands) – importer and processor of leather hides (Brazil)

Ad Hulst does not provide revenue numbers, only a gross profit number. Based on the ratios of Lear Corp (see next section), Profundo estimated Ad Hulst's revenues at € 5.5 million in 2023. Operating profit was € 1.1 million, and net profit available for shareholders was € 0.9 million. The level of remuneration of top executives is not available. Wages/salaries were € 0.57 million in 2023.[41]

Table 41 Ad Hulst: financials

€ million	2022	2023
Revenues	4.18	5.53
Raw materials	2.21	2.93
Gross profit	1.97	2.60
Operating profit	0.53	1.09
Net profit	0.35	0.93

€ million	2022	2023
Personnel costs		
of which wages/salaries	0.45	0.57
Annual remuneration of top executives		
Top	NA	NA
Key management	NA	NA
Board of Directors	NA	NA
Total	NA	NA

Source: Ad Hulst (2024), *Annual Report 2023;* Recalculation revenues based on Lear Corp/Table 44.

As the company is a small operator in the EU import market of leather from Brazil, the annual costs are calculated based on the input for SMEs. This results in an average estimate of EUDR compliance costs of € 17,000, with a range of € 4,000 to € 50,000. The estimate for set-up costs is on average € 500, with a range of € 300 to € 800. Note that the annual ongoing costs are 33 times higher than the set-up costs.

Table 42 Ad Hulst: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					5.53
EU share (metric tons)					407
Annual costs (€ million)					
EC report 2020	0.139%				0.008
Data and service suppliers		2,389			0.013
WWF UK	0.074%				0.004
CRR			0.05		0.050
CRR				30	0.012
Average	***0.315%***				***0.017***
Low					0.004
High					0.050
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.0005***
Low	0.005%				0.0003
High	0.014%				0.0008

Source: Profundo based on Table 10 and Table 41.

In relative terms, the ongoing EUDR compliance costs are 0.32% of global revenues, 1.59% of operating profit, and 1.41% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 3.1% versus the wages.

Table 43 Ad Hulst: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.01%	0.32%	0.32%
Operating profit	0.05%	1.59%	1.64%
Net profit (25% tax rate)	0.04%	1.41%	1.45%
Personnel costs	NA	NA	NA
of which wages/salaries	0.09%	3.06%	3.15%
Remuneration of executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.13 Eagle Ottawa Hungary/Lear Corp (US) – importer/processor of leather hides (Brazil)

Eagle Ottawa has been acquired by Lear Corp in 2015. Looking at volumes, the company is a small operator in the EU. There are no financial company data on the EU or Europe separately, so it is logical to use Lear Corp data. Lear Corp's revenues were € 21.1 billion in 2023. Operating profit was € 700 million, and net profit available for shareholders was € 516 million. The level of remuneration of top executives is not available. This report has estimated the personnel costs based on the number of employees and, on average, US$ 50,000 total costs per employee.[42]

Table 44 Lear Corp: financials

€ million	2022	2023
Revenues	17,705	21,141
Raw materials	9,362	11,195
Gross profit	8,343	9,946
Operating profit	431	700
Net profit	278	516
Personnel costs	7,148	8,405
of which wages/salaries*	NA	NA
Annual remuneration of top executives		
Top	NA	NA

Source: Lear Corp (2024), *Annual Report 2023*.

The company is a small operator in the EU import market of leather from Brazil, while it is part of a large global company. The 1,661 tons of imported hides in the EU, could represent a value of € 2 million. If processing is included, this EU activity is a company slightly larger than the numbers given in Table 41 for Ad Hulst. Therefore, we adjusted the revenue number for the EU to a number in line with Ad Hulst (based on tons of hides).

As a consequence, the annual EUDR compliance costs are calculated based on the input for SMEs. This results in an average estimate of EUDR compliance costs of € 40,000, with a range of € 20,000 to € 50,000. The estimate for set-up costs is on average € 2,000, with a range of € 1,000 to € 3,000. Note that the annual ongoing costs are 19 times higher than the set-up costs.

