



THEMATIC INSIGHTS

Chopping and changes: what are the implications of the EU's Deforestation Regulation?



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At a glance

- The European Union's Regulation on deforestation-free products (EUDR) establishes an exacting due diligence process for companies regarding the import of deforestation-risk products such as palm oil, timber, cocoa, coffee, leather, wood, pulp and furniture, among other things.
- The EU estimates this could increase costs by €175 million. €2.6 billion, which could equate to between 0.3%-4.3% of companies' input costs and not just for those based in the EU, but also multinationals importing to the EU.
- We are working to identify the risks and opportunities around this theme, looking at issuers who are potentially affected. This has been the basis for discussion with equity and fixed income investment teams and has helped us prioritise engagement.
- The EUDR will also likely be a catalyst for innovation in the wider "sustainable food" theme and with similar provisions potentially being introduced by some US states and in additional global markets, this is certainly a theme to watch.

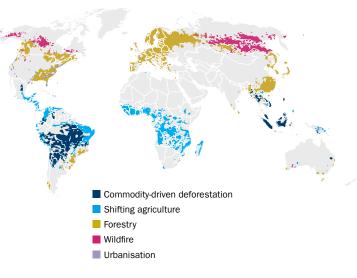


Despite numerous corporate sustainability pledges and multistakeholder initiatives, progress on reducing deforestation globally has been patchy. Population growth, increased food and materials demand and the need for economic development continue to drive the expansion of agriculture into previously forested areas (Figure 1).

While it has been challenging, we think efforts to address deforestation will be redoubled – the 10% of global greenhouse gas emissions¹ derived from deforestation will, as our grid and transport systems are decarbonised, become harder to ignore. So will the contribution of deforestation to biodiversity loss and an increased vulnerability to shifting weather patterns. As such, action from regulators and stakeholders will make the theme increasingly material for companies and their investors.

Introduced in June 2023, we see the European Union's Regulation on deforestation-free products (EUDR)² as a step towards this. It effectively brings forward the time horizon for material impacts such as supply-chain disruption and increased input and operational costs, as well as potential controversy and damage to brands. At a macro level the EUDR may also shift trade patterns, reducing EU imports from countries with deforestation risks.

Figure 1: dominant cause of tree cover change or loss 2001-2020



Sources: University of Maryland and NASA Earth Observatory, 2021

¹ Emissions estimates linked to deforestation vary, given forests and land use change can be both a carbon source and a carbon sink. The IPCC estimates that net emissions from forestry, agriculture and land use change are 23% of global GHG emissions, of which deforestation is a proportion.

² https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en



What does the EUDR entail?

There are several reasons we think the EUDR may be an inflection point, each of which sets the regulation apart: the detailed nature of the due diligence process it establishes; the short 18-month implementation timeline; the big potential penalties; the broad definition of deforestation included in the regulation, extending to deforestation that is legal in the country of origin; and the inclusion of mechanisms for third parties to share information on non-compliance.

Practically speaking, from the end of 2024 companies will have to submit due diligence statements for imports to the EU of palm oil, cocoa, coffee, timber, rubber, beef and soy specifically, as well as for "relevant products" including leather, chocolate, cocoa butter, fatty acids, peroxides and glycerol, wood, pulp, furniture, tires and other derived products.

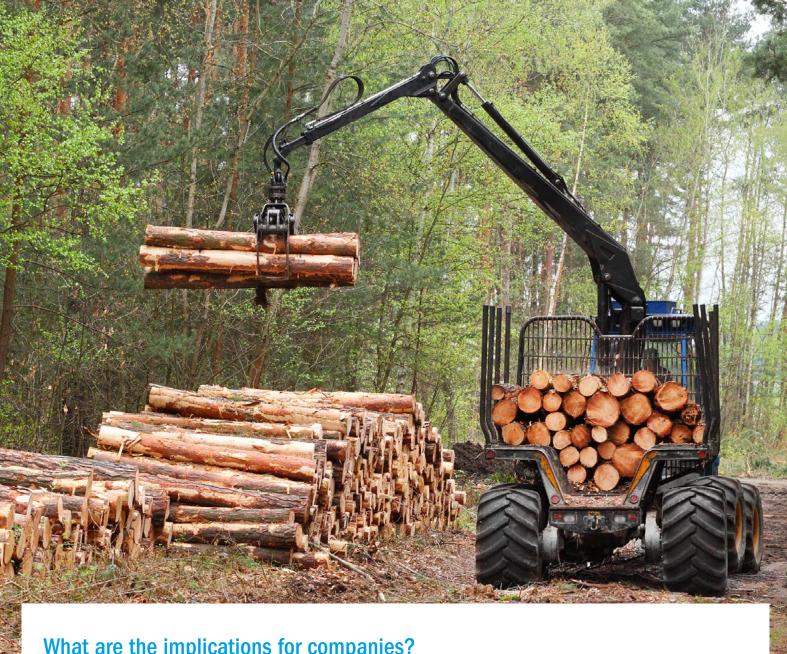
Information requirements include geolocation data to the plot of land where the material was produced, demonstrating that

