

**MAY 2023
REPORT**



MINDFUL MONEY REPORT

Tackling Global Deforestation

The Role of Investors

Prepared by Barry Coates and Shannen Barns of Mindful Money



What are the impacts?

Deforestation is a significant sustainability issue as it leaves long-term, negative impacts on the economy, vulnerable groups in society, the climate and the planet. These impacts are significant on a global scale. A continuation of forest loss at current rates will compromise the needs of both present and future generations.

Put simply, deforestation is the removal of forest ecosystems, which provide services that are important to human well-being and ecological health. Almost 50% of the world's forests have now been lost, largely by the process of deforestation, with half of this destruction taking place in the last century.¹ Most of the native forests in the OECD countries have already been converted and now the large-scale threats to forests are in developing countries, particularly in the tropical zone.

The main driver of tropical deforestation is the expansion of agricultural land, which is linked to the production of commodities such as beef, soy, and palm oil.² Due to the supply-chains of these commodities, deforestation is heavily influenced by the international community, leaving impacts that range far beyond the tropics.



Some of these impacts include:

Loss of biodiversity:

Forests are the most species-rich places on the planet, with an estimated 50% of total terrestrial biodiversity found in rainforests alone.³ Deforestation destroys the habitats of these species, leading to the extinction of some species and the reduction of others.

Climate change:

Forests play a crucial role in regulating the climate by absorbing and storing carbon dioxide, and rainforests alone are thought to store at least 250 billion tons of carbon.³ Deforestation disrupts this process, leading to an increase in the amount of greenhouse gases in the atmosphere, which contributes to climate change. It is thought that deforestation has accounted for an estimated 17% of total carbon emissions globally.⁴

Human rights:

Many indigenous communities rely on forests for their livelihoods, and deforestation can result in their displacement and loss of cultural heritage. Clearing land to capitalise on commodities can also result in conflicts between land-grabbing companies and local communities. Violence and threats to these communities are common, with 300 deaths reported in the Brazilian Amazonian states due to land use conflicts between 2010 and 2020, of which 70% of deaths were indigenous people.⁵ Conflicts and injustices are made worse by the acts of bribery, corruption, and fraud that are deeply ingrained in deforestation.

The global economy:

Over half the world's total Gross Domestic Product (GDP) is moderately or highly dependent on nature and its services.⁶ When ecosystem services (the benefits that people obtain from ecosystems, such as clean air and water, soil fertility, pollination, and carbon sequestration) are disrupted or destroyed by the process of deforestation, the global economy suffers. This is because these services underpin many economic sectors, including agriculture, fisheries, forestry, and tourism, and can also impact food security, water availability, climate stability, and human health.

On a local scale, deforestation can lead to a loss of income for communities, as well as a reduction in the availability of natural resources like timber and non-timber forest products.

Each of these issues are linked, and their interdependencies in the context of deforestation cannot be overlooked. Conserving forests is critical to our efforts to maintain biodiversity and limit global temperature rises, which in turn have great influence on society and the global economy. The loss of ecosystem services is felt far beyond the forested area themselves, and we risk triggering planetary tipping points with devastating consequences if we continue to disrupt these services.



“A continuation of forest loss at current rates will compromise the needs of both present and future generations.”

Who is involved?

Several large companies have been identified as driving deforestation through their supply chains. These companies include food and agriculture giants such as Cargill, Wilmar, and JBS, which have been linked to deforestation in the Amazon rainforest. Other major corporations involved in deforestation include palm oil producers such as Golden-Agri Resources and Sime Darby, and paper and pulp manufacturers such as Asia Pulp & Paper and APP-China. These companies have been accused of directly or indirectly clearing large areas of forest for their operations, resulting in significant environmental and social impacts, such as the loss of biodiversity and the displacement of local communities. As a result, there is increasing pressure on these companies and their investors to adopt more sustainable practices and to address the deforestation risks in their supply chains.

Even though many of these companies have put strong deforestation policies in place for their own operations, they may still be linked to deforestation through their supply chains. This is because their suppliers may not adhere to the same standards, or they may not have effective monitoring and enforcement mechanisms in place. In some areas, there is extensive illegal deforestation taking place,

fuelled by corruption, with governments unwilling or unable to enforce their laws.⁷ Companies may also face challenges in verifying the origin of the commodities they source, especially in complex and opaque supply chains.