Table 45 Eagle Ottawa/Lear Corp: EUDR compliance cost estimate

	% of revenues	Package price (€)/€ million revenues	€ million	€ per ton	Outcome
Input					
Revenues (€ million)					21.141
Revenues (€ million) adjusted to EU*					22.6
EU share (metric tons)					1,661
Annual costs (€ million)					
EC report 2020	0.139%				0.03
Data and service suppliers		2,389			0.05
WWF UK	0.074%				0.02
CRR			0.05		0.05
CRR				30	0.05
Average	***0.179%***				***0.04***
Low					0.02
High					0.05
Set-up costs (€ million)					
Average, based on WWF UK	***0.010%***				***0.002***
Low	0.005%				0.001
High	0.014%				0.003

Source: Profundo based on Table 10; *) revenues in EU adjusted from global Lear Corp to EU import/processing activity based on tons of hides and related to Ad Verhulst financials in Table 41.

In relative terms, the ongoing EUDR compliance costs are 0.00% (or negligible) of the global revenues of Lear Corp, 0.01% of global operating profit, and 0.01% of net profit, all for 2023. The ongoing EUDR compliance costs are estimated to be 0.00% versus the wages.

Table 46 Lear Corp: EUDR compliance average costs in relative context

%	Setting-up	Ongoing	Total year-1
Average costs as % of:			
Revenues	0.00%	0.00%	0.00%
Operating profit	0.00%	0.01%	0.01%
Net profit (25% tax rate)	0.00%	0.01%	0.01%
Personnel costs	0.00%	0.00%	0.00%

%	Setting-up	Ongoing	Total year-1
of which wages/salaries	NA	NA	NA
Remuneration of executives	NA	NA	NA

Source: Profundo, preceding tables; NA = Not available.

3.14 Summary

The most important outcomes for the 12 companies are as follows:

- Estimated EUDR compliance costs are equal to 0.1% of revenues, 1.45% of operating profit, 1.89% of net profit, and 4.33% of employee costs. The costs are equal to 58.77% of the remuneration of top management.
- The EUDR compliance costs for SMEs are nearly three times higher as a percentage of revenues versus large companies. As a percentage of profits and employee costs, the differences are smaller.

Table 47 Summary: EUDR compliance average costs in relative context

%	Company size*	Category	Revenues	Operating profit	Net profit	Personnel costs	Top remuneration
Large							
AAK	Large	Palm oil	0.07%	0.79%	0.82%	0.95%	18.56%
Amaggi (Brazil)	Large	Soy	0.04%	0.72%	0.78%	260.98%	821.51%
Barry Callebaut (CH)	Large	Cocoa	0.04%	0.50%	0.56%	0.45%	11.47%
Bunge (US)	Large	Soy	0.03%	0.52%	0.54%	NA	101.03%
ED&F Man (UK)	Large	Coffee	0.03%	1.18%	1.73%	1.15%	NA
Melitta (DE)	Large	Coffee	0.07%	1.83%	3.27%	0.42%	NA
Olenex (NL)	Large	Palm oil	0.14%	4.01%	4.12%	12.46%	104.02%
Touton (FR)	Large	Cocoa	0.08%	4.16%	7.24%	6.76%	NA
Average Large		All	0.06%	1.71%	2.38%	3.70%	58.77%
SME							
Ad Hulst (NL)	SME	Leather	0.32%	1.59%	1.41%	3.06%	NA
Frostmeat (DE)	SME	Beef	0.24%	0.45%	0.48%	9.03%	NA
Intervlees (BE)	SME*	Beef	0.12%	1.63%	1.76%	9.03%	NA
Lear Corp (US)	SME*	Leather	0.00%	0.01%	0.01%	0.00%	NA
Average SME		All	0.17%	0.92%	0.91%	5.28%	NA
Average total			0.10%	1.45%	1.89%	4.33%	58.77%
SME divided by Large (x)			2.75	0.54	0.38	1.43	NA

Source: preceding tables; *) The division is between companies with large volumes (large) and small/medium volumes. Lear Corp is a large company in turnover, but its activities in the EU are small. Details of its EU operating company, Eagle Ottowa, are not known but are assumed to be less than € 50 million based on leather import volumes. Based on revenues, Intervlees could be considered a large company with annual EU turnover of more than € 50 million, but it is classified as an SME for this report as its size is much more comparable to the SME group than to the large group.

4

Impact on downstream pricing

This section analyses how the EUDR compliance costs in each sector could impact downstream prices, which are the prices that consumers pay for the end product.

4.1 Introduction

Companies add value to a commodity at each step of the supply chain. Based on methodologies developed by Profundo, peer-reviewed, and applied in many reports, the pricing-up of every commodity that enters the EU can be calculated.

