

Managing Risks in the Palm Oil Supply Chain- A Guide for Investors





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Executive Summary

Investment and lending portfolios involved in the palm oil supply chain are vulnerable to the high risks posed by exposure to unsustainable practices. To effectively manage these risks, investors must first understand them, and thus they should strongly encourage companies in the palm oil supply chain to disclose their progress towards no-deforestation commitment through CDP. If companies do not disclose their progress, the risks will not even be visible, let alone manageable.

Cheap and versatile, palm oil can be found in thousands of everyday products. The outer orange flesh of the oil palm fruit produces crude palm oil, which can be processed into cooking oil and biofuel, among others. The white creamy substance in the fruit's kernel can be turned into palm kernel oil and used in cosmetics, soaps, and shampoo. However, irresponsible palm oil production is a major driver of deforestation, and thus climate change.

Deforestation translates into financial risk through physical and transition risks. Failure by companies to address the palm oil sourcing and production risks endangers their long-term financial stability, which can feed through to financial institutions as investment risk.

Indonesia, the world's largest palm oil producer, accounts for 57% of global production and the industry is key to the country's economy, generating significant employment and contributing to socio-economic development. However, the industry's unsustainable land use and agricultural practices increase carbon emissions through peatland conversion, cause biodiversity loss, and displace local people and communities.

The Government of Indonesia (GoI) has implemented measures to address this problem, including a forest conversion and palm oil moratorium, an oil palm rejuvenation scheme, and the strengthening of the Indonesian Sustainable Palm Oil (ISPO) standard¹. Meanwhile, the private sector has adopted No Deforestation, No Peatland, and No Exploitation (NDPE)

commitments throughout the supply chain.

These actions slowed palm oil-driven deforestation in 2013-2022, but the trend began reversing in 2023², when 30,000 hectares (ha) of forest and peatland – an area nearly half the size of Singapore – were cleared for oil palm plantations. Thus, deforestation remains a material risk for corporate buyers and interested investors³.

Investment and lending portfolios involved in the palm oil supply chain are vulnerable to the high risks posed by exposure to unsustainable practices. To effectively manage these risks, investors must first understand them, and thus they should strongly encourage companies in the palm oil supply chain to disclose their progress towards no-deforestation commitment through CDP. If companies do not disclose their progress, the risks will not even be visible, let alone manageable.

Disclosure through CDP can further ensure that the companies' data are standardized, comparable and decision-useful for investors, allowing them to address the deforestation risks in the palm oil supply chain. Consequently, investors can focus their engagement on the gaps in their portfolio companies, aiming to promote a transition towards sustainable palm oil supply chains.

This report provides essential context about Indonesia's palm oil industry, explains why investors should engage with Indonesian palm oil companies, and offers examples of the sustainability performance of non-disclosing publicly listed companies.

1. <https://backpanel.kemlu.go.id/Shared%20Documents/The%20State%20of%20Indonesia's%20Forest%202022.pdf>

2. <https://news.mongabay.com/2024/02/palm-oil-deforestation-makes-comeback-in-indonesia-after-decade-long-slump/>

3. <https://nusantara-atlas.org/2023-marks-a-surge-in-palm-oil-expansion-in-indonesia/>

Executive Summary

Specifically, the report focuses on the sustainability performance of the five largest non-disclosing palm oil producers in Indonesia, highlighting the levels of risk they are exposed to that remain invisible to their investors, including:

1

Insufficient no-conversion policy

All assessed companies have a publicly available sustainability policy that includes elements of NDPE.

However, none has a no-conversion policy for wider natural ecosystems, demonstrating a low awareness of natural ecosystem protection and its socio-cultural importance.

2

Incomplete third-party international certifications

All companies indicated their adoption of ISPO standard. However, two companies did not adhere to any international certification schemes. Such certification ensures the existence of policies to eliminate deforestation practices and prevent ecosystem conversion and human rights abuses throughout the supply chain.

3

A lack of forest-related risk assessment

Four of the assessed companies did not perform forest-related risk assessment, demonstrating a low awareness of forest-related risks within their operations and supply chains and inability to manage future uncertainties and liabilities.

4

A lack of landscape approach initiative involvement

Two of the assessed companies did not participate in landscape or jurisdictional approach initiatives, highlighting immaturity in collaboratively working with multiple stakeholders across local jurisdictions and landscapes to achieve common no-deforestation goals.

Overall, the assessment of this sample shows that although some actions to address deforestation have been taken, the ambition is insufficient. Thus, investors' exposure to deforestation risks may be significant.

There are four recommended actions to be taken by investors:



Request environmental disclosure through CDP from companies in the palm oil supply chain and join the CDP Non-Disclosure Campaign to amplify the engagement power through collective action with other investors.



Draft a robust investment-firm-level no-deforestation policy to provide clear criteria against which to understand investment portfolio companies' stance on deforestation.



Assess investment portfolio companies' risks and performance in achieving no-deforestation commitments through the tailored CDP Forests Champion Program.



Engage continuously and proactively with portfolio companies and other key stakeholders such as the government and the private sector.

About this report

This report provides essential context to understand the palm oil commodity and its forest-related financial risks, showing why capital market actors and investors should:

- **Engage directly with palm oil companies; and**
- **Engage with a wide range of companies relying on palm oil in their supply chains across diverse industries, including livestock, food & beverage, medical supplies, household consumables and transportation.**

This report is divided into four sections:

- ▼ **1** A primer on the palm oil industry covering production and consumption, including its supply chain, palm oil-based biofuel, the issues surrounding deforestation and the actions taken by the Government of Indonesia to reduce forest loss, noting that Indonesia produces 57% of the global palm oil supply.
- ▼ **2** A section on the relationship between sustainability performance and forest-related financial risk posed by companies and investors associated with palm oil supply chain.
- ▼ **3** A performance assessment of five Indonesian palm oil producers that have not disclosed through CDP, identifying risks using simplified CDP Forest Key Performance Indicators (KPI) and publicly available information. This section highlights the companies' actions to address deforestation and its risks, but also reveals critical gaps.
- ▼ **4** A set of recommendations on steps for investors to reduce the deforestation risk exposure of their investments or financing portfolios and to push for the transformation of the palm oil industry.