Domestic and international financial institutions (including banks, insurance companies, and investment and pension funds), as well as individual investors, play a role in enabling deforestation. They provide finance for the upstream companies directly responsible for deforestation as well as the traders and downstream buyers in commodity supply chains.⁸

The financial giants repeatedly financing tropical deforestation include HSBC, Deutsche Bank, BNP Paribas, Rabobank, and Bank of China, with the worst being US bank JPMorgan, which has made deals worth an estimated \$9.38 billion with firms accused of deforestation.⁹ This number is only a small part of the picture. Global Canopy's Forest 500 Report - 2022, which tracks the policies and performance of the 350 most influential companies and 150 financial institutions linked to deforestation in their supply chains and investments, revealed that these companies were provided US\$6.1 trillion by financial institutions in 2022 alone.¹⁰



"Conserving forests is critical to our efforts to maintain biodiversity and limit global temperature rises, which in turn have great influence on society and the global economy."

Why should investors and the financial sector care?

The influence of investors, banks and the broader financial sector on the global commodity market means they are exposed to the many risks associated with tropical deforestation. By investing and lending to companies driving deforestation, the sector is exposed to:

Physical risks:

These result from the material destruction of deforestation, such as soil erosion or severe weather events from climate change. This can cause financial losses and impact the long-term viability of the industries that depend on these natural resources, such as agriculture and forestry, and in turn, the investors and financial institutions that support and invest in these industries.¹¹

Transitional risks:

These result from policy measures and changing consumer preferences. Companies that engage in deforestation may potentially be held liable for violations of regulations that protect forests, which result in regulatory fines or loss of business. Banks that finance companies involved in deforestation may also face legal repercussions. This risk is likely to increase in importance in the context of the proposed European Union (EU) Regulation on Deforestation-free Products, a new law which will prevent companies from placing commodities linked with deforestation and forest degradation onto the EU market or exporting them from the EU.

More information on the European Union Deforestation Regulation can be found in the further information section at the end of this report.

Outside of regulations, financial institutions that are seen supporting companies that engage in deforestation can suffer reputational damage as public concern about the environment grows. Consumer pressure may remove the social licence for these companies, as consumers become more aware of the drivers of deforestation and impacts on the climate. The reputational damage may lead to negative returns on financial investments, or financial institutions being called out directly for financing nature and climate destruction. The social risks associated with deforestation, such as forced displacement of local communities, human rights abuses, and conflict, can also damage a financial institution's reputation and lead to public pressure to divest from companies involved in such activities.



Systemic risks:

These result in the larger-scale risk of the breakdown of an entire system, due to the integrated environmental, social, and economic impacts of deforestation at the global scale. With the threat of whole system collapse, there is a moral responsibility of investors and financial institutions to consider the impact of their portfolios on the society, the economy, and the planet.

Reporting nature-related risks:

