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COMMISSION STAFF WORKING DOCUMENT
Accompanying the document

COMMISSION DELEGATED REGULATION (EU) …/...

amending Regulation (EU) 2023/1115 of the European Parliament and of the Council as regards the list of relevant commodities and relevant products

1. INTRODUCTION

Regulation (EU) 2023/1115[1] on deforestation-free products (hereafter EUDR) establishes rules for making available on the Union market and export certain commodities and derived products associated with deforestation and forest degradation. The goal of the EUDR is to minimise the EU's contribution to global deforestation, greenhouse gas emissions and global biodiversity loss, in accordance with the EU's international obligations.

Art. 2(1) of EUDR defines relevant commodities as cattle, cocoa, coffee, oil palm, rubber, soya and wood. Art 2(2) of EUDR defines relevant products as products listed in Annex I of the same Regulation that contain, have been fed with or have been made using relevant commodities. The products listed in Annex I are identified through codes from the customs combined nomenclature ('Harmonised System' or HS codes).

The impact assessment for the EUDR did not provide a detailed assessment of the relevant products based on HS codes. The related Staff Working Document (SWD) also states that: *"the identification of derived products to be specified in the scope requires a specific study […] and subsequent implementing legislation*". This specific study needs to present: *"an analysis of derived products, based on potential costs and benefits, similar to the analysis of commodities. The analysis would need to map which products would maximise the impact of the intervention - covering more ground in terms of embodied deforestation - at the smallest potential cost".*

Art. 34(1) of the EUDR, as amended by Regulation (EU) 2025/2650[2], enables the Commission to adopt delegated acts in accordance with Art. 35 to amend the list of relevant products in Annex I of that Regulation (not the commodities).

In April 2025, the Commission published for a 4-week public feedback a draft delegated act which did not alter the product scope of EUDR but introduced simplifications and technical fixes for specific use-cases and products categories. These proposed changes presented in the 2025 draft delegated act gained broad consensus from stakeholders during the public feedback period. The feedback period was also used by 40% of respondents, mainly businesses and business associations, to recommend the inclusion or removal of certain derived products from Annex I.

This Staff Working Document now presents a comprehensive assessment, consisting of a quantitative as well as a qualitative component, building among others on stakeholders' feedback concerning the EUDR product scope. The assessment evaluates the 31 product codes, and thereby all codes suggested by stakeholders, for inclusion in or exclusion from EUDR Annex I, based on input received until February 2026. The Commission services have received many contributions from industry associations, individual companies, NGOs and third country authorities, and have endeavoured to take these into account to the largest extent possible.

Although the EUDR applies to all relevant products placed on the EU market, the focus on embedded deforestation in imports for the purpose of this analysis is justified from an

[1] OJ L 150, 9.6.2023, p. 35. ELI: http://data.europa.eu/eli/reg/2023/1115/oj
[2] OJ L, 2025/2650, 23.12.2025. ELI: http://data.europa.eu/eli/reg/2025/2650/oj

environmental perspective. The environmental benefits of the EUDR derive from preventing deforestation where it occurs. FAO's Global Forest Resources Assessment 2025 shows that most deforestation takes place outside of the EU.

The conclusions and findings of this SWD underpin a new draft Delegated Act which contains additional changes to the EUDR product scope in addition to the simplifications and technical fixes presented already for public feedback in April 2025.

2. METHODOLOGY

This chapter outlines the methodology used to assess products for potential inclusion/exclusion within the scope of the EUDR. In line with the task of the original Impact Assessment, which said that: '*it was not possible […] to perform the necessary analysis to map and list the products derived from the relevant commodities that should be included in scope'*, a new and more robust methodology has been developed.

Compared to the original impact assessment, the methodology has been updated and strengthened to reflect developments in global deforestation and trade patterns, the availability of more granular data and improved analytical tools, as well as the current scope of the EUDR following the extension of product coverage through the 2022 legislative process.

The revised approach addresses a number of limitations identified in the original Impact Assessment. In particular, it allows for a more granular assessment of costs and benefits at HS custom code level, it extends the analysis beyond CO_2 emissions to include quantified impacts on biodiversity and ecosystem services based on established scientific literature, and it draws on more recent and methodologically refined estimates of embedded deforestation. It also no longer relies on an effectiveness reduction factor derived from the EU Timber Regulation, instead applying an analytical framework that reflects the full range of environmental effects associated with the new policy intervention. The new methodological framework and assessment consist of two complementary components. First, a quantitative assessment evaluates measurable factors such as the embedded deforestation footprint in derived products placed on the EU market, the environmental benefits of including a derived product in the scope of the EUDR, and the recurring compliance costs for operators placing the derived products in scope on the market. Second, a qualitative assessment considering additional factors which is to be taken into account alongside the quantitative assessment. Both components inform the proposed draft act, ensuring a balanced approach that integrates numerical evidence with considerations that cannot be fully captured through quantitative analysis alone.

In line with the original impact assessment of the EUDR, the methodology examines recurrent environmental benefits and compliance costs derived from the activities of operators importing the relevant goods into the EU market. The figures on benefits and costs for the HS codes analysed would be broadly similar if domestic operators, downstream operators, traders and had been included in the calculations.

The conclusion of the analysis and the proposed changes to the scope via the draft Delegated Act apply in an even-handed and non-discriminatory manner to all relevant products regardless of whether they are produced inside or outside of the EU.

2.1 QUANTITATIVE ASSESSMENT

The quantitative assessment evaluates products in a structured, data-driven approach. This chapter first presents the key variables and then introduces a stepwise logic, which screens products for inclusion or exclusion based on a combination of environmental and economic criteria.

2.1.1 Key variables and data sources

The key computed variables used in the quantitative assessment are the deforestation footprint, environmental benefits, and recurring compliance costs, all of which are calculated at the level of the individual HS codes analysed. A short description is provided below, while further details on the quantitative assessment, calculations, and data sources can be found in the Annex to this document.

The deforestation footprint represents the estimated area of land converted from forest to agricultural use for the production of the relevant product corresponding to the HS code. The emissions footprint reflects the net difference in carbon stocks associated with this land-use change. The deforestation footprint and associated emissions linked to derived products are estimated using a range of literature sources. First, country-level estimates of total deforestation and emissions associated with the production of the seven commodities in scope of the EUDR are obtained from the DeDuCE database based on the work of Singh and Persson (2026)[3]. Using production data from FAOSTAT, the deforestation- and emission intensity is calculated for each country–commodity combination, defined as the ratio of deforestation or emissions to national production of that commodity.

The estimated embedded deforestation and emissions associated with the placement on the market of derived products by operators is then calculated by multiplying the deforestation or emission intensity by the volume of the derived product placed on the EU market (COMEXT), and by the mass fraction of the primary commodity contained within the final product. Due to data availability constraints, the embedded deforestation and emissions in product are computed over the period 2015–2020[4].

The estimated environmental benefits B_p are quantified based on the estimated deforestation and emissions footprints associated with the placing on the market of goods covered under the EUDR. Limited by the availability of authoritative data sources, the quantitative assessment

[3] Singh, C., & Persson, U. M. (2026). Global patterns of commodity-driven deforestation and associated carbon emissions. Nature Food, 7(2), 138-151.

[4] The DeDuCE dataset, which provides estimates of deforestation by country and commodity, is only available up to 2022. However, the model exhibits limitations for the years 2021–2022, making it difficult to accurately assess recent trends in the deforestation impact of derived products. In particular, delays in national reporting of agricultural land-use and harvested area data, which serve as inputs to the DeDuCE model, may distort deforestation signals.

does not capture the environmental benefits of a reduction in forest degradation. As a result, the potential environmental benefits of keeping/including wood products in the scope would be systematically underestimated. The assessment does capture the environmental benefits of a reduction of deforestation, and the emissions associated with the land cover or land use change. The deforestation and emission indicators are monetized separately and subsequently aggregated to estimate total environmental benefits. Deforestation impacts are valued using an ecosystem services approach and emissions are valued using a carbon price. An ecosystem services value[5], of €10,000 per hectare per year is adopted from Brander et al. (2024)[6] as a representative value for tropical, subtropical and temperature forests, while a carbon price of €100 per ton of CO_2 is adopted in line with the initial impact assessment[7].

Recurring compliance costs include, in line with the definition in the initial impact assessment, the costs of employees dedicated for the task, maintenance of systems, and costs related to the collation, aggregation and analysis of the data, including in some cases professional services for 3rd party audit costs and surveys. The estimated recurring compliance costs C_p are computed following a standard cost estimation approach, calculating annual recurrent costs by multiplying the number of operators and traders subject to the EUDR with a fixed average cost per actor. The average cost per actor builds upon the economic quantifications from the initial impact assessment[8] published in 2021. The number of unique operators placing a product on the market is derived from the Surveillance database of the Directorate-General for Taxation and Customs Union (TAXUD).

Given that the methodology is designed to inform decisions on the inclusion or exclusion of specific products from the scope, it focuses on recurrent annual compliance costs for operators placing those products on the market. This provides a consistent basis for comparison with the corresponding annual environmental benefits associated with their inclusion or exclusion. Accordingly, the analysis does not cover broader enforcement costs incurred by public authorities in the Member States or by the Commission in implementing the EUDR as a whole. Nor does it account for one-off costs borne by operators in establishing due diligence systems. For these elements, the original impact assessment remains the appropriate reference.

In addition to the computed variables, the assessment relies on two key data inputs: the traded volumes, both imported from extra-EU ($V_{in,extra,p}$) and traded intra-EU ($V_{in,intra,p}$), and the corresponding value of these inflows (W_p).

[5] An ecosystem service value is the quantified benefit that humans derive from natural ecosystems, such as clean water, food production, climate regulation, recreation, and the maintenance of genetic resources that support crop improvement, medicine development, and ecosystem resilience.
[6] Brander, L. M., De Groot, R., Schägner, J. P., Guisado-Goñi, V., Van't Hoff, V., Solomonides, S., ... & Thomas, R. (2024). Economic values for ecosystem services: A global synthesis and way forward. *Ecosystem Services*, *66*, 101606.
[7] Commission Staff Working Document – Impact Assessment (2021)
[8] Staff working document on the initial impact assessment (EUR-Lex - 52021SC0326 - EN - EUR-Lex)

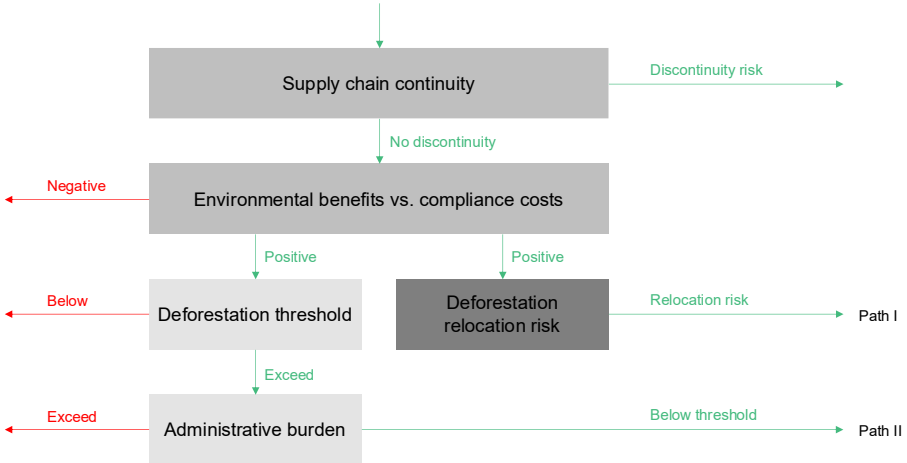
2.1.2 Overview of the quantitative assessment

Based on the variables described in Section 2.1.1, all products are individually assessed using a stepwise logic. As illustrated in Figure 1, the process begins with a general screening based on ensuring continuity of obligations along the supply chain and a cost–benefit analysis. It then outlines two potential pathways that may lead to the recommended inclusion of a product within the scope of the EUDR, provided that the relevant criteria are met. A detailed description of all steps in the quantitative assessment is provided in the following paragraphs.

As a first step, a supply-chain continuity check is conducted to identify downstream derivatives of the product being analysed and to assess whether these derivatives fall within the scope of the EUDR. This ensures that potential linkages to already regulated products are properly understood as part of the broader value-chain analysis and that the entire supply chain is treated consistently and prevents gaps in the product coverage of the Regulation. This is done to avoid, for example, a situation where operators are obliged to file a due diligence statement when placing chocolate on the EU market but not for the cocoa powder to produce chocolate within the EU.

