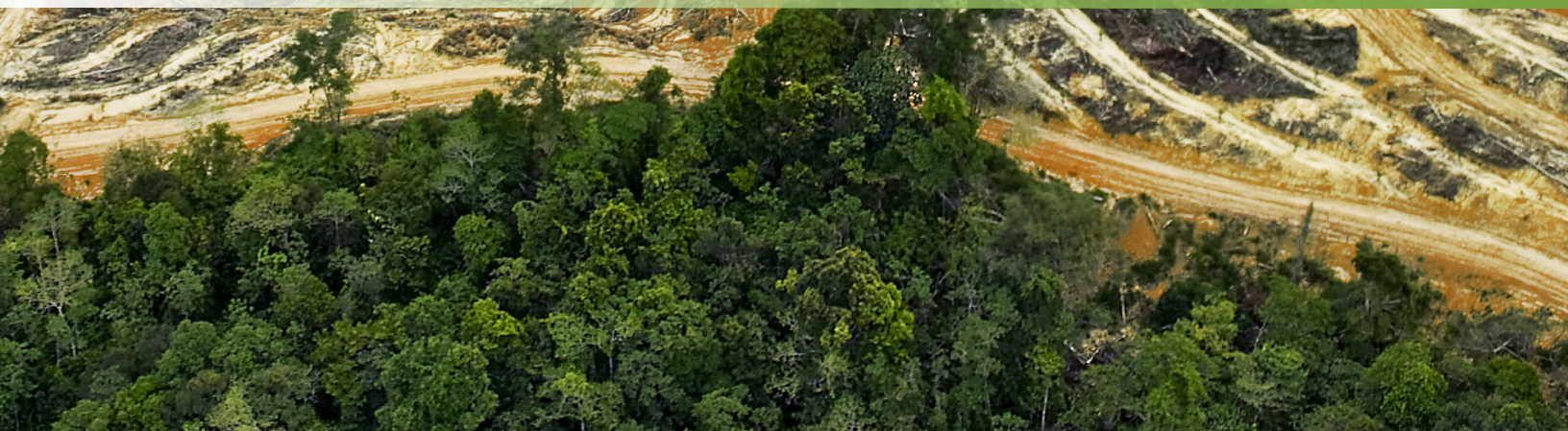




Ceres **The Investor Guide**
to Deforestation and Climate Change

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Executive Summary

Climate change is a systemic risk that poses vulnerabilities to businesses in all sectors, and has the potential to trigger the collapse of an entire industry or economy. As the material risks posed by climate change become increasingly apparent, a growing number of investors are mobilizing to address this risk in their portfolios. However, a major driver of climate change remains largely overlooked as an avenue for engagement – deforestation.

Deforestation is a major contributor to greenhouse gas (GHG) emissions, which have already triggered 1.8 degrees Fahrenheit (1 degree Celsius) of climate warming since pre-industrial times. Left unchecked, deforestation and other GHG-emitting activities will lead to profound physical damages and broader economic losses that will have serious negative consequences for investors worldwide.

Deforestation also poses its own unique set of risks. Investors holding equities in a wide range of sectors and industries – including food products, household products, auto components, textiles, apparel and luxury goods, among others – face financial exposure to risks from deforestation.

This Ceres guide – the result of extensive input from investors and deforestation experts – gives investors a framework to understand and engage on deforestation-driven climate risks across their portfolios. It is especially intended for engagement specialists who are relatively new to deforestation and may be engaging on climate risk but not deforestation risk. The guide will help them understand the drivers of deforestation risk and prioritize company engagements based on industries, geographies and sourcing patterns. It also outlines key expectations that investors should be looking for in a company’s climate and deforestation commitments and example questions for company engagements. Lastly, the guide provides concrete next steps the investors can take to address deforestation risk.

Deforestation and Climate Change

When forests are converted to agriculture, pasture and other land uses, felled trees are burned or left to decompose. This emits large amounts of carbon dioxide and other GHGs into the atmosphere.

According to the IPCC Special Report on Climate Change and Land, 23 percent of global GHG emissions come from human use of land. Tropical deforestation is one of the largest single sources of these emissions; 5 percent of global emissions come from commodity-driven deforestation in the tropics. Vast swaths of tropical forest are being cleared every day to make way for commodities such as beef, palm oil and soybeans. In addition to releasing GHGs, deforestation eliminates the cleared land’s ability to store more carbon and can disrupt local and global precipitation patterns in ways that exacerbate drought, something already happening in the Amazon rainforest.