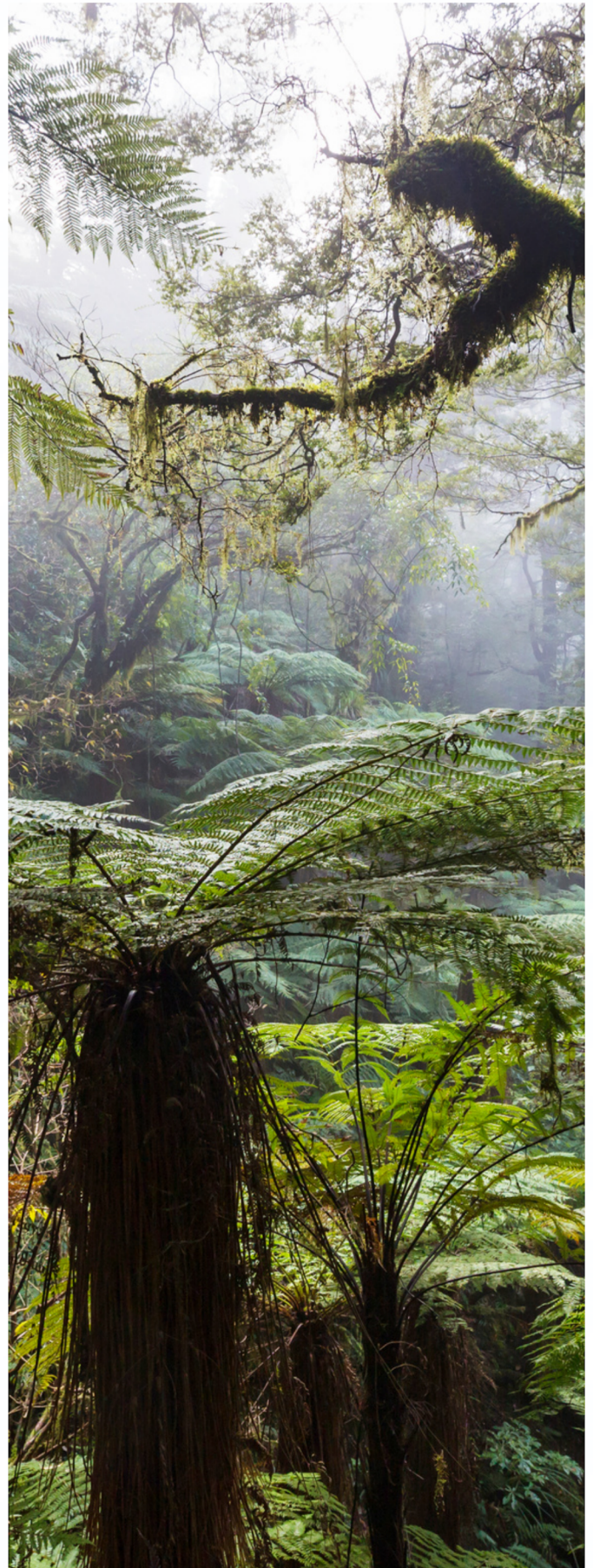
International sustainability reporting obligations are starting to extend beyond climate risks and impacts and include nature and biodiversity. However, unlike risk from climate change, understanding of nature-based risks is at a relatively early stage for most New Zealand companies. A new legal opinion by Chapman Tripp for The Aotearoa Circle advises that prudent directors and businesses should be starting on the path to identify, assess and manage nature-related risks, particularly if they depend on the environment for their business model.¹²

The opinion seeks to highlight current and anticipated regulatory and market trends to allow directors on the boards of New Zealand businesses that are particularly reliant on natural capital to stay “ahead of the curve” as new frameworks, regulations and expectations emerge globally and locally.

Directors will increasingly be expected to ensure that their businesses have processes in place to:

- Identify their businesses’ own dependencies on natural capital, ecosystem services and biodiversity that are at risk or vulnerable;
- Assess their businesses’ exposure to material nature-related risks including as to foreseeability, vulnerability and financial materiality; and
- Manage nature-related risks that may have a financially material impact on the business, as they would any other serious business risk.

The opinion also highlights important tools such as the Task Force on Nature-related Financial Disclosures (TNFD) framework to help New Zealand companies to identify, manage and report on nature-related risks effectively.



What can be done?

It is important for investors and the financial sector to consider these risks when making investment decisions and to support efforts to promote sustainable land use practices that maintain and enhance ecosystem services. Given investors and the financial sector have outsized influence on the commodity market driving deforestation, there are also several opportunities to address the impacts of deforestation through their lending and investments.

This goes beyond simply eliminating risks and towards effecting positive change, including opportunities for:

Engagement:

Investors and financial institutions can exercise leverage over the companies they invest in or finance, engaging with the companies to ensure their supply chains are free from deforestation and associated human rights abuses, or using their voting power in corporate resolutions. It is important that investment providers identify and report on the ways in which their engagement and influence is improving corporate practices and reducing the incidence of deforestation.

Divestment:

Not all companies involved in deforestation are willing or able to make substantial improvements to their business model.

Avoiding investments in companies with high risks associated with deforestation can reduce portfolio risk for investment providers and strengthen their reputation for responsible investment.