Following the supply-chain continuity check, a cost–benefit analysis per product evaluates whether environmental benefits of a potential inclusion (i.e., the reduced deforestation and resulting emissions reduction) outweigh associated recurring compliance costs. This analysis compares the environmental benefit B_p of including the derived product with the recurring compliance costs C_p. If compliance costs exceed environmental benefits, the quantitative analysis stops there, indicating that the product should not be included in, or should be removed from, the scope. By contrast, if expected environmental benefits are larger than expected recurring compliance costs, the product is subject to the next phase of the analysis, which presents additional criteria under two alternative pathways.

Figure 1: Schematic overview of the quantitative assessment methodology with two pathways to assess inclusion (in green) or exclusion (red) from the scope of EUDR



2.1.3 Path I: deforestation relocation risk

In the first pathway, following a positive cost–benefit analysis, the assessment considers whether the absence of the product code in Annex I could have a significant contribution to deforestation by relocating rather than eliminating the deforestation risk. This risk is higher for those products currently not in scope of the EUDR but whose upstream ingredients are, particularly where these products contain a high share of the relevant primary commodity, like cocoa in a pure chocolate bar. EU-based producers of goods with a lower percentage of the relevant commodity, where the ingredients are in scope, can spread recurring compliance costs for those ingredients over a broader cost base. This reduces the relative impact on the final product price.

To be proposed for inclusion based on this path, the product and its supply chain must fulfil two criteria, relating to the commodity share in the derived product and the ratio between imports and domestic production of the good concerned.

Firstly, the embedded commodity share $f_{cs,p}$ in the derived product (representing, at product code level, the typical percentage of the final product's volume composed of the relevant commodity), must be above 75%. A 75% embedded-commodity threshold ensures that in the derived products considered the regulated commodity represents a significant majority of the product, and associated compliance costs borne by EU producers are likely to constitute a material share of total production costs. Setting the threshold significantly lower (e.g., 50%) would risk capturing products where the regulated commodity is not the principal cost driver, raising proportionality concerns for operators, while setting it much higher (e.g., 90%) would be too restrictive and could unnecessarily disadvantage further downstream industries that transform the commodity into more complex products.

In addition, to prevent a situation in which the inclusion of a derived product with a high embedded commodity share would impose additional costs on a significantly larger group of importers compared with a relatively small group of EU-based producers, a second criterion is introduced. This criterion considers the ratio between imports and EU production of the product concerned. Specifically, the EU production capacity of derived products must at least be 50% of the import volume[9].

[9] In the absence of a comprehensive EU27 production database by HS code, the difference between EU imports $V_{in,extra,p}$ and intra-EU trade flows $V_{in,intra,p}$ is used as a proxy for domestic production. Given limited external entry points and subsequent internal trade flows within the EU, most EU imports are assumed to circulate further as intra-EU trade. The excess of intra-EU trade over EU imports $V_{in,extra,p}$ is therefore considered to equal the EU production. In other words, this criterion requires intra-EU trade flows to be at least 1.5 times larger than EU imports.

2.1.4 Path II: deforestation and administrative burden

If a product does not meet the criteria under the first pathway, the product can be considered for inclusion under the second pathway based on the magnitude of the deforestation impact as well as on the administrative burden, i.e., the relative compliance costs as compared to trading values. This second pathway helps ensure that there is environmental relevance for inclusion and that the recurring compliance costs remain proportionate.

Under this pathway, the product must first meet a minimum threshold of relative or absolute embedded deforestation. Two separate thresholds are applied to distinguish the deforestation footprint per HS code from the associated trade volumes. The relative deforestation share is computed as the ratio between the absolute deforestation embedded in the product placed on the market D_p and the total volume of the products placed on the market $V_{in,extra,p}$. This threshold captures products with smaller trade volumes but a high deforestation footprint per unit. Conversely, an absolute threshold is introduced to capture products that have a smaller per-unit footprint but are traded in large volumes, resulting in a substantial total deforestation impact.

For individual products, the relative and absolute thresholds are respectively set at 0.005 hectares per ton of product and 100 hectares. These thresholds are designed to help ensure that those products commonly associated with a high deforestation footprint remain in scope of the EUDR.

Secondly, the administrative burden, defined as the ratio of recurring compliance costs C_p to the total value of products placed on the EU market W_p, must not exceed 5%. While the cost–benefit analysis ensures that inclusion is defensible from a macroeconomic and environmental perspective, by comparing the environmental benefits with the compliance costs, the administrative burden criterion focuses on microeconomic considerations, notably the balance sheets of individual operators, by comparing the compliance costs with the value of traded products. A higher ratio is considered undesirable because of potential consumer price impacts.

2.2 QUALITATIVE ASSESSMENT

The quantitative assessment provides a first screening of the potential products considered for inclusion/exclusion from Annex I of the EUDR, based on the estimated environmental footprint, costs of compliance and trade data. However, to take informed decisions on product scope and on the potential inclusion/exclusion of certain derived products, the quantitative criteria are complemented with qualitative considerations such as the objectives of coherence along and between supply chains and avoiding disproportionate disruptions and circumvention. The qualitative assessment looks at the structure of the relevant supply chains, the particular situations of sectors, and at potential spill-over effects. It also aims to avoid potential overlaps with other policy initiatives in order to prevent excessive administrative burden and looks at the coherence with policy objectives in other areas (e.g. circularity, energy security, food security).

3. RESULTS OF THE QUANTITATIVE AND QUALITATIVE ASSESSMENTS

This chapter provides an assessment of the environmental benefits of the current EUDR scope and evaluates potential changes to the product scope. Section 3.1 gives an overview of the benefits delivered by the current scope. Section 3.2 presents an analysis of stakeholder-requested changes, to which both quantitative and qualitative assessments are applied, with conclusions supporting the proposed changes. Section 3.4 presents the assessment for those requests where the conclusions do not support the proposed changes. Finally, Section 3.4 offers a consolidated overview of the findings.

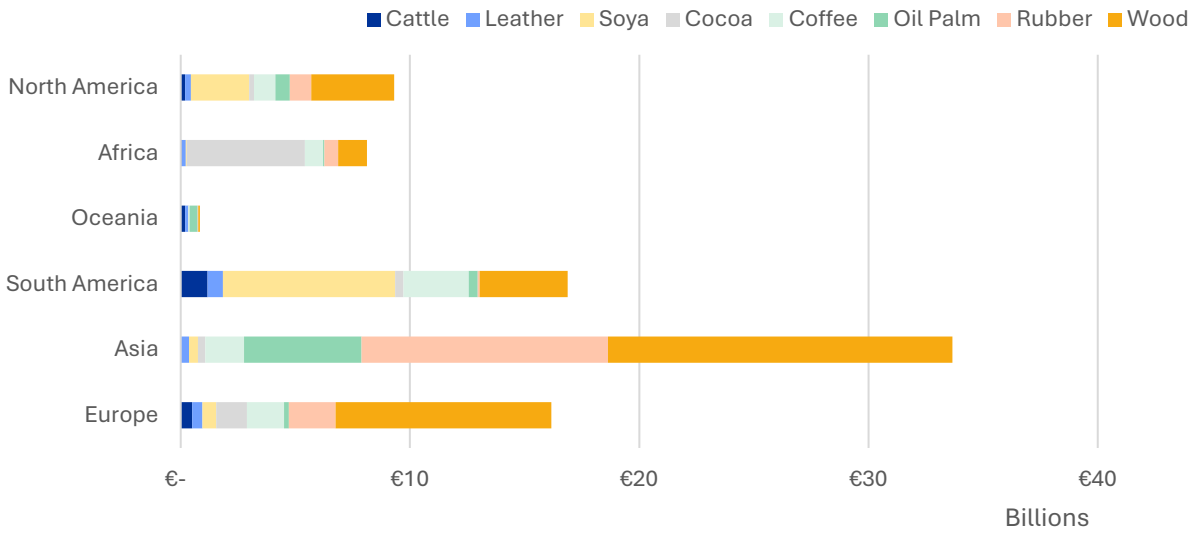
3.1 CURRENT SCOPE OF THE EUDR AND REQUESTED CHANGES

This section first provides an overview of the current scope of the EUDR and the environmental benefits it delivers. It then outlines the requested changes and presents their high-level impacts on trade flows covered by the regulation, as well as the associated environmental benefits.

3.1.1 Current scope of the EUDR

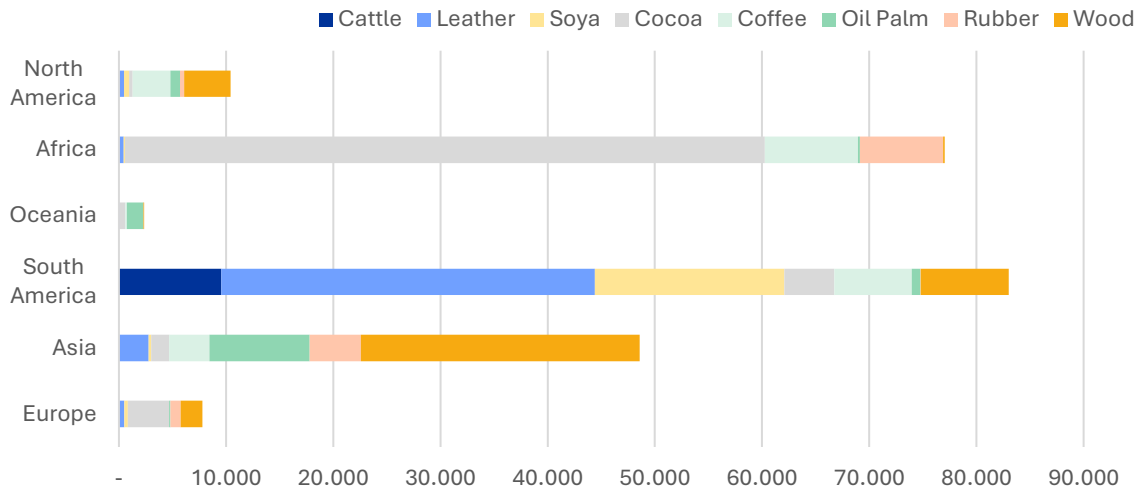
The current scope of the EU Deforestation Regulation (EUDR), following the removal of printed paper (HS Chapter 49) during the co-legislative process in December 2025, comprises 76 product codes of the Combined Nomenclature. During the period 2015-2020, on average a volume of 112 million tons of EUDR relevant goods was imported into the EU per year with an average trade value per year of €85 billion. Figure 2 presents a breakdown of the trade value by geographic origin.

Figure 2 Import value of EUDR relevant goods broken down by geographic origin, in € per year between 2015-2020. Europe excludes imports from EU Member States.



Building on trade and deforestation data from this period, the current scope of the EUDR is estimated to capture 228 thousand hectares of deforestation embedded in derived products placed on the EU market by operators per year. Figure 3 illustrates that the origin of this footprint is not evenly distributed across continents. It is primarily concentrated in Africa (driven largely by cocoa production); South America, (driven by leather production and cattle); and Asia (driven by wood and oil palm production). Compared with Figure 2, it illustrates that the deforestation footprint is not proportional to overall trade volumes from these continents. This highlights that exposure is driven more by the nature of the commodities sourced than by the sheer scale of trade flows.

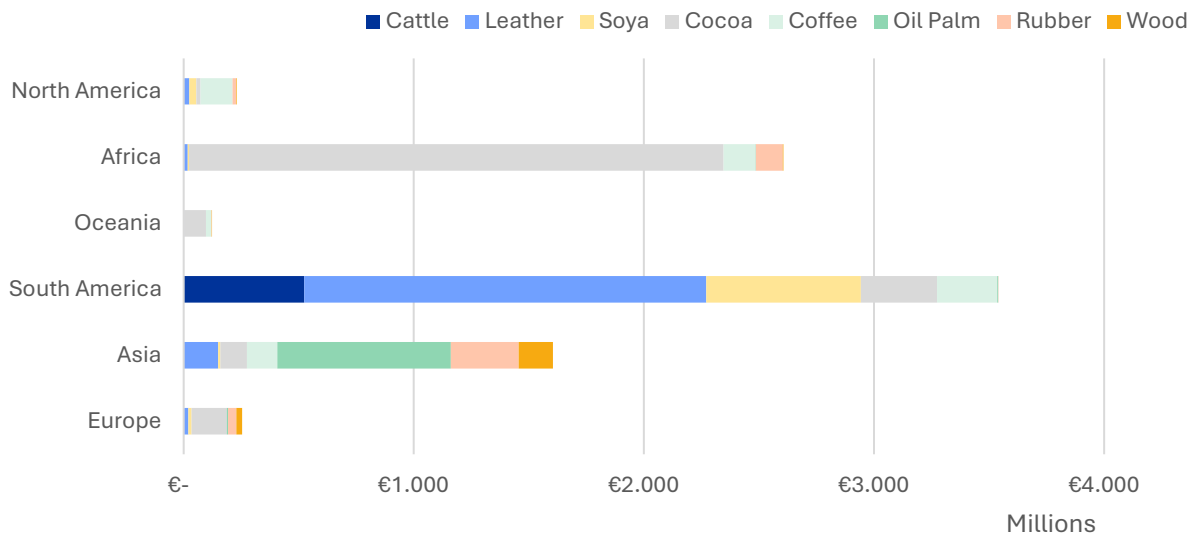
Figure 3: deforestation footprint broken down by geographic origin - ha/yr



Converted into economic values, the EUDR under the current scope is estimated to generate environmental benefits of approximately €8.3 billion per year by reducing the deforestation footprint and the associated emissions embedded in derived product placed on the EU market by operators.