4.2 Pricing-up

On average, the pricing up of a group of commodities researched by Profundo was from an index of 100 at the farmer level to an index of 302 at the retailer level. For example, a relatively strong pricing-up exists for sugarcane, which is due to the very high gross margins earned by large sourcing companies like Coca-Cola which have strong brand positions. Sugarcane is not included in the EUDR compliance cost analysis but confirms the pricing-up mechanism.

Table 48 Pricing-up in supply chains

	Soy	Beef	Leather	Palm	Coffee	Cocoa	Sugar-cane	Average
Producer	100	100	100	100	100	100	100	100
Processor		123	123					123
Exporter					115			115
Traders	111			114	123	119	117	117
Importer	111	264	233					203
FMCG	181			160	212	207	318	215
Retail/wholesale	302	337	332	194	277	270	398	302

Source: Profundo. The input for this table for soy, beef, palm and sugarcane is derived from various public reports available on the Profundo website and/or websites from organisations that commissioned the research. The coffee and cocoa data is recently developed for this report.

4.3 Impact of EUDR compliance costs on end or retail price

To estimate the impact on downstream prices of end products from EUDR compliance costs, two steps are crucial:

- The pricing-up from the point in the supply chain occupied by each of the 12 investigated companies (which will be subject to EUDR compliance obligations and associated costs) to the retail level. As EUDR compliance costs are added to the input costs of an operator and a pricing-up takes place from traders/importers to retail, it is the pricing-up indices from the trader level that are relevant (e.g. for palm oil, the step from 114 to 194).

- When the EUDR commodities are embedded into other products (like palm oil in peanut butter, or soy in cow milk), the composition of the most relevant consumer products (i.e. the 'whole' products) should be analysed to reflect the proportion of the relevant commodity embedded in the final product (as EUDR compliance costs will only affect the EUDR commodity inputs in the final product and not the cost of sourcing / producing all other components of the final product).

The first step leads to the adjusted pricing-up indices in Table 49, which is based on Table 48 and re-calculates the various smaller pricing-up steps into one step. Important to note is that, depending on the commodity supply chain, the relevant EU company will be pricing-up the commodity from different levels in the supply chain. For coffee, the EUDR-adjusted pricing-up is applied to the coffee sourced from the exporter; for beef and leather, the EUDR-adjusted pricing-up is applied to the beef/leather sourced from the slaughterhouse (the 'processor' in Table 48); for palm, traders/refineries have local positions in the EU and the EUDR-adjusted pricing-up is applied to that level, who sell the products directly to FMCGs as well as to oleochemical companies; for soy, the global traders both export and import the commodity into the EU, and cocoa, the EUDR-adjusted pricing-up is applied to traders which are also processors of beans at the same time.

Table 49 Adjusted pricing-up indices for EUDR compliance cost impact assessment

Index	Cocoa	Beef	Coffee	Soy	Palm	Leather
Pricing-up from EU supplier (X)…	100	123	115	100	114	123
….to retailer/wholesale	270	337	277	302	194	332
Adjusted pricing-up index (relative to X)	2.70	2.74	2.41	2.72	1.70	2.70

Source: Profundo based on Table 48.

This relevant pricing-up factor is factor B. Then, C indicates how much the retail price would be affected by EUDR compliance costs if the products were complete end products bought by consumers. However, the leather in a car is less than 1% of the end price of the 'whole' product; soybeans are only a small part of the cow milk on the shelf. Thus, a variable factor D is needed to reflect the estimated proportion of the EUDR commodity embedded in the end product.[iii] Using this approach, the impact of annual EUDR compliance costs on consumer product prices can be reflected more accurately. For example, EUDR-adjusted pricing-up of soybeans would be between 0.001% on the end-product price for European consumers of cow milk and 0.066% in the case of imported beef.

[iii] Based on approximates; cocoa: average percentage of cocoa and derived ingredients (cocoa butter, paste) in chocolate products; coffee: accounting for other ingredients in prepared products (milk, sugar); soy: conservative estimate across key animal products (lower share for dairy, higher share for meat products) as well as vegetable oil use; palm oil: conservative estimate across different consumer products (food, cosmetics).