Deforestation in South America (mostly from beef and soybean production) and Asia (primarily palm oil) are the most pressing problems. In 2019, Brazil’s Amazon ecosystem saw its highest deforestation rates in over a decade. First-quarter losses in 2020 have been even steeper – up more than 50 percent compared to

first-quarter 2019, according to Brazilian [satellite data](#). Commodity-driven deforestation in Indonesia and Malaysia are equally troublesome, and the situation is made worse because the biggest losses are in peatlands. Soils in peatlands store up to 10 times as much carbon as the trees that grow in them.

While deforestation poses serious supply chain risks, mitigating those risks with sustainable sourcing practices is a huge business and environmental opportunity. The combined effect of eliminating deforestation and reforesting previously cleared land could provide 16-23 percent of the climate mitigation needed to limit warming to 1.5 to 2 degrees Celsius in 2100 – the goal of the Paris Climate Agreement. That’s nearly three-quarters the mitigation potential of all renewable energy technologies combined (Figure 1).

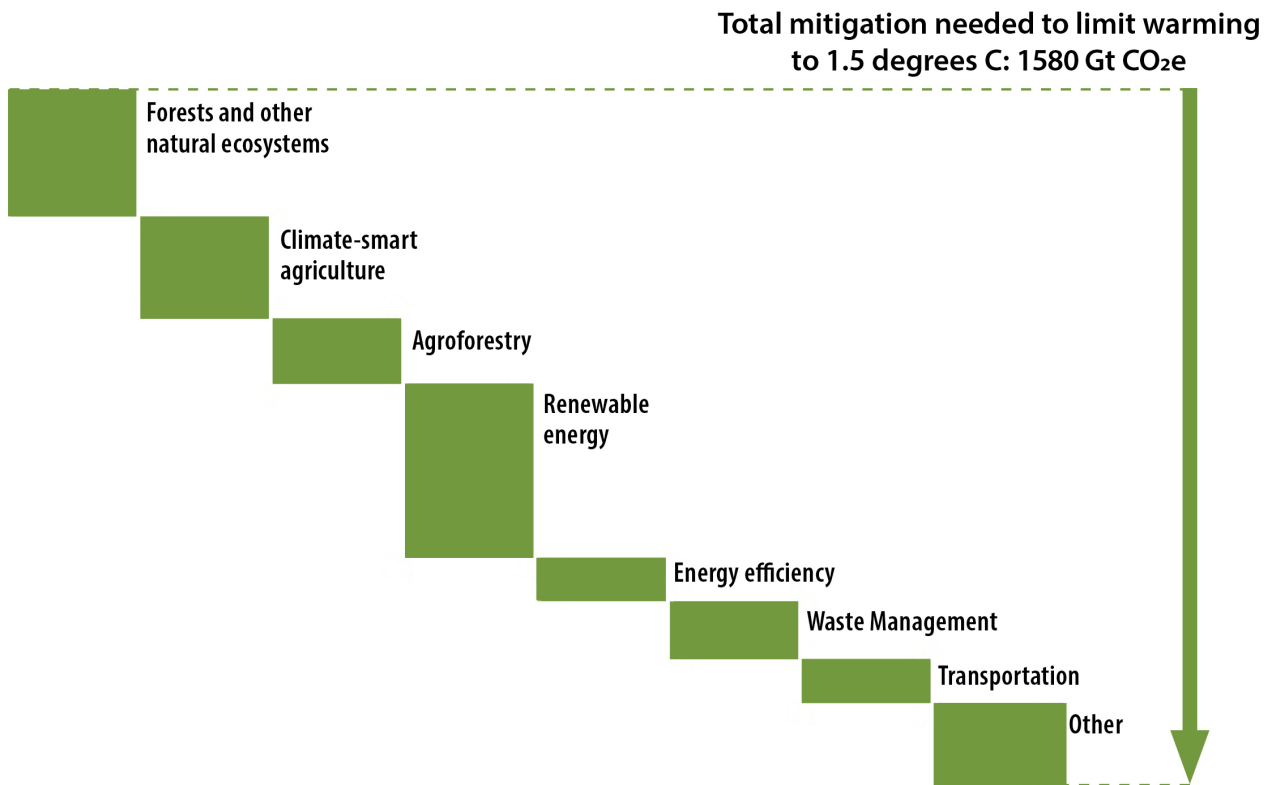


Figure 1 Comparison of climate solutions in terms of their potential to reduce GHG emissions and sequester carbon between 2020 and 2050. Data are from [Drawdown Review 2020](#),¹¹ which provides individual estimates for 78 climate solutions. Solutions are grouped here according to how investors might assess their portfolios for opportunities and elevate solutions in investor-company dialogues. Please refer to the [companion website](#).

Broad Exposure to Deforestation-Driven Climate Risks

Climate change is a clear systemic risk that has the potential to trigger severe disruptions of entire industries – among those, the massive consumer staples, consumer discretionary and materials sectors whose global supply chains are directly exposed to deforestation.

The Task Force on Climate-related Financial Disclosures (TCFD) recommends that companies and investors evaluate these risks by using different projected climate scenarios. Through this exercise, companies and their investors can assess how business operations and supply chains will perform under climate change.