Figure 4 illustrates the breakdown of these environmental benefits. The environmental benefits profile differs from the pure deforestation breakdown presented in Figure 3, as it also accounts for greenhouse gas emissions associated with land-use and land-cover change. The emissions linked to these changes vary significantly depending on the type of conversion. For example, the conversion of natural forest to pasture typically leads to substantial carbon emissions due to the loss of high-carbon biomass and soil disturbance. In contrast, conversion to plantation forest may, in some cases, maintain or even increase carbon stocks over time, depending on management practices and species composition. Overall, roughly 73% of the environmental benefits stem from the monetization of emissions and 27% from the ecosystem services.

Figure 4: Estimated annual environmental benefit per commodity in the period 2015-2020 by geographic origin, in €/yr



3.1.2 Overview of proposed changes to the scope of the EUDR

This assessment evaluates 31 product codes for potential inclusion in or exclusion from Annex I of the EUDR. Of these, 10 codes are proposed for removal from the scope, while 21 are proposed for addition. Products proposed for exclusion include cattle skins and hides, retreaded tyres, and fatty acids derived from palm oil. Products proposed for inclusion comprise several palm oil derivatives used in the oleochemical industry, as well as biodiesel, animal feed preparations, soluble coffee, and cattle tongue.

Figure 5 illustrates the magnitude of these requested changes relative to the current scope of the EUDR: proposed removals account for €2.5 billion in import value, while proposed additions represent €9.3 billion.

Figure 5: Import value of EUDR relevant goods into the EU-27 broken down by commodity, in € per year between 2015-2020. Yellow bars indicate the deforestation footprint of products currently in, but proposed for removal from the EUDR scope: leather under cattle, fatty acids under oil palm and retreaded tyres under rubber. The green bars indicate the deforestation footprint of the products proposed to be added to the scope: palm oil derivatives, animal feed preparations and biodiesel under oil palm, soluble coffee and cattle tongue.

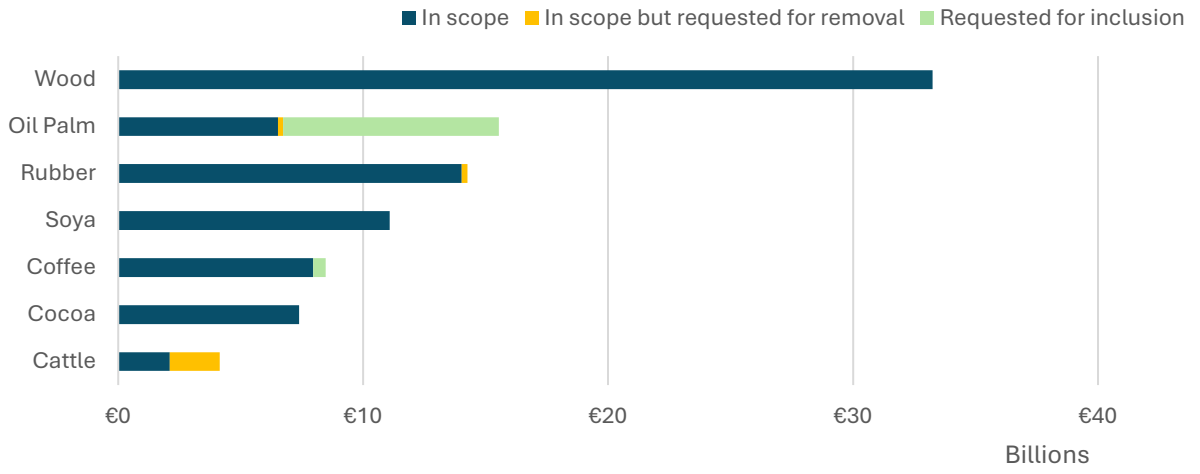
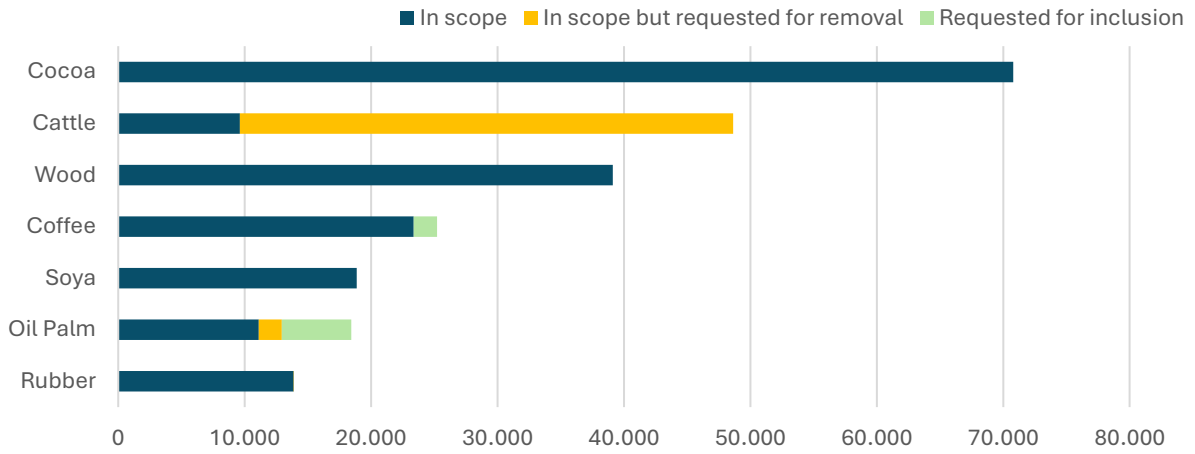


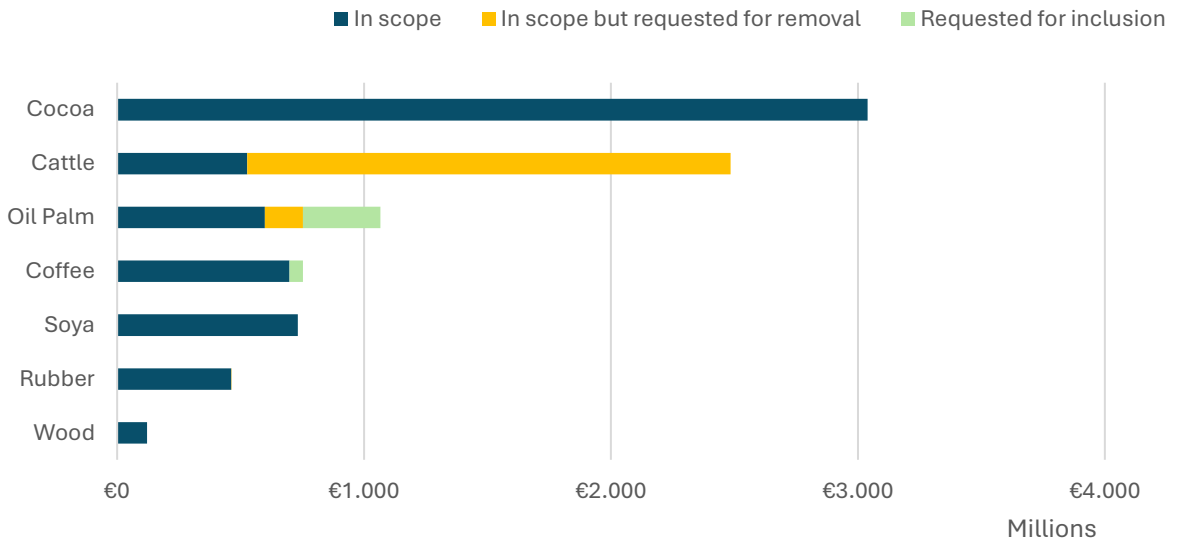
Figure 6 illustrates the impact of these proposals on the deforestation footprint within the current scope of the EUDR. Proposed removals account for 40.9 thousand hectares of deforestation, while potential inclusions represent an additional 7.4 thousand hectares of embedded deforestation.

Figure 6: Annual deforestation footprint per commodity in the period 2015-2020, in hectares/yr. Yellow bars indicate the deforestation footprint of products currently in, but proposed for removal from the EUDR scope: leather under cattle, fatty acids under oil palm and retreaded tyres under rubber. The green bars indicate the deforestation footprint of the products proposed to be added to the scope: palm oil derivatives, animal feed preparations and biodiesel under oil palm, soluble coffee and cattle tongue.



In terms of environmental benefits, products proposed for removal from Annex I correspond to €2.1 billion, while products proposed for addition account for €367 million. Figure 7 illustrates the impact of these proposed changes on the overall environmental benefits of the current scope of the EUDR.

Figure 7: Annual environmental benefit per commodity in the period 2015-2020, in €/yr. Yellow bars indicate the environmental benefit of products currently in, but proposed for removal from the EUDR scope: leather under cattle, fatty acids under oil palm and retreaded tyres under rubber. The green bars indicate the environmental benefit of the products proposed to be added to the scope: palm oil derivatives, animal feed preparations and biodiesel under oil palm, soluble coffee and frozen tongue under cattle.



3.2 CHANGES TO THE SCOPE OF THE EUDR EXAMINED AND IMPLEMENTED IN THE PROPOSAL

Following the assessment of the total environmental benefits associated with the current scope of the EU Deforestation Regulation (EUDR), this section examines a set of modifications to the product scope that have been proposed by stakeholders. The six subsections below present, for the analysed product codes, the quantitative impact in terms of environmental benefits and administrative burden, and a qualitative reasoning. Each subsection introduces the data underpinning the quantitative assessment, with detailed information provided in Annex II. Finally, it concludes with a recommendation regarding inclusion or exclusion of the product group from the Regulation's scope.

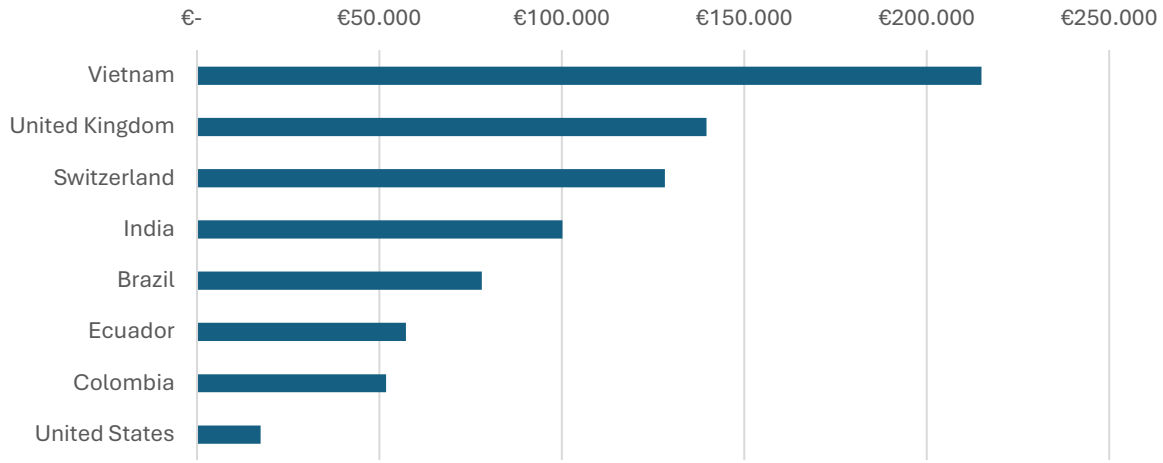
3.2.1 Soluble coffee

Soluble coffee (HS 2101 11 00) is made from brewed coffee beans that have been processed and dried into a powder or granules. While roasted or green coffee beans are included in the product scope of the EUDR, soluble coffee is not. It was therefore proposed by stakeholders to include soluble coffee in the scope of the EUDR. Soluble coffee is a derived product from codes that are in scope of the EUDR; however, there are no further derived products of soluble coffee within scope that would justify its inclusion on supply-chain continuity grounds.