Table 50 Impact on end product price in retail for ‘whole’* product

	Factor**	Cocoa	Beef	Coffee	Soy	Palm Oil	Leather
EUDR CC as % of revenues	A	0.06%	0.18%	0.05%	0.03%	0.11%	0.16%
Adjusted pricing-up index	B	2.70	2.74	2.41	2.72	1.70	2.70
Impact on retail price	C = A/B	0.02%	0.07%	0.02%	0.01%	0.06%	0.06%
Embedded proportion***	D	30%	100%	90%	10%	10%	5%
Impact on retail price of 'whole' product	E = C x D	0.007%	0.066%	0.018%	0.001%	0.006%	0.003%

Source: Profundo; *) ‘whole’ product is the final consumer product in which the raw material is processed; **) A is the average of the companies in specific commodities in Table 47, the revenue column; B is based on Table 49; ***) an estimated percentage of the whole product consisting of the raw material (D). As the various commodities are used for many products, it would need in-depth research to calculate a precise % for each commodity. The current estimates are based on various supply chain studies that can be found on www.profundo.nl or www.chainreactionresearch.com and include milk, cheese, eggs, meat, leather, detergents and personal care products (palm oil). Coffee and cocoa are based on average estimates of food and beverage products (i.e., foods containing chocolate and beverages containing coffee) but would benefit from further investigation given the variety of foods and beverages containing chocolate and coffee respectively and fluctuations in corresponding consumer prices. See further footnote iv on page 39.

Based on this analysis, the potential impacts on retail prices for final consumers of products containing EUDR commodities as a result of EUDR compliance costs are a negligible fraction of retail prices: 0.007% for chocolate, 0.066% for beef, 0.018% for coffee, 0.001% for soy-fed cow milk, 0.006% for detergents and personal care products containing palm oil, and 0.003% for leather products.

References

1 European Council (2024, December 3), "EU deforestation law: Council and Parliament agree on its targeted amendement", Press release, online: https://www.consilium.europa.eu/en/press/press-releases/2024/12/03/eu-deforestation-law-council-and-parliament-agree-on-its-targeted-amendment/, viewed in December 2024;

Regulation (EU) 2024/3234 of the European Parliament and of the Council of 19 December 2024 amending Regulation (EU) 2023/1115 as regards provisions relating to the date of application, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202403234.

2 Barry Callebaut (2023), Annual Report 2022/23, pp. 4, 11;

ICCO (2024, September), Grindings of Cocoa Beans.

3 Fountain, A. and F. Huetz-Adams (2022), Cocoa Barometer 2022, VOICE, p. 79;

ICCO (2024, September), Grindings of Cocoa Beans.

4 ED&F Man (2023), Annual Report and Financial Statements for the year ended 30 September 2022, p. 10;

ICO (2023, December), Coffee Report and Outlook, p. 30.

5 Melitta Group Management (2022), Konzernabschluss zum Geschäftsjahr vom 01.01.2021 bis zum 31.12.2021.

6 Panjiva (2024), Shipment data Brazil.

7 Panjiva (2024), Shipment data Brazil.

8 AAK (2024), Sustainability Report 2023, p. 21;

AAK (2024), Annual Report 2023, p. 13.

9 Olenex Holdings (2024), RSPO Annual Communication of Progress 2023.

10 Panjiva (2024), Shipment data Brazil.

11 Panjiva (2024), Shipment data Brazil.

12 Panjiva (2024), Shipment data Brazil.

13 Panjiva (2024), Shipment data Brazil.

14 RSM (2024, 26 March), "CSRD, CSDDD and EUDR connecting the dots", online: https://www.rsm.global/netherlands/en/insights/csrd-csddd-and-eudr-connecting-dots, viewed September 2024.

15 European Commission (n.d.), "Deforestation Regulation implementation. Scope", online: https://green-business.ec.europa.eu/deforestation-regulation-implementation/scope_en, viewed September 2024.

16 European Union (2023), "Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance)", online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1115&qid=1687867231461, viewed September 2024.

17 European Commission (n.d.), "Corporate sustainability due diligence", online: https://commission.europa.eu/business-economy-euro/doing-business-eu/sustainability-due-diligence-responsible-business/corporate-sustainability-due-diligence_en#which-companies-will-the-new-eu-rules-apply-to, viewed September 2024.