The financial power that institutional investors hold over the publicly listed companies driving deforestation provides the lever for divestment to have an impact on the companies involved in deforestation. While any single divestment has little impact, the combined effect of a large pool of capital switching investment from companies involved in deforestation or into companies with stronger deforestation commitments has an impact. When this occurs at a large scale, it influences the share prices of those companies, and their cost of capital.

Re-directing investment:

Addressing global deforestation will require active collaboration between governments, civil society, and the private sector. Financial institutions can play a vital role in facilitating collaboration and promoting sustainable development by adopting best practices and investing in sustainable solutions.

There is growing interest in investment that not only manages the damage to nature, but also delivers positive environmental and social impacts. This could include directing capital towards nature-positive activities that protect and regenerate forest ecosystem, such as green bonds, sustainable investment funds, sustainability-linked insurance policies, or sustainability-linked loans.



“Reputational damage may lead to negative returns on financial investments, or financial institutions being called out directly for financing nature and climate destruction.”


Policies:

Financial institutions are well placed to set strong deforestation policies and disclose their impacts on the planet. Doing so would set clear expectations to companies and investors, as well as generate pressure on other financial institutions which are lagging on deforestation-related policies and commitments. As of 2022, 61% of the financial institutions financing the companies driving deforestation do not have a single deforestation policy covering their lending and investments. Not only would policies provide financial institutions an advantage in a rapidly changing regulatory environment, especially given the new EU regulations, but policies to combat deforestation are also an important part of net zero or other climate-related commitments.

Due to the interdependencies between forest ecosystems and the climate, financial institutions cannot credibly deliver on climate goals without addressing the deforestation risks in their portfolios. Furthermore, due to the link between deforestation and human rights abuses affecting indigenous communities, deforestation financing is also incompatible with the United Nations Sustainable Development Goals.

Overall, the impacts of deforestation are not only significant but also interdependent, affecting both people and the planet. Investors and financial institutions that do not actively address these impacts through their lending and investments are exposing themselves to the multifaceted and ever-increasing risks of deforestation. Acting on deforestation, whether at a company, investor, or sector level, plays a critical role in reducing greenhouse gas emissions and biodiversity loss, supporting global economic development, and helping secure the safety and livelihoods of local communities across the world who rely on forest ecosystems.

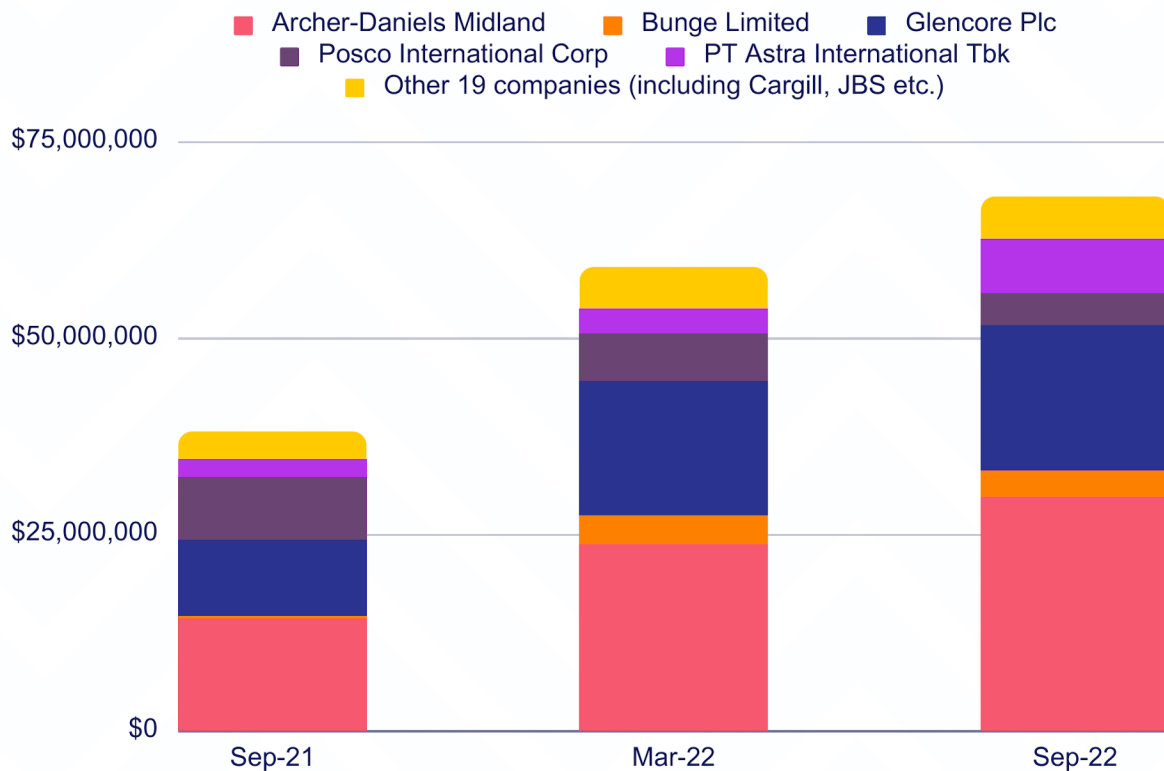
Further information for financial institutions looking to conduct due diligence to identify, prevent and mitigate the risks and impacts of deforestation and associated human rights abuses can be accessed through [Global Canopy's 2023 Guide on Deforestation-Free Finance for Financial Institutions](#). Individual investors may also find the [Global Canopy 2023 Deforestation-Free Investment Mandate](#) or the [Forest & Finance Policy Scores for Banks](#) useful.