In terms of the quantitative assessment, soluble coffee presents a high deforestation footprint (1865 hectares) and significant emissions (356 thousand tons CO_2e) combined with rather low recurring compliance costs relative to their trade value. With an environmental benefit of €54.2 million and a recurring compliance cost of €4.2 million, soluble coffee meets the cost-benefit criteria. All other criteria under both pathway 1 and 2, such as competitiveness, deforestation and administrative burden, are also met, leading to a quantitative assessment suggesting its inclusion in the EUDR scope.

From a qualitative perspective, the current non-inclusion of soluble coffee in scope creates a fragmented and incoherent approach for the coffee sector for operators placing the relevant goods on the Union market, as soluble coffee may be placed on or exported from the Union market without complying with EUDR obligations, ultimately undermining its objectives. This situation leads to the risk that the embedded deforestation in the coffee used to make soluble coffee is relocated, rather than eliminated. Therefore, on the basis of both the quantitative and qualitative analysis, it is proposed to add soluble coffee to the EUDR product scope.

Figure 8: Import value of soluble coffee (HS 2101 11 00) into the EU in 2024 sorted by total value, in thousand €/yr (COMEXT).



3.2.2 Palm oil derivatives

Palm oil derivatives are used in the oleochemicals industry as raw materials or intermediates in a wide variety of applications, including the manufacturing of paints and coatings, pharmaceuticals, lubricants and food additives. It was proposed by stakeholders to include several of those derivatives. The proposed products are derived from codes that are in scope of the EUDR; yet there are no further derived products of the suggested additions within scope that would justify their inclusion on supply-chain continuity grounds.

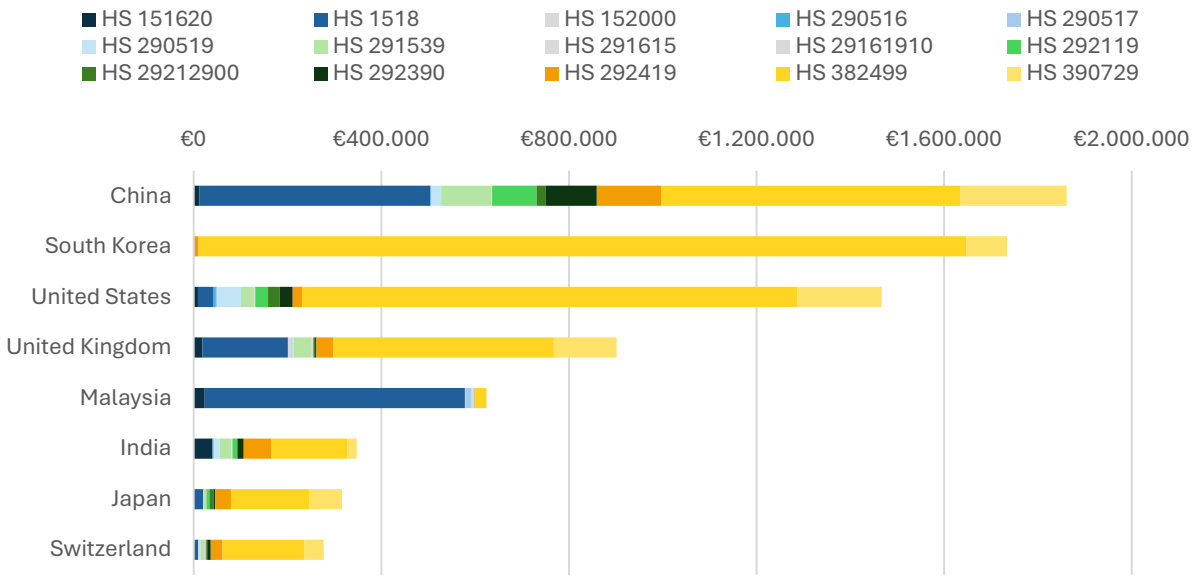
Most palm oil derivatives suggested for inclusion meet the quantitative cost-benefit criteria (See Annex II) [10]. Only oleic, linoleic, linolenic acids (HS 291615) and acyclic polyamines (HS 29212900) do not pass the cost-benefit analysis and are for that reason not suggested for inclusion in scope of the EUDR.

With a compliance cost ratio below 3% and significant absolute or relative deforestation values, all remaining products fulfil the additional criteria under pathway 2 for inclusion within the scope of the EUDR. Having in general a high embedded commodity share (above 75%) and a significant intra EU trade compared to imports (Annex II), several products identified by the quantitative assessment also meet the conditions for inclusion under pathway 1.

[10] The environmental benefits and compliance costs are estimated under the assumption that all derivatives are produced exclusively from palm oil and that all operators trade only in palm oil derivatives. In practice, many of these products can also be derived from other vegetable oils and fats. However, provided that derivatives from different feedstocks are not mixed and that the number of operators scales proportionally with traded volumes, both environmental benefits and compliance costs would decline proportionally. Consequently, the overall cost–benefit ratio remains unaffected.

Annex I of the EUDR does not contain all relevant palm oil derivatives used in the oleochemicals industry. The absence of certain oleochemicals from the scope of EUDR leads to gaps in obligations applicable in the supply chain, as certain oleochemicals may be placed on the Union market without complying with the EUDR obligations. For the oleic, linoleic, linolenic acids (HS 291615) and acyclic polyamines (HS 29212900) which do not meet the cost-benefit analysis, there are no clear qualitative findings at this stage that would require to modify the quantitative assessment. On the basis of the quantitative analysis and of the qualitative assessment, it is proposed that the majority of palm oil derivatives used in the oleochemicals industry be included in Annex I of EUDR.

Figure 9: Import value of palm oil derivatives into the EU in 2024 sorted by total value, in thousand €/yr (COMEXT). The products requested for inclusion are hydrogenated vegetable oils (HS 151620), chemically modified animal/veg oils (HS 1518), crude glycerol (HS 152000), octanol (HS 290516), lauryl, cetyl, and stearyl alcohols (HS 290517), saturated monohydric alcohols (HS 290519), acetic acid esters (HS 291539), oleic, linoleic, linolenic acids (HS 291615), undecenoic acid (HS 29161910), acyclic monoamines(HS 292119), acyclic polyamines (HS 29212900), quaternary ammonium salts (HS 292390), acyclic amides (292419), misc. chemical products (HS 382499) and polyethers (HS 390729)



3.2.3 Frozen cattle tongue

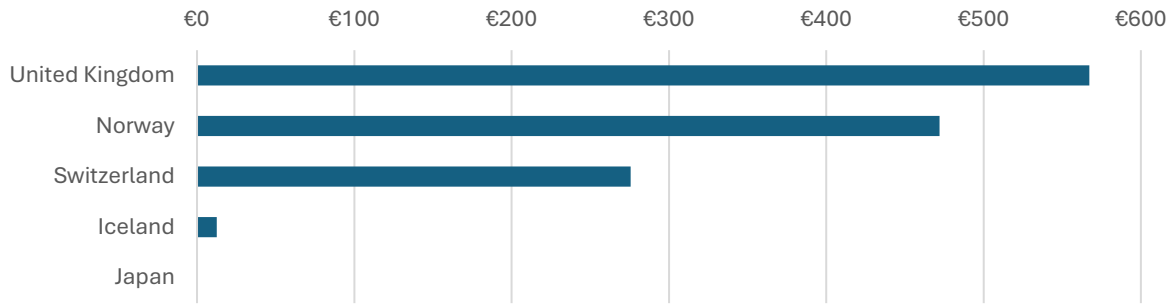
Cattle meat and most offal products are already included, both in fresh and frozen form, in the scope of the EUDR. However, only fresh cattle tongues fall within the scope of the EUDR whereas frozen cattle tongues (HS 0206 21 00) do not. It was therefore proposed by stakeholders to include frozen cattle tongues.

Trade data show that a significant share of cattle tongues marketed in the Union are imported from third countries in frozen form. In practice, frozen cattle tongues can be considered an upstream product in the supply chain of fresh cattle tongues.

The absence of frozen cattle tongue in Annex I therefore creates a risk of supply chain discontinuity. Hence, frozen cattle tongues are proposed for inclusion within the scope of the EUDR based on the supply chain continuity criterion, the first test in the stepwise approach of the quantitative assessment, rendering a cost-benefit test unnecessary.

Excluding frozen cattle tongues, while their fresh counterparts are included, creates a risk of circumvention, as imports may shift from fresh to frozen products. To prevent such potential circumvention, the qualitative assessment aligns with the quantitative assessment. Therefore, it is proposed to include HS 02062100 in Annex I of the EUDR.

Figure 10: Import value of frozen cattle tongue (HS 0206 21 00) into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT).



3.2.4 Soap in the form of bars, cakes, flakes and granules

Soap, soap noodles and surfactants are downstream oleochemical products. Surfactants are surface-active agents that help break down the interface between water and oils or dirt. They are one of the main ingredients used in detergents. The inclusion of soap (HS 3401) and surfactants (HS 3402) has been proposed by several stakeholders, while other stakeholders expressed opposing views.

There are no further products derived from soap and surfactants in scope of the EUDR that would justify their inclusion based on supply-chain continuity grounds.

The quantitative assessment indicates that the cost of compliance for soap (HS 3401) and surfactants (HS 3402) exceeds the environmental benefits from their inclusion in the product scope. This is due to the high fragmentation of the import base and the relatively low palm oil content for soap (between 20-50%) and surfactants (below 20%)[11]. The highly fragmented importer base increases estimated recurring compliance costs. As background, there are approximately 750 EU importers of palm oil (HS 1511), compared to nearly 16 thousand EU importers of soap (HS 3401). This dispersion of operators results in estimated recurring compliance costs of approximately €43.7 million. By contrast, the relatively low palm oil content in soap, and therefore limited embedded deforestation risk, limits potential environmental benefits to an estimated €8.0 million.

[11] WWF 2019: The Impact of the Consumption of Palm Oil in Poland on the Global Natural Environment and Analysis of the Possibility of Replacing it by Other Vegetable Oils

Similarly, for surfactants, the estimated recurring compliance costs of €16.5 million per year exceed the expected environmental benefits worth €9.4 million per year. Therefore, the quantitative assessment does not suggest including both products in scope of the EUDR.

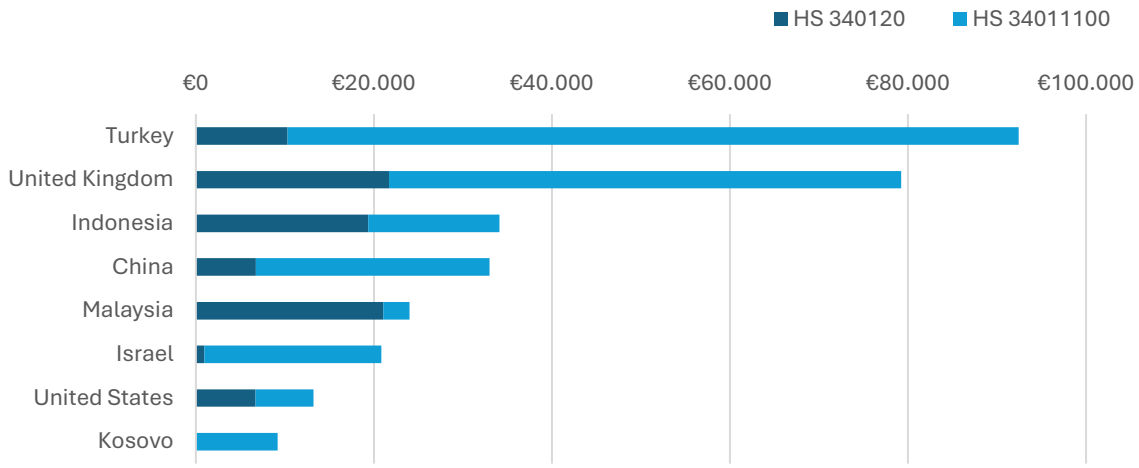
At the same time, some considerations can support inclusion of soap and surfactants despite the outcome of the quantitative assessment. Keeping these products outside the scope could result in a fragmented approach along the palm oil supply chain, as these products containing palm oil could be placed on the Union market without being subject to EUDR obligations. This would risk undermining the effectiveness of the Regulation and maintaining gaps in obligations applicable in the supply chain.