there has been no deforestation or degradation of forest in the relevant area since December 2020. Companies also need to have carried out a risk assessment, and where there is a non-negligible risk of deforestation, undertake mitigating actions. Relevant materials must also meet legal requirements from the country of origin – for example, human rights.

Potential penalties are severe: fines of at least 4% of EU revenues are possible, along with the confiscation of products at customs and other measures.

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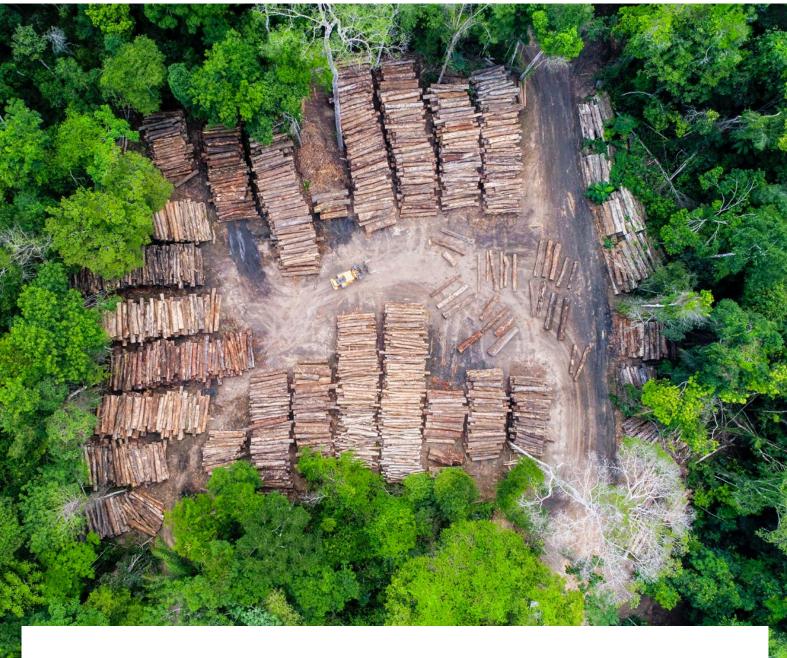


What are the implications for companies?

In short, the regulation is likely to contribute to overall inflationary impacts seen over the past year. Companies will need to step up their due diligence and traceability systems to facilitate the provision of geographic information – going beyond the requirements of many of the commodity certification systems used to-date. Implementation of satellite mapping and the segregation of import shipments will also be needed. This is likely to increase operational and input costs. We could see oneoff costs of implementation and/or enhanced risk assessment, due diligence and traceability systems, and increases in, and volatility of, input costs due to supply-demand gaps for fully traceable products and the need to segregate supply chains.

In its impact assessment of the regulation, the EU estimates that due diligence would increase costs somewhere in the range of €175 million-€2.6 billion, which could equate to between 0.3%-4.3% of companies' input costs. Costs will also apply not just to companies based in the EU, but multinationals importing to the EU as well.

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Identifying risk and opportunity

To identify relevant risks we assessed commodity volumes relative to EBITDA (earnings before interest, taxes, depreciation and amortisation), highlighting potential sensitivity to commodity price increases, as well as the proportion of EU revenues linked to in-scope products. In tandem, we assessed companies' regulatory preparedness using Columbia Threadneedle's proprietary deforestation risk management tool. By pulling this data together we created a heat map of issuers' potential exposures. This has been the basis for discussion with equity and fixed income investment teams and has helped us prioritise engagement.