"Companies linked to deforestation in their supply chains were provided US\$6.1 trillion by financial institutions in 2022 alone."

New Zealand investors' role in deforestation

New Zealand Investment in Companies Driving Deforestation



New Zealand investors may have investments in companies that source commodities, such as palm oil, beef, or soy, from areas that have experienced deforestation, in which case they would be contributing to the problem of deforestation through their investments.

Mindful Money maintains a list of companies of concern, including companies involved in environmental degradation and human rights violations through their products or operations. On this list, 24 companies have been identified as being involved in, or directly linked to through their supply chain, the act of deforestation. A link to this methodology is provided at the end of this report.

Over the past year, New Zealand's investment in these companies in both Kiwisaver and Managed Funds has increased substantially, from \$38m to \$68m between September 2021 to September 2022. Notably almost \$40m of the total for September 2022 is in individuals' KiwiSaver portfolios.

This includes significant investment in the main players mentioned earlier in this report, such as Cargill, JBS, Sime Darby, Wilmar and Golden Agri-Resources Ltd, but New Zealand also has growing investment in several other large companies driving deforestation through their supply chains.

The five largest of these companies in terms of investment across both Kiwisaver portfolios and Managed Funds include: Archer-Daniels Midland, Bunge Limited, Glencore Plc, POSCO International Corp and PT Astra International Tbk.



These five companies have been linked to deforestation

Archer Daniels Midland

Archer Daniels Midland (ADM) is a global agribusiness company involved in deforestation through its sourcing of commodities like soy, palm oil, and cocoa. As a major player in the global food and agriculture industry, ADM purchases raw materials from suppliers around the world, many of whom engage in deforestation to clear land for crop production. In 2020, ADM was one of several agribusiness companies that signed a statement pledging to stop sourcing soy from newly deforested areas in the Brazilian Amazon. However, the company continues to be linked to alleged deforestation and land-grabbing in the Brazilian Cerrado, a hugely biodiverse savannah and critical carbon sink.¹³

Bunge Limited

Bunge is a global agribusiness and food company, and one of the world's largest soybean traders. Bunge has been criticised for not doing enough to ensure that its soybean and palm oil suppliers do not engage in deforestation or other environmentally harmful practices and has also been accused of buying beef from suppliers that engage in illegal deforestation and land grabbing.¹⁴

Glencore Plc

Glencore is a multinational commodity trading and mining company. Glencore has been criticised for not having adequate policies in place to ensure that its palm oil suppliers in Southeast Asia do not engage in deforestation or other environmentally harmful practices. Glencore also operates mines in several countries, including Indonesia and the Democratic Republic of Congo, where the mining industry has been linked to deforestation and other environmental damage.¹⁵