Taking into account the opposing views, the results of the quantitative analysis, and the fragmented approach resulting from non-inclusion, the Commission has analysed the possibility of including products at a more granular level. In particular, the inclusion of non-liquid soaps, namely soap bars (HS 3401 11 00) and soap flakes (HS 3401 20) has been assessed. These products are characterised, on average, by a higher share of natural oils in their composition compared to liquid soaps classified under HS 3401 and surfactants under HS 3402.

Although compliance costs for these subproducts, estimated at €10.9 million and €9.7 million for soap bars and flakes respectively, still exceed the associated environmental benefits, estimated at €4.0 million and €2.5 million, these two subcodes account for 82% of the total environmental benefits associated with the proposed inclusion of HS 3401, while representing only 52% of the estimated compliance costs.

In this context and taking into account the need to ensure coherence and effectiveness across the supply chain, the Commission considers that there are sufficient qualitative grounds at this stage to support the inclusion of soap bars and flakes within the scope of the Regulation. It is therefore proposed to include these products in Annex I of the EUDR.

Figure 11: Import value of soap bars (HS 3401 11 00) and soap flakes (HS 3401 20) into the EU in 2024 sorted by total value, in thousand €/yr (COMEXT).



3.2.5 Hides, skins and leather of cattle

Hides and skins are the raw, unprocessed outer coverings of bovine animals removed after slaughter, preserved with different techniques, and processed for commercial use. Through the tanning process, hides and skins are transformed into leather. Hides come from large, mature cattle, and thus are thicker and suitable to produce durable leather goods (e.g. shoes, belts). Skins of cattle typically derive from younger or smaller bovines and are thinner and finer in grain and thus often used for high-quality leather products (e.g. gloves, luxury accessories).

In the reaction to the public consultation on the draft delegated Act of April 2025, 25% of the respondents referred to leather. Industrial stakeholders proposed to remove leather from the scope of the EUDR. Some of them have mentioned, as a possible alternative, the inclusion of leather derived products in the scope, to avoid risks of relocation outside the EU. Their main arguments highlight leather as a by-product of meat production. On the other side, a broad range of NGOs have requested to keep leather products in scope of the EUDR. The main arguments presented highlight leather as a co-product of meat production, the substantial market size and its value.

When considered as a by-product of cattle production, hides and skins account for 2.5% of deforestation through price effects and demand interactions in the cattle meat market, and meat is the main revenue source of cattle producers.[12] The remaining 97.5% of the deforestation footprint is attributed to other cattle products. When considered as a co-product (i.e. a material produced simultaneously), hides and skins are set accountable for 5% of cattle-related deforestation by following a value-allocation approach. The remaining 95% of the deforestation footprint is attributed to other cattle products[13].

Depending on the approach, the environmental benefit from leather inclusion could range from €979 to €1957 million per year. Recurring compliance costs are €16.7 million per year. These estimates are subject to a certain level of uncertainty stemming from assumptions around the absolute deforestation allocated to cattle, the share allocated to the skin and the conversion factors used to reflect the processing of raw skins to semi processed goods.

[12] To analyse the impact of leather when solely seen as a by-product and not a driver of deforestation, a hypothetical scenario is considered where no additional income is generated from hides. Under this scenario, producers would lose around 5% of their revenues, the value of skins, and would therefore need to raise meat prices by roughly 5%. When meat becomes more expensive, people buy less of it. Based on typical consumer behaviour, cattle meat has a price elasticity of -0.5 (Tonsor et al, 2018), meaning that a 5% increase in beef prices would reduce demand by about 2.5%. Hence, with leather as a byproduct, the income from hides and skins keeps prices for meat slightly lower, supporting higher meat consumption and thereby more deforestation. Without revenues from cattle skins and thus higher prices for meat, beef demand would fall by around 2.5%, which would in turn reduce cattle-related deforestation by approximately the same percentage.

[13] Value allocation approach based on the scientific publication from Singh, C. and Persson, U.M. (2026) "Global patterns of commodity-driven deforestation and associated carbon emissions"; it deviates from the general mass-based approach (deforestation linked to a commodity is distributed across its subproducts based on the share of total mass each subproduct represents) according to which hides and skins would count for 8% of cattle related deforestation. This is a conservative estimate, as in some large slaughterhouses leather has been reported to account for up to 26% of total earnings, as reported by Bain & Company (2020).

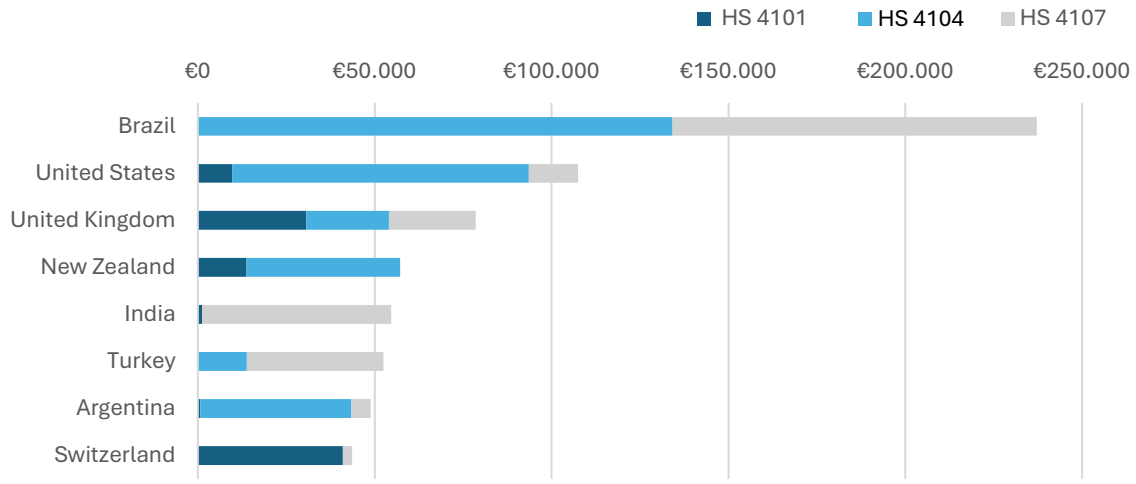
Were cattle skins and hides not to be included in the scope of the EUDR, by having cattle meat and offal products in scope of the EUDR, a slice of these environmental benefits would still be indirectly captured in most cases when meat is imported into the EU, as the hides associated with meat imports into the EU are inherently required to comply with the no-deforestation criteria.

A number of further qualitative considerations need to be taken into account. First, given the lower economic value of cattle skins and hides compared to meat within overall cattle production, combined with asymmetries in trade flows between meat and hides, economic operators have limited leverage to obtain information required to comply with the EUDR from suppliers outside the Union market (cattle farmers within the Union are in any event subject to the Regulation). Second, leather has, compared to other products, a separate value chain from meat products; the downstream leather value chain is distinct from the meat value chain and typically involves additional processing stages and intermediaries which also reduces the direct link between leather operators and cattle farmers, and maintaining the inclusion would therefore represent a high burden on the industry.

Third, maintaining leather within the scope risks creating an unbalanced approach, as importers of finished leather goods (such as footwear, handbags or other articles) could continue to place them on the Union market without being subject to equivalent due diligence obligations, while operators producing leather goods within the EU would face compliance requirements. The inclusion of derived products to address this situation cannot be considered at this stage due to the specificities of the sector including the high number of new products that would enter the scope of the Regulation as this would not give sufficient time for businesses from EU and third EU countries to prepare before entering into application. Moreover, the potential impact of including derived products on the load of the EUDR IT system also needs to be taken into account.

Against this background and taking into account the need to ensure proportionality and to avoid unintended economic distortions, it is therefore proposed to exclude these products from the scope of the EUDR.

Figure 12: Import value of cattle skin products from 3rd countries into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT). The three products requested for exclusion are raw hides and skins of cattle (HS 4101), tanned or curst hides and skins of cattle (HS 4104), and leather of cattle, further prepared after tanning or crusting (HS 4107)



3.2.6 Retreaded tyres

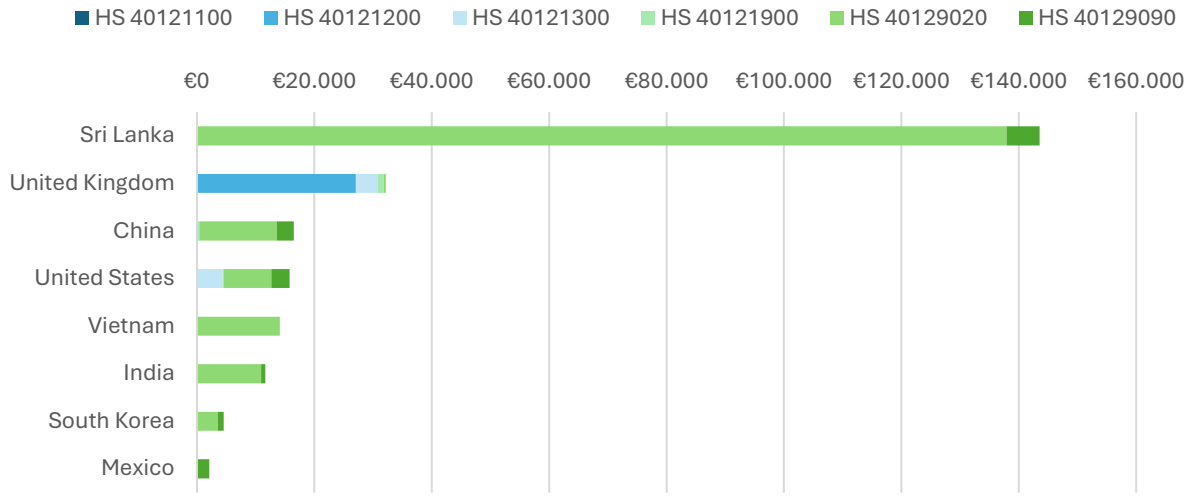
Retreaded tyres are used tyres at the end of their life cycle. Through the retreading process, a new rubber tread is applied to the old tyre casing, allowing a life-extension of the tyre. As retreaded tyres are manufactured from used tyres, it is difficult for retreaders to retrieve the traceability information of the original tyre casing. Therefore, it has been proposed to exclude retreaded tyres from Annex I and limit the EUDR obligations to the new rubber thread applied to the old casing.

Rubber tyres are end-product; hence, there are no further derived products that would prevent the exclusion of retreaded tyres from the scope of the EUDR based on supply-chain continuity grounds.

As only a small fraction of a retreaded tyre, the new tread (approximately 25%), falls within the scope of the EUDR, and that fraction consists of only about 20% natural rubber, recurring compliance costs exceed environmental benefits for most products considered for removal (cf Annex II). Only rubber tyres for buses (HS 40121200) meet the cost–benefit criteria, driven by their slightly higher natural rubber content. However, this product does with an absolute deforestation value of 5 hectares and a relative deforestation value just below 0.0005 not meet the thresholds for the deforestation criterion required for inclusion via the second pathway. Therefore, retreaded tyres products would not meet the criteria of the quantitative assessment for remaining in scope.

In addition, retreading allows for a life-extension of used tyres, thus encouraging circular and resource efficient practices. Based on the insights from the quantitative and qualitative assessment, it is therefore proposed that retreaded tyres are removed from the product scope of EUDR. Only new rubber thread imported as a standalone product into the EU, to be applied to the old tyre casing in the domestic EU market, remains in scope.

Figure 13: Import value of retreaded tyres from 3rd countries into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT). The products requested for exclusion are retreaded rubber tyres for motor cars (HS 40121100), retreaded rubber tyres for buses (HS 40121200), retreaded rubber tyres for aircrafts (HS 40121300), other retreaded rubber tyres (HS 40121900), solid or cushion rubber tyres (40129020) and rubber tyre flaps (HS 40129090).



3.3 CHANGES PROPOSED BY STAKEHOLDERS BUT NOT IMPLEMENTED IN THE PROPOSAL

This section provides an overview of proposed modifications to the product scope that have not been implemented in the draft Delegated Act at this stage. The three subsections below present the requested changes by stakeholders and describe, based on the results of the quantitative and qualitative analysis, why those requests have not been implemented in the draft Delegated Act.

3.3.1 Biodiesel

Biodiesel is a renewable liquid fuel made from biomass ('biofuels' and 'bioliquids'). It serves as a renewable alternative to fossil fuels in hard-to-abate sectors, such as aviation and maritime transport, where electrification is not a viable option. It was proposed by stakeholders to include biodiesel.

Biodiesel is an end-product; hence, there is no further derived products that could justify its inclusion in the scope of the EUDR based on supply-chain continuity grounds.