We also identified issuers that may be vulnerable to supply disruption due to the scale of EU revenues and limited evidence of progress in traceability for specific commodities. This analysis highlighted the potential for issues within coffee and leather supply chains – two commodities with highly fragmented and often opaque supply chains. Issues may also arise where companies have been reliant on mass balance certificates or on traceability only to the first tier of the supply chain – for instance to palm oil mills rather than plantations. Where this is the case it implies there will be switching costs for companies to shift their sourcing. Analysis is further complicated by a lack of disclosure, for example around rubber, with the lack of data potentially masking material impacts.



Disruption to trading relationships?

At the macro level there are countries where EU exports may be at risk (Figure 2). Brazil appears to have downside exposure given the large volume of exports to the EU of coffee, soy and wood pulp – however, despite these large volumes they account for only circa 7% of Brazil's total exports by value.³

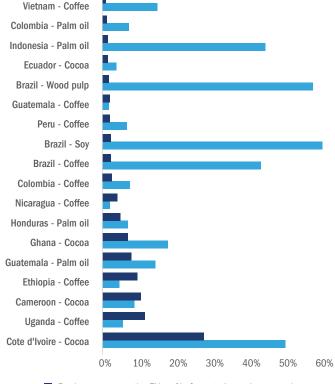
For Cote d'Ivoire, more than 20% of its total export value is derived from cocoa exported to the EU.⁴ However, given the cocoa market concentration in West Africa, exporting countries may have some negotiating leverage. At the time of writing, Cote d'Ivoire was sending a delegation to Brussels to secure an agreement where multinationals would bear the cost to implement the traceability measures. Resolution of this debate could become a prerequisite for resumption of the country's future cocoa sales.

Other emerging and middle-income countries have been vocally opposed to the regulation and are taking their case to the WTO.

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3 World Bank, 2022

Figure 2: EU trade relationships with forest risk countries



Product exports to the EU as % of country's total export value

% of product EU imports from the country

Source: European Commission/World Bank, 2022

European Commission/World Bank, 2022



Who benefits?

While the regulation will have some negative impacts, it is not all bad news. Ultimately it should spur supply of traceable commodities. It will likely also be a catalyst for innovation in the wider "sustainable food" theme. There are a few angles to consider:

- Companies with traceable supply chains: companies with long-standing efforts to trace their supply chains are better positioned to comply with the tight implementation timeline. This will favour the largest food and consumer companies with existing capabilities and financing.
- Traceability and mapping tools: traceability platforms are under development by numerous start-ups. Real-time satellite monitoring will be of benefit, through tools such as Airbus's Starling, a remote sensing solution that can help measure the environmental impact of supply chains.
- Alternatives to deforestation-risk commodities: companies such as Geno and C16Biosciences are using precision fermentation to produce palm oil, in collaboration with large fast-moving consumer goods companies such as Unilever and L'Oreal. WNWN Food Labs is at an earlier stage of doing the same for cocoa, with an R&D partnership with Mondelez. Numerous brands are exploring bio-based leather alternatives from bamboo, mycelium or fruit skins. More straightforward alternatives include recycled materials paper, pulp and rubber may all see increased demand due to avoidance of EUDR challenges.
- Tools and products to improve agricultural productivity:
 over the medium term the focus on deforestation will indirectly
 support efforts to improve agricultural productivity, for example
 through improved support for precision agriculture or regulatory
 changes on novel foods or gene editing tech. This may benefit
 companies such as Deere, CNH, Corteva and Bayer.

Conclusion

The EU's deforestation regulation will have potentially material impacts on companies' supply chains and on trading relationships. However, while the regulation sets a high bar, it is unlikely to be the last piece of legislation brought in on this theme. Similar provisions may be introduced by some US states and in additional global markets, making this a theme to watch.

Growth in the transition will not be linear, with different regions and industries seeing a different pace and speed of transition

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Get to know the author



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Olivia joined Columbia Threadneedle Investments in 2018. As part of the global research team she undertakes thematic research, engages with companies and collaborates with investment teams on the risks and opportunities arising from the shift toward sustainable food and materials and the circular economy. She previously worked at the Principles for Responsible Investment as well as in proxy voting and corporate sustainability consulting.

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