POSCO International

POSCO is a global trading and investment company operates in a variety of industries, including energy, minerals, and infrastructure, as well as the trading of various commodities. POSCO owns several palm oil operations in Indonesia, and some have been linked to deforestation and other environmental pollution that have negatively affected local communities.¹⁶

PT Astra International Tbk

Astra International Tbk is an Indonesian conglomerate that operates in various sectors, including automotive, financial services, and agribusiness. Astra Agro Lestari, a subsidiary of Astra International, is one of the largest palm oil producers in Indonesia and has been accused of clearing large areas of forest and peatland to make way for palm oil plantations.¹⁷ The company has also been linked to forest fires in Indonesia, which are often set intentionally to clear land for agriculture.¹⁸

Where to from here

New Zealand has already made a significant step towards ending global deforestation during the United Nations (UN) COP26 climate summit in Glasgow last year, where 145 countries pledged to end the felling of forests by the end of the decade.¹⁹ As a signatory to the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework, and member of the UN Framework Convention on Climate Change, New Zealand has also committed to reducing greenhouse gas emissions, protecting global biodiversity, and promoting sustainable development. Investing in companies that contribute to global deforestation can undermine these commitments and make it more difficult to achieve Sustainable Development Goals, both in New Zealand and on a global scale.

Although governments have made international commitments to end deforestation, these agreements are yet to be fully honoured. Global investors need to accept their responsibility to act and seek to become part of the solution through investing in sustainable forest management and regeneration, rather than remaining part of the problem. Investors should not only fulfil their commitments to these international agreements but exceed them by actively promoting sustainable practices and preserving the world's forests for generations to come.

It is time for New Zealanders to take a stand and use their financial power to support sustainable development and combat global deforestation. For too long, the destruction of forests for short term financial gain has been financed by international capital from New Zealand and other countries. By actively engaging with or divesting from these harmful companies, and instead investing in companies that prioritise environmental protection and conservation, investors can make a real impact in mitigating the devastating effects of deforestation on society, the economy, and the planet.



“It is time for New Zealanders to take a stand and use their financial power to support sustainable development and combat global deforestation.”