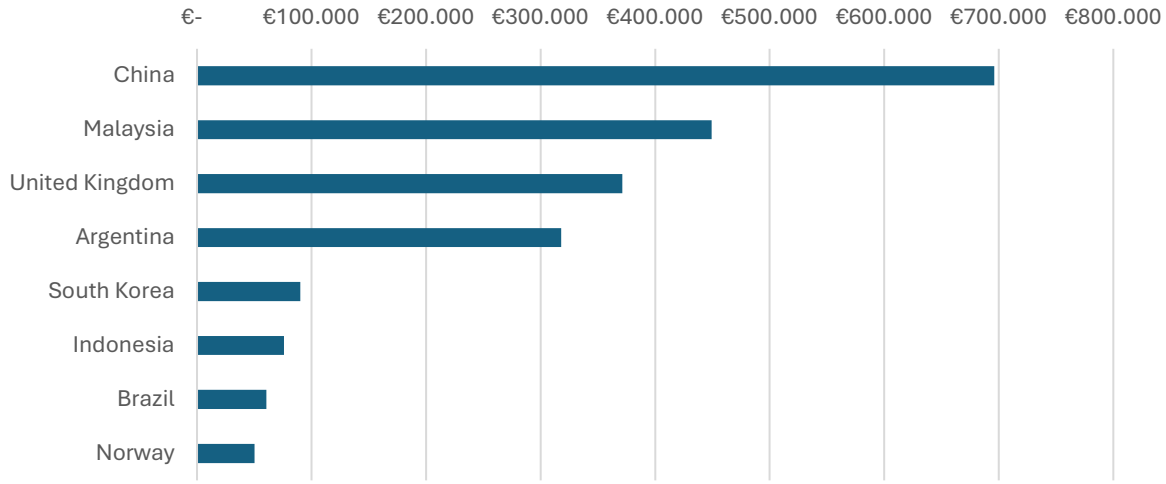
With a small importer base and a significant percentage of palm oil embedded in biodiesel (HS 38260010), the quantitative analysis concludes that the environmental benefits of including biodiesel in scope of the EUDR, with an estimated value of €66.9 million per year, far exceed the estimated recurring compliance costs of €353 thousand per year[14].

[14] The analysis assumes that all imported biofuels consist of 50% palm oil, that all importing operators handle palm oil–based biofuels, and that import volumes scale linearly with the number of operators. In practice, not all biofuels are palm oil–based, and not all operators import such products. As a result, both the estimated environmental benefits and associated compliance costs are likely overstated. However, provided that the number of operators trading in palm oil–derived biofuels scales linearly with the traded volume, compliance costs would remain at any time lower than the environmental benefits.

Whilst biodiesel does not meet the criteria for inclusion under pathway 1, it fulfils the additional criteria for inclusion via pathway 2 of the quantitative assessment, i.e., palm oil-based biodiesel exceeds the deforestation threshold while the administrative burden remains below the 5% threshold.

However, biodiesel is already subject to Directive (EU) 2018/2001 as amended by Directive (EU)2023/2413[15] (Renewable Energy Directive). The placement of biodiesel on the market is therein regulated in a strict and effective manner, addressing both direct and indirect environmental impacts. Including biodiesel within the scope of the EUDR would therefore lead to double regulation without providing additional environmental benefits. It is therefore suggested to maintain this product out of the scope of EUDR.

Figure 14: Import value of biofuels from 3rd countries into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT).



3.3.2 Preparations used in animal feed

Animal feed preparations are feed products obtained by processing animals or vegetable materials. The inclusion of preparations used in animal feed was proposed by stakeholders.

Animal feed preparations are an end-product; hence, there is no further derived products that could justify their inclusion in the scope of the EUDR based on supply-chain continuity grounds.

According to the quantitative assessment, with a small importer base and a significant percentage of palm cake embedded in animal feed preparations, environmental benefits of including animal feed preparations (HS 2309) in scope are with an estimated value of €51.4 million per year 4 times higher than the recurring compliance costs of €12.4 million per year[16].

[15] OJ L, 31.10.2023. ELI: http://data.europa.eu/eli/dir/2023/2413/oj.

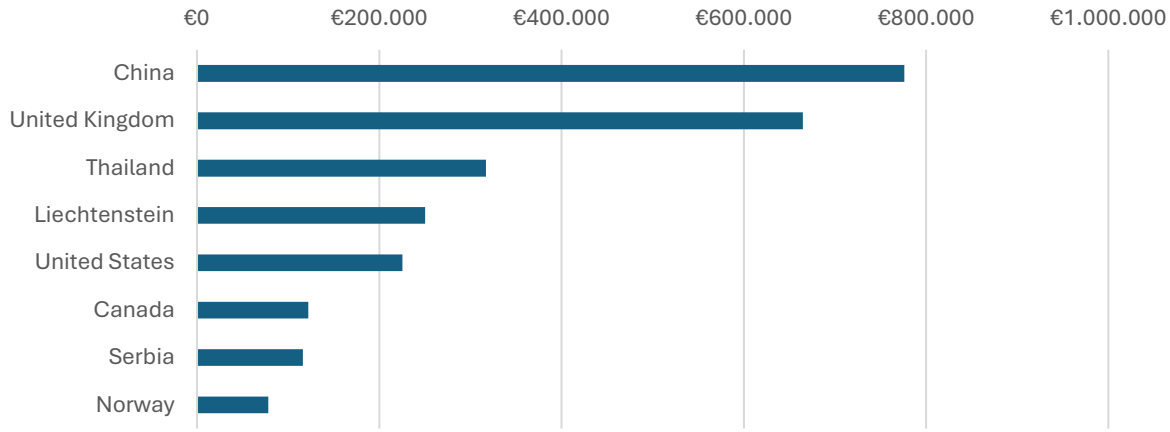
[16] The analysis assumes that all imported animal feed preparations consist of 50% palm oil, that all importing operators handle palm oil–based feed preparations, and that import volumes scale linearly with the number of operators. In practice, not all feed preparations are palm oil–based, and not all operators import such products. As a result, both the estimated environmental benefits and associated compliance costs are likely overstated.

Animal feed preparations do not meet the criteria for inclusion under pathway 1 but do meet the criteria relating to relative deforestation risk and administrative burden and are therefore suggested for inclusion via pathway 2.

At the same time, while the quantitative assessment indicates potential benefits, the overall impacts on the agricultural sector have not yet been sufficiently assessed. This is particularly relevant in light of the Commission's Vision for Agriculture and Food, which highlights that the EU's food sovereignty depends to a large extent on imported inputs such as feed and underlines the need to reduce strategic dependencies and ensure resilient supply chains.

In this context, there is not sufficient qualitative evidence at this stage for the Commission to support inclusion of preparations used in animal feed in the scope of the Regulation. It is therefore suggested to maintain these products outside the scope.

Figure 15: Import value of animal feed preparations from 3rd countries into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT).



3.3.3 Oilcake and other solid residues of palm nuts or kernels

Oilcake and other solid residues of palm nuts or kernels (HS 230660) are palm oil derivatives resulting from the physical refining of palm oil. They are used in the manufacturing of animal feed. Stakeholders requested their removal from the EUDR product scope.

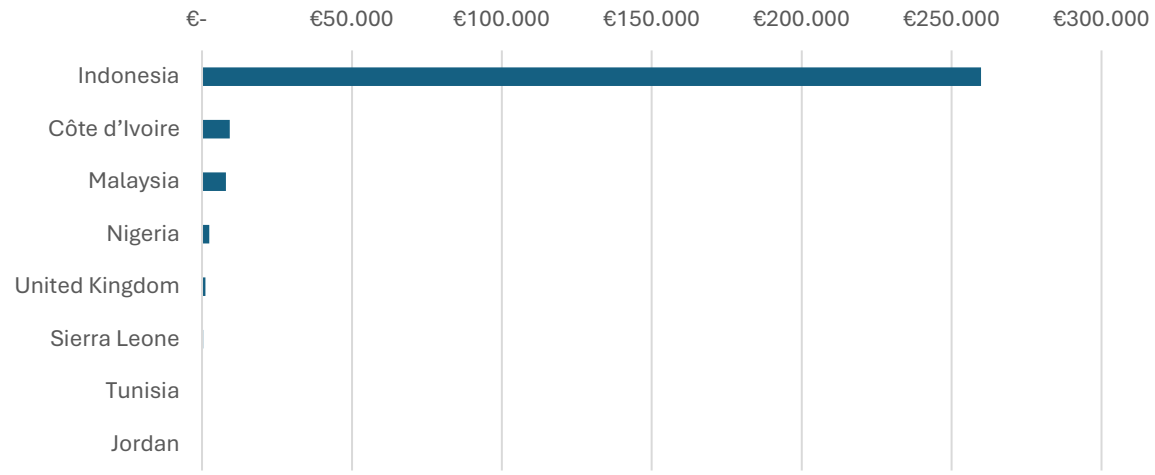
As further prepared animal feed preparations are not proposed for inclusion in the scope of the EUDR (Section 3.3.1), there are no grounds would that prevent the removal of palm cake from the EUDR scope, based on the supply chain continuity criterion.

However, according to the quantitative assessment, the environmental benefits derived from their inclusion in the scope of EUDR exceed the recurring compliance costs, with environmental benefits of €154.5 million and compliance costs of €187,000. Additionally, while the product does not meet the criteria for inclusion under pathway I, the product meets the deforestation and administrative burden criteria under pathway II. Therefore, the quantitative approach suggests keeping HS 230660 in scope.

However, provided that the number of operators trading in palm oil–derived feed preparations scales linearly with the traded volume, compliance costs would remain at any time lower than the environmental benefits.

In addition to relevant environmental impact of this product shown by the quantitative analysis, the exclusion of oilcake and other solid residues of palm nuts or kernels would be in contrast with the approach proposed for the palm oil supply chain, where the proposed inclusion of further palm oil derivatives aims to ensure a uniform regulatory approach and avoid inconsistencies in the obligations applicable throughout the supply chain, in particular for the oleochemicals sector. Excluding oilcake would also affect this balanced approach between derived products used in animal feed, as some of these products such as soya cake or cocoa husks would still be covered by EUDR obligations while oilcake would be out of scope. On the basis of the quantitative and qualitative insights, it is therefore proposed to maintain oilcake within the product scope of EUDR.

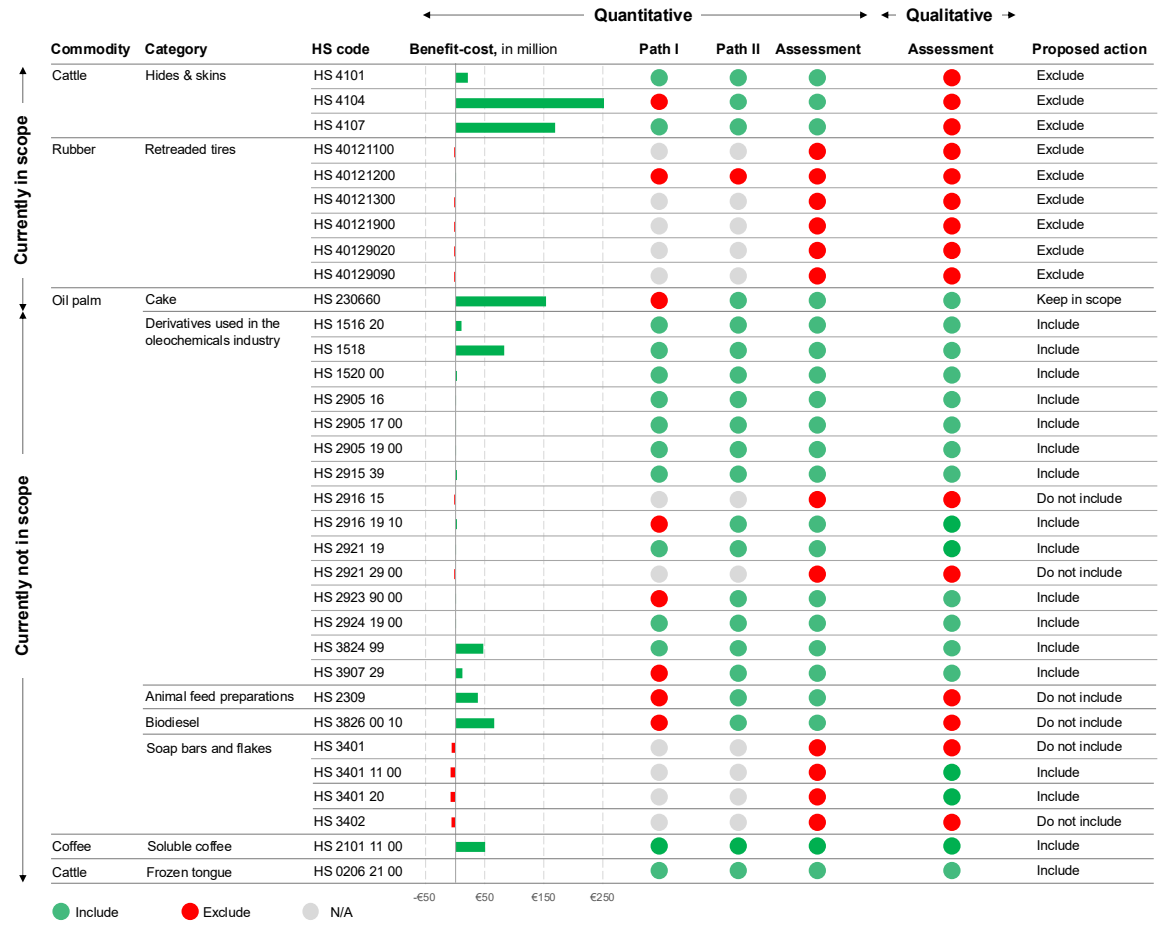
Figure 16: Import value of palm oil products from 3rd countries into the EU27 in 2024 sorted by total value, in thousand €/yr (COMEXT). The product requested for exclusion is oil cake (HS 230660).