18 European Commission (2024, 2 October), "ANNEX to the Communication to the Commission, Approval of the content of a draft Commission Notice on the Guidance Document for Regulation (EU) 2023/1115 on Deforestation-Free Products", online: https://green-business.ec.europa.eu/document/download/162138c8-7c22-4bb5-98ce-fd31c81d6936_en?filename=C_2024_7027_1_EN_Guidance%20on%20EU%20Deforestation%20Regulation%20.pdf, viewed October 2024.

19 Bambridge-Sutton, B. (2024, 7 October), "EUDR: inside the guidance", online: https://www.foodnavigator.com/Article/2024/10/07/eudr-inside-the-guidance, viewed October 2024.

20 British Institute of International and Comparative Law (BIICL), CIVIC Consulting, London School of Economics and Political Science (LSE) (2020, January), Study on Due Diligence Requirements Through the Supply Chain, Brussels,

Belgium: European Commission.

21 British Institute of International and Comparative Law (BIICL), CIVIC Consulting, London School of Economics and Political Science (LSE) (2020, January), Study on Due Diligence Requirements Through the Supply Chain – Part IV: Annexures, Brussels, Belgium: European Commission.

22 WWF (2022), Designing Due Diligence.

23 Rijk, G., C. Wiggs, M. Piotrowski (2020, 2 July), FMCGs' Lagging Efforts in NDPE Execution Lead to Deforestation, USD 16-82B Reputation Risk, Washington DC, US: Chain Reaction Research.

24 Rijk, G., C. Wiggs, M. Piotrowski (2020, 2 July), FMCGs' Lagging Efforts in NDPE Execution Lead to Deforestation, USD 16-82B Reputation Risk, Washington DC, US: Chain Reaction Research.

25 Satelligence, website, online: https://satelligence.com/eudr/, viewed September 2024.

26 Ballegeer, D. (2024, 3 October), "Satelligence ziet vanuit de ruimte het verschil tussen koffieplanten en bomen", FD, online: https://fd.nl/economie/1532650/satelligence-ziet-vanuit-de-ruimte-het-verschil-tussen-koffieplanten-en-bomen#:~:text=Satelligence%20ziet%20vanuit%20de%20ruimte%20het%20verschil%20tussen, viewed October 2024.

27 CDP (n.d.), "Barry Callebaut - Forests 2023", online: https://www.cdp.net/en/responses?queries%5Bname%5D=barry+call, viewed September 2024.

28 CDP (n.d.), "Unilever - Forests 2023", online: https://www.cdp.net/en/formatted_responses/responses?campaign_id=83631038&discloser_id=1029489&locale=en&organization_name=Unilever+plc&organization_number=19829&program=Forest&project_year=2023&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2023%2Fcwccch19%2F294349&survey_id=82591738, viewed September 2024.

29 CDP (n.d.), "Unilever - Forests 2021", online: https://www.cdp.net/en/formatted_responses/responses?campaign_id=74241109&discloser_id=898194&locale=en&organization_name=Unilever+plc&organization_number=19829&program=Forest&project_year=2021&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2021%2Fcw926qgj%2F137088&survey_id=74712238, viewed September 2024.

30 Barry Callebaut, Annual Report 2022/23.

31 Toton S.A., Etats Financiers; Au 31 mars 2023 ; Période d'exploitation ; Du 1er avril 2022 au 31 Mars 2023.

32 Intervlees, Jaarrekening 2022.

33 Frostmeat, Annual financial statement as of June 30, 2022.

34 ED&F MAN, Annual Report and Financial Statements for the year ended 30 September 2022.

35 Melitta Group, Konzernabschluss zum Geschäftsjahr vom 01.01.2021 bis zum 31.12.2021.

36 Bunge, 2023 Annual Report.

37 Amaggi Europe B.V., Annual report for the year ended 31 December 2022.

38 Publicidada Legal Digital On Line, André Maggi Participacoes S.A., Demonstracoes financeiras em 31 de dezembro 2023 e 2022.

39 AAK, Annual report 2023.

40 Olenex Holdings B.V., Annual Report 2023.

41 Ad Hulst B.V., Publicatiestukken 2023 Ad Hulst B.V.

42 Lear Corporation, Form 10-K, annual report for the fiscal year ended December 31, 2023.

Profundo
Research & advice

Radarweg 505
1043 NZ Amsterdam
The Netherlands
+31-20-8208320
profundo@profundo.nl
www.profundo.nl