Further Information

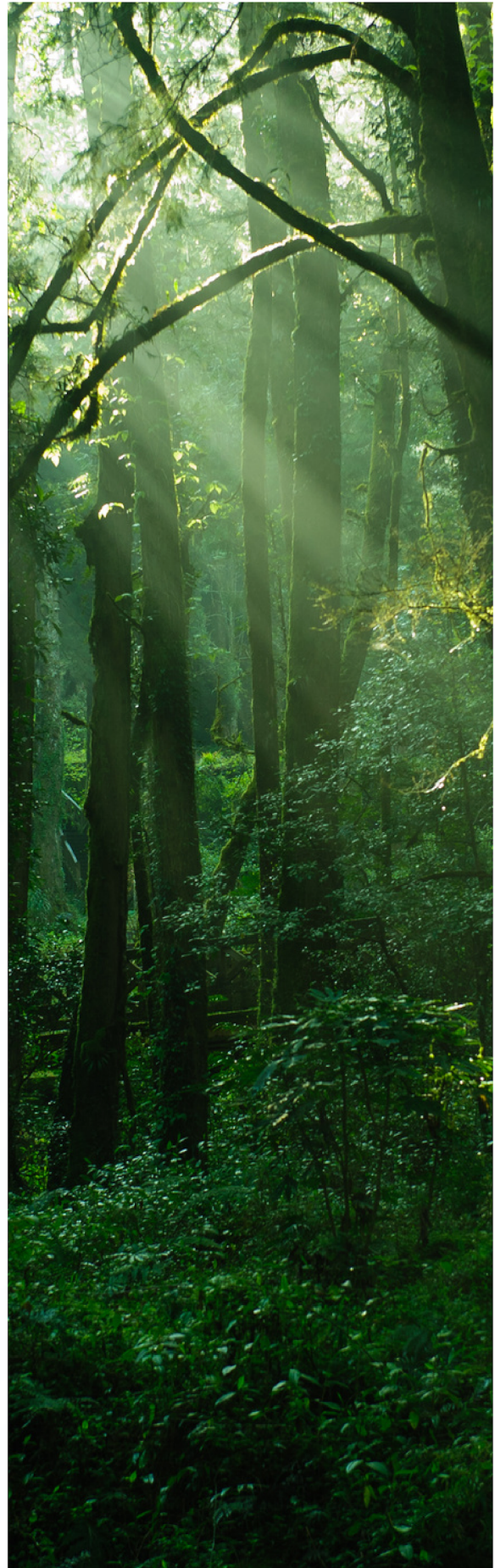
European Union Deforestation Regulation

In April 2023, the European Parliament overwhelmingly approved a ground-breaking new law that will require companies to demonstrate that their products have not contributed to deforestation if they want to sell them in the European Union (EU) market. The European Deforestation Regulation (EUDR) will apply to beef, soy, palm oil, cocoa, coffee, rubber, and timber, as well as most of the products derived from these commodities like leather, hides and chocolate.

The purpose of the regulation is to halt deforestation driven by EU consumption, setting up a due diligence requirement to verify that goods placed on the EU market or exported from it are not linked to production on land subject to deforestation and forest degradation anywhere in the world, and compliant with local laws in the producer country.

This regulation will set a global benchmark. Taking effect from early 2024, the EU will require firms working in deforestation hotspots to certify that their goods have not harmed forests both in the EU and elsewhere in the world. Since the EU is a major economy and consumer of these commodities, this step will help stop a significant share of global deforestation and forest degradation, in turn reducing greenhouse gas emissions and biodiversity loss.²⁰

Operators and traders will have to prove that the products are both deforestation-free (produced on land that was not subject to deforestation after 31 December 2020) and legal (compliant with all relevant applicable laws in force in the country of production).²¹ Large companies will have 18 months to comply with these new regulations, while smaller companies have 24 months.



By promoting the consumption of 'deforestation-free' products and reducing the EU's impact on global deforestation and forest degradation, the regulations are expected to bring down greenhouse gas emissions and biodiversity loss. This would also mean an estimated reduction of at least 31.9 million metric tons of carbon emissions to the atmosphere every year due to EU consumption and production of the relevant commodities, which could be translated into economic savings of at least € 3.2 billion annually.²¹ Combatting deforestation will go hand in hand with creating incentives for a transition toward more sustainable use of natural resources, contributing to preserving more intact forests, boosting market opportunities for sustainable products which in turn could strengthen local and indigenous economies, and eliminating unfair competition from unsustainable producers exporting to the EU market.

Financial institutions that provide financing to companies operating in the EU must ensure that their clients comply with these regulations to avoid legal repercussions. On the other hand, the EU regulations on deforestation are part of a broader effort to promote sustainable finance. By aligning their activities with these regulations, financial institutions can demonstrate their commitment to sustainable development, which can attract environmentally and socially conscious investors and customers.

Mindful Money methodology

Further information on Mindful Money methodology for deriving companies of concern can be found online at <https://mindfulmoney.nz/about/methodology/>



References:

1. Ritchie, H. & Roser, M. (2021). *Forests and Deforestation*. Our World in Data. <https://ourworldindata.org/deforestation>
2. World Economic Forum. (2020). *Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy*. World Economic Forum in collaboration with PwC. Retrieved from https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf
3. Butler, R. (2020). *A Place Out of Time: Tropical Rainforests and the Perils They Face - information on tropical forests, deforestation, and biodiversity*. Mongabay. Retrieved from <https://rainforests.mongabay.com/>
4. Nellemann, C. (2012). *Green carbon, black trade: illegal logging, tax fraud and laundering in the world's tropical forests*. Green carbon, black trade: illegal logging, tax fraud and laundering in the world's tropical forests. A Rapid Response Assessment. INTERPOL Environmental Crime Programme. United Nations Environment Programme. Retrieved from https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s_document/609/original/GRIDPublication.pdf?1605784279
5. Acebes, C.M., Wilkinson, D., & Téllez-Chávez, L. (2019). *Rainforest Mafias. How Violence and Impunity Fuel Deforestation in Brazil's Amazon*. Human Rights Watch. Retrieved from https://www.hrw.org/sites/default/files/report_pdf_brazil0919_web.pdf
6. de Groot, R. et al. (2012). *Global estimates of the value of ecosystems and their services in monetary units*. *Ecosystem services*. 1(1). <https://doi.org/10.1016/j.ecoser.2012.07.005>
7. Bolton, L. (2020). *Criminal activity and deforestation in Latin America*. K4D Helpdesk Report 918. Brighton, UK: Institute of Development Studies. <https://doi.org/10.19088/K4D.2021.003>
8. Van Gelder, J.W. & Kuepper, B. (2020). *Funding destruction of the Amazon and the Cerrado. A Fair Finance Guide Netherlands case study on deforestation risks in soy and beef supply chains*. *Eerlijke Geldwijzer*. Retrieved from <https://fairfinanceguide.org/media/496089/funding-destruction-of-amazon-cerrado.pdf>
9. Global Witness. 2021. *Deforestation Dividends. How global banks profit from rainforest destruction and human rights abuses*. Global Witness. Retrieved from <https://www.globalwitness.org/en/campaigns/forests/deforestation-dividends/>
10. Forest500, 2023. *Annual Report 2023: A watershed year for action on deforestation*. Forest500 – a project of Global Canopy. Retrieved from https://forest500.org/sites/default/files/forest_500-2023_annual_report.pdf
11. Patel, K. – WWF-International. (2022). *Seeing the forest for the trees - a practical guide for financial institutions to take action against deforestation and conversion risks*. Worldwide Fund for Nature, Gland, Switzerland. Retrieved from https://wwfint.awsassets.panda.org/downloads/seeing_the_forest_for_the_trees.pdf
12. Chapman Tripp. 2023. *New Zealand Director Duties to Manage Nature-Related Risk and Impact on Natural Capital*. Chapman Tripp Legal Opinion Instructed by The Aotearoa Circle. Retrieved from https://chapmantripp.com/media/ublccg02/the-aotearoa-circle_tnfd_opinion.pdf
13. Global Witness. 2022. *Bankrolling Destruction – Briefing*. Global Witness. Retrieved from <https://www.globalwitness.org/en/campaigns/forests/bankrolling-deforestation/>
14. Olsen, V. 2022. *Storebrand AM places Bunge and ADM on observation list due to deforestation risk*. Storebrand. Retrieved from <https://www.storebrand.no/en/asset-management/news/storebrand-asset-management-places-bunge-and-adm-on-observation-list-due-to-deforestation-risk>
15. Environmental Justice Atlas. 2023. *Mutanda Mine, Democratic Republic of Congo*. EJAtlas. Retrieved from <https://ejatlas.org/print/mutanda-mine-democratic-republic-of-congo>
16. Friends of the Earth Asia Pacific. 2019. *NGOs from Korea and Indonesia file OECD complaint against POSCO International*. Friends of the Earth Asia Pacific. Retrieved from <https://foeasiapacific.org/2019/12/12/ngos-from-korea-and-indonesia-file-oecd-complaint-against-posco-international/>
17. Contant, J. & Madan, G. 2022. *No Consent Astra Agro Lestari's land grab in Central and West Sulawesi, Indonesia*. Friends of the Earth US & Friends of the Earth Walhi. Retrieved from https://foe.org/wp-content/uploads/2022/03/Astra_Agro_Lestari_Report_v4.pdf
18. Mongabay. 2016. *Fires ravaged forests in Indonesian palm oil giant Astra's land in 2015*. Mongabay. Retrieved from <https://news.mongabay.com/2016/10/fires-ravaged-forests-in-indonesian-palm-oil-giant-astras-land-in-2015/>
19. New Zealand Ministry of Foreign Affairs & Trade. n. d. *Commitments made at COP26. MFAT*. Retrieved from <https://www.mfat.govt.nz/en/environment/climate-change/working-with-the-world/building-international-collaboration/commitments-made-at-cop26/>
20. European Commission. 2022. *Green Deal: EU agrees law to fight global deforestation and forest degradation driven by EU production and consumption*. European Commission. Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7444
21. European Commission. 2021. *Questions and Answers on new rules for deforestation-free products*. European Commission. Retrieved from https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_5919