3.4 OVERVIEW OF QUALITATIVE AND QUANTITATIVE ASSESSMENT

An overview of the considerations and final analysis under both the qualitative and quantitative assessment is presented below in Figure 17. Vertically, the figure lists all product codes submitted by stakeholders for analysis, with those currently in scope on top and the codes currently not in scope below. Horizontally, it presents the results of the quantitative and qualitative assessments. Within the quantitative assessment, the net benefit[17] (environmental benefit minus recurring compliance cost) is shown together with the assessment of criteria under Path I and Path II of the quantitative approach. The colour scheme indicates the EUDR scope assessment: green denotes a positive test or inclusion assessment, red indicates a negative assessment, and grey signifies that the step is not applicable because a preceding step in the stepwise approach already yielded a negative assessment.

Figure 17: Overview of proposed product codes and the results of quantitative and qualitative assessments. Vertically, codes currently in scope are presented on top, and those currently not in scope below. Horizontally, the figure shows the quantitative and qualitative assessments, with net benefit (environmental benefit minus compliance cost) shown under the qualitative assessment alongside Path I and II criteria from the quantitative approach. Colours indicate EUDR scope: green = positive assessment/inclusion, red = negative/exclusion, grey = step not applicable due to a prior negative assessment. The final column spells out the proposed change in Annex I of the EUDR.



[17] The bar with the net benefits for HS 4104 is truncated; computed net benefits are €1.750 million.

4. CONCLUSIONS

The comprehensive analysis of stakeholders' proposals for inclusion/exclusion of derived products is based on first a quantitative assessment, which combines data on environmental footprint, costs of compliance and trade aspects. The insights of the quantitative assessment are then complemented with qualitative considerations to evaluate stakeholders' proposals concerning EUDR product scope.

Based on the quantitative and qualitative considerations presented in section 3 and 4, seventeen product codes are proposed for inclusion in Annex I of the EUDR, three product codes are proposed for exclusion from that Annex and one product code is proposed to be replaced with a more specific product code.

The results of the analysis presented in this SWD is reflected in a draft Delegated Act amending Annex I of the EUDR accordingly. The draft Delegated Act, published alongside this working document, will now be subject to the 4-week public feedback after which the Commission will carefully analyse all input before presenting a final Delegated Act. Any new request for inclusion/exclusion from Annex I of the EUDR that might be presented during the public feedback will be analysed according to the assessment methodology presented in this paper.

Table 1: Product codes proposed for inclusion in Annex I of EUDR

Commodity	HS Code	Description
Cattle	ex 0206 21 00	Frozen cattle tongues
Coffee	ex 2101 11 00	Extracts, essences, and concentrates of coffee
Oil palm	ex 1516 20	Palm, palm kernel and babassu oils and their fractions, partly or wholly hydrogenated, inter-esterified, re-esterified or elaidinised, whether or not refined, but not further prepared
Oil palm	ex 1518 00	Palm, palm kernel and babassu oils and their fractions boiled, oxidised, dehydrated, sulphurised, blown, polymerised by heat in vacuum or in inert gas or otherwise chemically modified, excluding those of heading 1516; inedible mixtures or preparations of animal, vegetable or microbial fats or oils or of fractions of different fats or oils of this chapter, that contain or have been made using oil palm
Oil palm	ex 1520 00	Crude glycerol, glycerol waters and lyes that have been produced using oil palm
Oil palm	ex 2905 16	Octanol (octyl alcohol) and isomers thereof, that have been synthesized using oil palm
Oil palm	ex 2905 17 00	Dodecan-1-ol (lauryl alcohol), hexadecan-1-ol (cetyl alcohol) and octadecan-1-ol (stearyl alcohol), that have been synthesized using oil palm

Oil palm	ex 2905 19 00	Other saturated monohydric alcohols, not elsewhere specified or included, that have synthesized using oil palm
Oil palm	ex 2915 39	Esters of acetic acid, other than ethyl acetate, vinyl acetate, n-butyl acetate and dinoseb (ISO) acetate, that have been synthesized using oil palm
Oil palm	ex 2916 19 10	Undecenoic acids, its salts and esters that have been synthesized using oil palm
Oil palm	ex 2921 19	Acyclic monoamines and their derivatives; salts thereof, other than methylamine, di- or trimethylamine and their salts, 2-(N,N-dimethylamino)ethylchloride hydrochloride, 2-(N,N-diethylamino)ethylchloride hydrochloride and 2-(N,N-diisopropylamino)ethylchloride hydrochloride, that have been synthesized using oil palm
Oil palm	ex 2923 90 00	Quaternary ammonium salts and hydroxides, other than choline and its salts, tetraethylammonium perfluorooctane sulphonate and didecyldimethylammonium perfluorooctane sulphonate, that have been synthesized using oil palm
Oil palm	ex 2924 19 00	Acyclic amides, carbamates and their salts, other than meprobamate (INN), fluoroacetamide (ISO), monocrotophos (ISO) and phosphamidon (ISO), that have been synthesized using oil palm
Oil palm	ex 3824 99	Other chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included, that contain or have been made using oil palm
Oil palm	ex 3907 29	Other polyethers in primary forms, other than bis(polyoxyethylene) methylphosphonate, that have been made using oil palm
Oil palm	ex 3401 11 00	Soap in the form of bars, cakes, moulded pieces or shapes for toilet use (including medicated products), that contain or have been made using oil palm
Oil palm	ex 3401 20	Soap in forms other than bars, cakes, moulded pieces or shapes, that contain or have been made using oil palm

Table 2: Products codes proposed for exclusion from Annex I of EUDR

Commodity	HS Code	Description
Cattle	ex 4101	Raw hides and skins of cattle (fresh, or salted, dried, limed, pickled or otherwise preserved, but not tanned,

		parchment-dressed or further prepared), whether or not dehaired or split
Cattle	ex 4104	Tanned or crust hides and skins of cattle, without hair on, whether or not split, but not further prepared
Cattle	ex 4107	Leather of cattle, further prepared after tanning or crusting, including parchment-dressed leather, without hair on, whether or not split, other than leather of heading 4114

Table 3: Product codes proposed for replacement in Annex I of EUDR

Commodity	HS Code	To be replaced with
Rubber	ex 4012 Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber	ex 4012 90 30 Tyre treads

ANNEX I - KEY VARIABLES AND DATA SOURCES

The methodology presented in this SWD is based on a stepwise approach bringing together data on deforestation footprint of derived products, costs of compliance and trade aspects. Three sets of key variables underpin the inclusion and exclusion logic presented in Section 3 and elaborated further below. These are:

(i) The estimated embedded deforestation and associated emissions in derived products placed on the EU market by operators at product level which underpins the calculation of environmental benefits.
(ii) The estimated recurring compliance costs.
(iii) Trade volumes and values.

Embedded deforestation and associated emissions

The deforestation D_p embedded in the import of product p is the summed product of the deforestation intensity $I_{r,c,p}$ of raw commodity r in country c, the volume of the derived product placed on the EU market by opeartors $M_{p,c}$, and the conversion factor f_p over time period 2015-2020[18]:

$$D_p = \sum_c I_{r,c,p} \cdot f_p \cdot M_{p,c}$$

The conversion factor f_p expresses the proportion of the relevant primary commodity contained in a given derived product. It translates trade volumes of derived goods into the corresponding quantity of primary commodity embedded in those goods for the purpose of estimating associated deforestation and emissions. The conversion ratio therefore accounts only for processing losses and for dilution resulting from the incorporation of other ingredients not derived from the same primary commodity. It does not reflect the generation of co-products or by-products during primary processing, as these outputs have their own economic value and associated deforestation impacts.

This approach avoids overstating impacts by attributing the entire upstream production volume to a single downstream product. Instead, it ensures that only the share of the primary commodity physically embodied in the traded product is considered, while upstream impacts are allocated proportionally across all economically valuable co-products. In this way, the methodology maintains internal consistency between physical trade flows and impact accounting and prevents double counting or misallocation of deforestation risk.

[18] The DeDuCE dataset, which provides estimates of deforestation by country and commodity, is only available up to 2022. However, the model exhibits limitations for the years 2021–2022, making it difficult to accurately assess recent trends in the deforestation impact of derived products. In particular, delays in national reporting of agricultural land-use and harvested area data, which serve as inputs to the DeDuCE model, may distort deforestation signals.

Illustrative example of the conversion factor for soap

To produce 1 tonne of soap, 400 kg of palm oil are required, while the remaining 600 kg consists of other oils, water, and salts. The conversion factor for palm oil in this soap is therefore 0.4. This factor accounts for processing losses during the soap production, but not for the refining from palm nuts. Co-products such as palm kernel cake, crude palm oil, or palm oil mill effluent (POME) have their own economic value and are allocated their own share of upstream deforestation and emission impacts.

Conversion factors are assumed to be constant over time and geography and computed based on a combination of scientific literature and expert and stakeholder consultations, building on work delivered by the consultants under the review contract.

The volume M_p of dervided product p placed on the EU market by operators is derived from COMEXT, the European Commission's official database on international trade in goods[19]. COMEXT provides detailed, product-level import statistics reported by both EU member states and partner countries[20].

The deforestation intensity $I_{r,c,p}$ indicates, on average, the amount of deforestation associated with the production of one unit of raw commodity r in country c. It reflects the area of forest converted per unit of commodity produced, considering land-cover changes directly attributable to that commodity. A distinction is made between the computation of the deforestation intensity factor for raw commodities and derived products.

For raw commodities, the deforestation intensity I_{raw} is computed as the ratio between the reported forest land-cover loss $F_{c,r}$, in hectares, directly attributable to the cultivation of that commodity in country c and the total production of that commodity $Q_{c,r}$, in tonnes, in the same country and period:

$$I_{raw,r,c} = \frac{F_{c,r}}{Q_{c,r}}$$

Annual deforestation data per commodity and country are sourced from DeDuCE[17], a database of deforestation and emissions statistics linked to agricultural and forestry production, based on the scientific, peer-reviewed work of Singh and Persson, published in *Nature Food* (2026).

[19] Eurostat, Comext – International Trade in Goods Database (https://ec.europa.eu/eurostat/web/international-trade-in-goods/database)

[20] Singh, C. and Persson, U.M. (2026). Global patterns of commodity-driven deforestation and associated carbon emissions (https://www.deforestationfootprint.earth/)

This work builds on the work of Pendrill and Persson (2019)[21], used in the impact assessment of the EUDR, by applying a new comprehensive integrated modelling framework (DeDuCE) combining spatial tree-cover loss data, statistical land-use data, and carbon stock maps to directly attribute deforestation and its emissions to specific commodities.

National production statistics for the commodities are extracted from FAOSTAT, the statistical database of the Food and Agriculture Organization of the United Nations[22]. As the reporting categories in the FAOSTAT and DeDuCE databases are not identical, a mapping was conducted between the commodities in DeDuCE and FAOSTAT prior to calculating the deforestation intensity ratios for each relevant commodity (see Table 4).