Two key categories of climate risk should be considered as part of this exercise – transition and physical risks – and deforestation contributes to both in substantial ways. Companies with deforestation in their supply chains face material financial risks if they fail to adapt to changes in laws, regulations, consumer behavior and market systems as part of the foreseeable transition to a low-carbon economy. Companies also face

risks due to the predicted physical effects of climate change, including more extreme droughts, flooding and fires that may decrease yields and affect input costs and volumes. Deforestation exacerbates the physical risk from climate change by changing local precipitation patterns in ways that make agricultural production less resilient to these predicted changes, as we’re already seeing in Brazil. In some parts of the Amazon, rainy seasons are being delayed two weeks due to deforestation.

Beyond climate change, other salient issues stemming from deforestation pose significant financial material risks that can affect a company’s bottom line. Companies whose products are not sustainably sourced are exposed to potential regulatory action, loss of market access and loss of customers in the short term. They also face supply chain disruptions and increased production costs in the long term.

A growing number of investors are recognizing the wide-ranging risks inherent in deforestation and are demanding action to mitigate them. In September 2019, [230 institutional investors](#) with more than \$16 trillion in assets under management, called on companies to implement anti-deforestation policies for all of their supply chains, to set up monitoring systems to ensure compliance and to report every year on progress they are making. “Deforestation and loss of biodiversity aren’t only environmental problems,” wrote one of the investors signing the statement, [Storebrand Asset Management](#). “There are significant negative economic effects associated with these issues and they represent a risk that investors can’t ignore.”

Assessing and Responding to Portfolio-Wide Deforestation Risk

Identifying investments in sectors that are sourcing high-risk commodities is a key first step in assessing portfolio-wide exposure to deforestation risk. Palm oil, soybeans, beef and timber are the most common commodities discussed in association with deforestation, but there are many other commodities that may be produced on deforested land including leather, rubber, wood pulp for paper, cocoa and coffee. As a result, companies in many sectors are exposed to deforestation risk.