Table 4: Mapping between the commodities regulated under the EUDR and reporting categories in the DeDuCE and FAOSTAT databases

EUDR commodity	***DeDuCe***	***FAOSTAT***
Cattle	Cattle meat	Meat of cattle with bone, fresh or chilled Edible offal of cattle, fresh, chilled or frozen Cattle fat, unrendered
	Leather	Raw hides and skins of cattle
Cocoa	Cocoa beans	Cocoa beans
Coffee	Coffee, green	Coffee green
Oil palm	Oil palm fruit	Oil palm fruit
Rubber	Natural rubber in primary forms	Natural rubber in primary forms
Soya	Soya beans	Soya beans
Wood	Forest plantation	Sawlogs and veneer logs, non-coniferous and non-coniferous Pulpwood, round and split, coniferous and non-coniferous Other industrial roundwood, coniferous and non-coniferous

[21] Pendrill, F., Persson, U. M., Godar, J., & Kastner, T. (2019). Deforestation displaced: trade in forest-risk commodities and the prospects for a global forest transition. *Environmental Research Letters*, *14*(5), 055003. (https://iopscience.iop.org/article/10.1088/1748-9326/ab0d41)
[22] FAOSTAT – Food and Agriculture Organization of the United Nations (https://www.fao.org/faostat)

Whilst this deforestation intensity factor can be safely applied when computing the deforestation impact of raw commodities, it is only valid for derived products under the assumption that the country of origin is the same as the country of production. In reality, supply chains are often more complex: raw commodities are frequently traded and refined into derived products in a different country, resulting in a divergence between the country of production of the raw commodity and the country of origin of the product.

To account for this and ensure that the deforestation impact in the country of production is appropriately reflected, even when the product passes through a third country for processing, a separate deforestation intensity factor is computed for derived products. This derived-product intensity factor $I_{derived}$ reflects the weighted deforestation per unit of product volume, combining the domestic deforestation occurring in the country where the product is processed, the imported deforestation embodied in the raw commodities sourced V_{in} from other countries, and exported deforestation associated with raw commodities exported V_{out} for further processing:

$$I_{derived,r,c} = \frac{F_{c,r} + \sum_b \left(I_{raw,r,b} \cdot V_{in,c,b} - I_{raw,r,c} \cdot V_{out,c,b} \right)}{Q_{c,r} + \sum_b \left(V_{in,c,b} - V_{out,c,b} \right)}$$

The volume of imports and exports is adopted from FAOSTAT's detailed trade database, which provides country-level bilateral trade flows by commodity. The database compiles officially reported national trade statistics and harmonises them using internationally comparable commodity classifications, ensuring consistency across reporting countries and over time. For leather products, limited statistics are available in FAOSTAT. Therefore, bilateral trade statistics from UN Comtrade were used to capture leather-related trade flows.

Illustrative example of the intensity factor for derived cocoa products from Switzerland

Consider derived cocoa products, such as chocolate, produced in Switzerland, a country that does not cultivate cocoa domestically. All cocoa used is imported, hence the entire deforestation footprint of its derived cocoa products originates from the producing countries. Assume for instance that 70% of the cocoa originates from Côte d'Ivoire and 30% from Ghana and that the deforestation intensities of cocoa production in these countries are 2.5 ha per tonne for Côte d'Ivoire and 1.8 ha per tonne for Ghana. Based on these values, the weighted deforestation intensity of the cocoa embedded in Swiss chocolate is approximately 2.29 hectares per tonne of cocoa.

A similar approach can be applied to estimate the embedded greenhouse gas (GHG) emissions associated with the import of raw commodities and derived products. Just as deforestation intensities are expressed per unit of commodity produced in each country, emissions intensities can be calculated based on the total GHG emissions from and land cover or land-use change, divided by the total volume of the commodity produced.

The computed embedded deforestation and emissions on a product level are converted into an environmental benefit, i.e., the environmental benefits quantify the economic value of prevented forest loss and associated GHG emissions:

$$B_p = D_p \cdot P_{ETS} + E_p \cdot P_{ecosystem}$$

The economic value of prevented forest loss B_p is calculated as the product of the avoided deforestation (in hectares) and the monetary value of ecosystem services provided per hectare of forest $P_{ecosystem}$. The value of ecosystem services varies depending on several factors, including forest type (e.g., temperate versus tropical), climatic conditions, cultural and recreational use, and surrounding land-use patterns. For the purpose of this study, a uniform global value is applied across all forest types. An ecosystem services value[23], of €10,000 per hectare per year is adopted from Brander et al. (2024)[24] as a representative value for tropical, subtropical and temperature forests, while a carbon price of €100 per ton of CO_2 is adopted in line with the initial impact assessment[25].

The methodology incorporates only a cost per hectare of forest loss and, due to data limitations, does not quantify the cost of forest degradation. While this is not problematic for most commodities, where production is primarily associated with land cover change, it constitutes a limitation for the impact assessment of wood products, which are mainly associated with forest degradation rather than land use change. As a result, the environmental benefits of wood-derived products are likely to be significantly underestimated, making this analysis insufficient fit to draw robust conclusions regarding wood derivatives

[23] An ecosystem service value is the quantified benefit that humans derive from natural ecosystems, such as clean water, food production, climate regulation, recreation, and the maintenance of genetic resources that support crop improvement, medicine development, and ecosystem resilience.
[24] Brander, L. M., De Groot, R., Schägner, J. P., Guisado-Goñi, V., Van't Hoff, V., Solomonides, S., ... & Thomas, R. (2024). Economic values for ecosystem services: A global synthesis and way forward. *Ecosystem Services*, *66*, 101606.
[25] Commission Staff Working Document – Impact Assessment (2021)

Compliance costs

Estimated recurring compliance costs for operators under the obligations stipulated in the EUDR are calculated, in line with the methodology applied in the review study quantifying environmental reporting costs across the EU environmental acquis[26], as the product of the number of unique operators placing a derived product p in a given year on the EU27 market with the compliance cost per operator:

$$C_p = N_p \cdot C_{operator,p}$$

The number of unique operators N_p for product p is derived from DG TAXUD's Surveillance database. This database collects detailed customs data on goods imported into and exported from the European Union, based on customs declarations submitted by economic operators and national customs authorities.

Since operators frequently import multiple products within the same commodity group, compliance activities (e.g., IT system maintenance, due diligence systems, and reporting procedures) generate economies of scale. To avoid overestimating total compliance costs, the number of unique operators per product is therefore adjusted. Specifically, the count is scaled by the ratio between the sum of unique operators across all products within a commodity group and the total number of unique importers for that commodity. This adjustment accounts for overlaps between product-level importer populations and reflects cost synergies when operators handle multiple related products.

For importing operators, the calculations apply the same unit compliance cost assumptions as used in the initial impact assessment. The impact assessment estimated annual due diligence compliance costs per company at €1,000 in the low scenario, €10,000 in the central scenario, and €15,000 in a high scenario when sourcing from standard- or high-risk countries[27]. This study, in line with the aforementioned study, focuses exclusively on the central estimate of €10,000 per company. For sourcing from low-risk countries, the compliance cost per company is assumed to be 50% of the standard cost, reflecting the reduced due diligence obligations. Companies sourcing exclusively from low-risk countries are not required to conduct a risk assessment or implement a risk mitigation plan, thereby lowering administrative and compliance burdens. The average recurring compliance cost per unique operator $C_{operator,p}$ is for each product p calculated as the weighted average compliance costs, based on the value share of product volumes sourced from high-, standard-, and low-risk countries, in line with the country benchmarking set out in the Implementing Regulation published in May 2025[28].

[26] "Assessment of environmental reporting and the potential for simplification" study commissioned by the Commission and expected to be published in late 2026.

[27] Final report – Service contract on EU policy on forest products and deforestation – Task 3: impact assessment on demand side measure to address deforestation

[28] Commission Implementing Regulation laying down rules for the application of the Deforestation Regulation

Illustrative example of compliance cost for cocoa beans

Cocoa beans imported into the EU originate predominantly from standard-risk countries (77%), while the remaining 23% are sourced from low-risk countries. Imports from high-risk countries are negligible and can therefore be disregarded for the purpose of this calculation. Operators sourcing from standard- or high-risk countries incur an annual due diligence cost of €10,000 per company. For sourcing from low-risk countries, the compliance cost is assumed to be half of that amount (€5,000). The average compliance cost per unique operator is calculated as a weighted average, using the respective import shares as weights. Applying the 77% share at €10,000 and the 23% share at €5,000 results in an estimated average compliance cost of approximately €8,600 per cocoa-importing operator. With an assumed 1000 operators importing cocoa beans into the EU27, the total cost of compliance is €8.6 million per year.

ANNEX II – KEY INPUTS AND OUTPUTS

Commodity	HS code	Conversion factor (-)	Commodity share (-)	Import (t/yr)	Intra-EU trade (t/yr)	Import value ('000 €)	Importers (#)	Deforestation (ha)	Emissions (MtCO2)	Environmental benefits ('000 €/yr)	Compliance costs ('000 €/yr)
Cattle	4101	1.00	1.00	144.20	693.62	283,996	348.00	283-565	0.09-0.17	11,278-22,557	740.63
	4104	2.33	1.00	373.45	79.94	1,027,113	1,291.00	17,495-34,989	7.0-14.0	876,406-1,752,812	3,843.23
	4107	4.20	1.00	47.99	90.25	731,531	4,125.00	1,726-3,451	0.74-1.47	90,784-181,567	12,157.65
Coffee	210111	2.60	1.00	62.17	107.90	501,388	1,093.50	1,864.88	0.36	54,242.89	4,247.09
Oil Palm	1516	1.00	1.00	123.55	581.50	159,027	156.00	143.80	0.07	8,808.58	543.58
	1518	1.00	1.00	1,195.18	1,948.22	667,340	647.00	1,455.39	0.71	85,711.68	2,126.22
	152000	0.86	0.81	90.90	513.94	21,239	178.00	90.10	0.03	3,690.90	629.57
	230660	1.00	1.00	1,754.96	646.33	206,319	40.00	1,824.37	1.36	154,468.16	186.59
	2309	0.51	0.50	1,728.34	10,782.57	1,709,671	5,010.50	923.37	0.42	51,422.46	12,377.05
	290516	1.07	0.99	23.64	236.52	29,909	104.50	26.65	0.02	1,806.46	318.33
	290517	1.02	0.99	27.26	49.93	33,830	139.00	28.39	0.01	1,719.89	441.85
	290519	1.02	0.99	53.43	310.71	91,323	416.00	65.18	0.02	2,229.61	1,189.97
	291539	0.84	0.82	74.05	153.38	153,797	680.50	67.58	0.04	4,445.81	1,651.39
	291615	0.84	0.82	10.46	35.50	18,391	351.50	9.88	0.01	658.80	1,209.12
	29161910	0.84	0.82	36.57	0.31	21,361	65.50	31.08	0.03	3,005.78	304.20
	292119	0.96	0.93	38.75	76.11	132,003	649.50	39.07	0.02	2,745.98	1,589.96
	29212900	0.81	0.77	10.38	74.83	37,225	473.00	8.99	0.01	635.05	1,131.86
	292390	0.71	0.63	49.29	98.97	146,023	933.00	36.67	0.02	2,679.80	2,203.47
	292419	1.08	0.87	61.88	135.14	212,289	1,529.00	77.79	0.04	4,565.08	3,657.57
	340111	0.50	0.50	142.03	338.14	243,474	4083.50	68.410	0.034	€4,035,633	10,905.84
	340120	0.50	0.50	79.12	255.49	97,701	3198.00	45.804	0.021	€2,533,409	9,693.85
	382499	0.97	0.97	819.25	5,922.74	2,368,005	2,656.50	903.44	0.45	53,840.70	6,482.79
	38260010	0.50	0.41	2,212.70	7,806.59	1,721,769	95.00	1,322.21	0.54	66,912.89	352.65
	390729	0.54	0.48	325.91	1,559.24	942,662	471.00	183.87	0.11	13,026.92	1,122.17

Rubber	40121100	0.04	0.14	1.21	8.62	2,974	45.00	0.14	0.00	5,554.98	86.79
	40121200	0.08	0.30	11.60	85.26	30,153	88.50	5.31	0.00	191,607.60	170.10
	40121300	0.11	0.43	2.21	2.22	6,376	52.00	1.41	0.00	51,391.87	100.02
	40121900	0.04	0.14	0.76	6.44	1,612	82.00	0.12	0.00	4,285.99	158.59
	40129020	0.11	0.43	56.93	54.95	133,253	473.50	26.69	0.01	850,947.16	913.50
	40129090	0.20	0.20	1.93	1.45	6,464	438.00	1.30	0.00	42,616.64	906.84