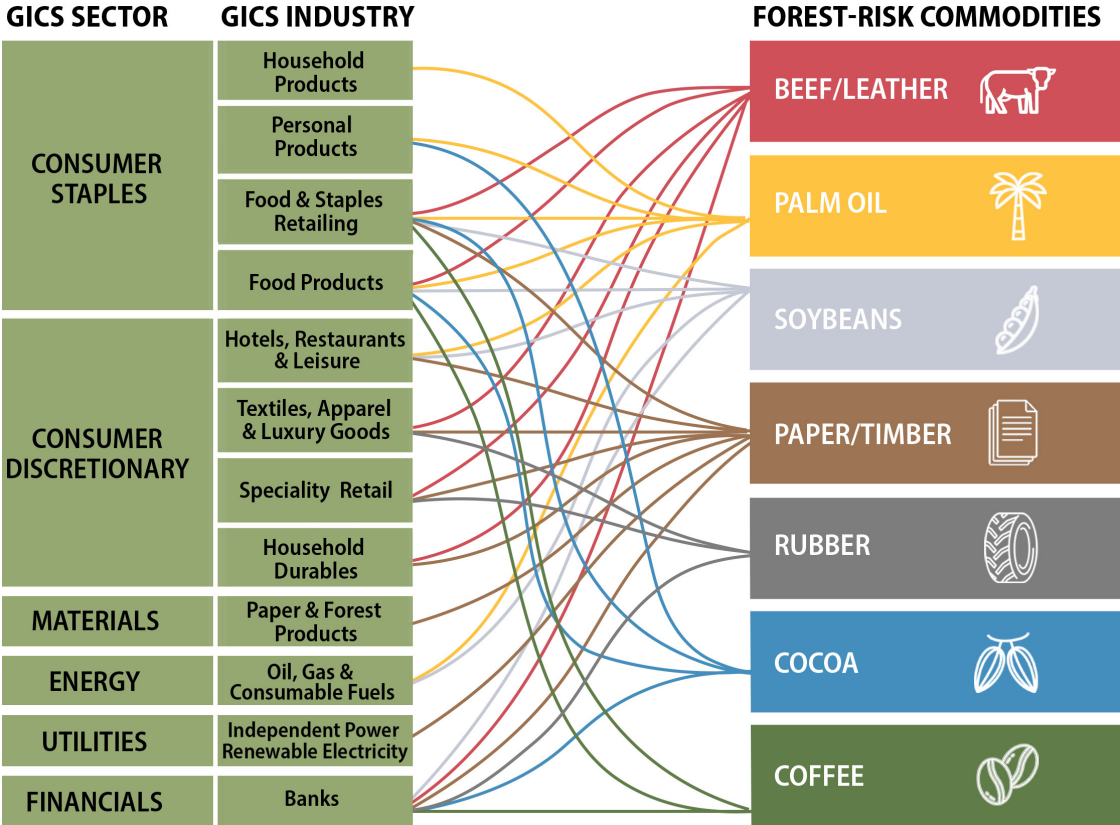


Figure 2 Sector and industry exposure to deforestation due to agriculture and forest commodity sourcing. A broad swath of industries are exposed to deforestation due to their use of commodities that are drivers of deforestation.

Investors should also examine key countries where they may hold companies sourcing commodities that are drivers of deforestation. Most GHG emissions from tropical commodity-driven deforestation occur in emerging economies such as Brazil, Indonesia and Malaysia. However, the trade of forest-risk commodities leads to these emissions ending up in the supply chains of companies in developed markets, as well as other emerging markets where deforestation is less prevalent. Downstream manufacturers in all markets are exposed to deforestation through these supply chain emissions that they are increasingly expected to report as a part of their GHG emissions inventory.

After assessing portfolio-level exposure to deforestation, investors can further prioritize companies for engagement in three ways: (1) analyze companies' sourcing patterns to identify where they might be sourcing commodities from countries with high emissions from deforestation (2) review companies' climate disclosures for information on deforestation-driven emissions and (3) and evaluate how the company is mitigating its deforestation exposure.

After identifying priority companies for engagement, investors can use the framework provided in Part 5 of the guide to assess company commitments related to deforestation and climate change and engage with companies on eliminating deforestation from their supply chains. Among the policies and actions investors should be expecting from companies:

- Set ambitious GHG reductions targets aligned with the science-based Paris climate goals, as well as targets aimed at eliminating GHG emissions from deforestation.
- Enact a climate action plan with implementation strategies to address emissions from deforestation, including a no-deforestation policy that applies to all commodities and extends to both direct and indirect suppliers. The policies should also be paired with time-bound commitments to eliminate deforestation as well as supply chain implementation plans that include monitoring, evaluation and incentives.
- Provide annual public disclosures of its quantitative progress on reducing GHG emissions, including deforestation and related emissions across its supply chains.

Investors can use their influence as shareholders to engage with companies on eliminating commodity-driven deforestation. And now is the time. The Amazon is approaching a disastrous tipping point where vast areas of rich tropical forest are being transformed into dry, degraded savannah and scrubland. Progress in limiting global temperature rise to 1.5 degrees Celsius – the goal of the Paris Climate Agreement – is behind schedule and a huge shift in practices is needed immediately. Eliminating deforestation is a linchpin of this shift. Simply put, we will not be able to avoid potentially catastrophic climate warming without eliminating deforestation. Engaging with companies now will allow investors to manage current and emerging financial risks and improve the long-term impacts of their investments.