Overview of the palm oil industry



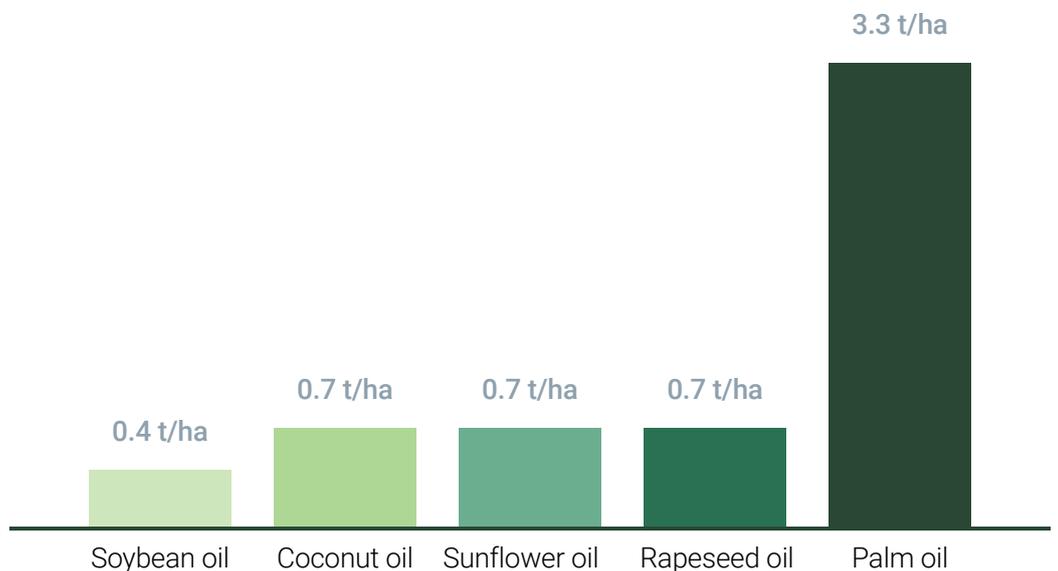
Overview of the palm oil industry

Oil palm trees can produce nearly 5 times more oil per hectare than any other vegetable oil

In 2021, palm oil accounted for nearly **35%** of global vegetable oil consumption

Palm oil is among the most widely used vegetable oils globally, accounting for nearly 35% of vegetable oil consumption in 2021^{4,5}. Its versatility has made it increasingly popular – it is an ingredient in a wide variety of products ranging from toothpaste to instant noodles. Palm oil can also be used for biodiesel production, which has seen growing demand due to the global transition away from fossil fuels. In addition, palm oil is valued for its high yield efficiency. Oil palm trees can produce nearly five times more oil per hectare than any other vegetable oil, such as sunflower oil, coconut oil and rapeseed oil⁶.

Figure 1. Productivity of different vegetable oils (tonne/hectare)



Source: WWF

4. Habi Mat Dan, N. L. (2018). Palm oil and palm kernel oil: Versatile ingredients for food applications. *Journal of Oil Palm Research*, 29(4), 487-511. <https://doi.org/10.21894/jopr.2017.00014>

5. <https://www.statista.com/statistics/263937/vegetable-oils-global-consumption/>

6. <https://www.wwf.org.uk/updates/8-things-know-about-palm-oil#:~:text=Palm%20oil%20is%20an%20incredibly,to%20produce%20all%20vegetable%20oils>

Global production and consumption

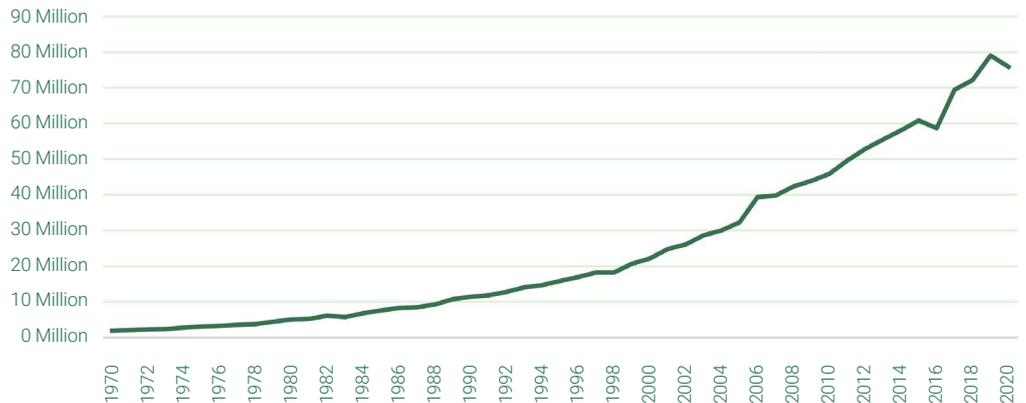
57%

of global palm oil production is owned by Indonesia

Given its versatility and efficiency, the demand for palm oil production has been increasing steadily. This has driven a 40-fold increase in global palm oil production over the last five decades (Figure 2).

Indonesia and Malaysia are the world's two largest palm oil-producing countries, contributing 57% and 27% of the global supply, respectively⁷. In Indonesia, there has been rapid production growth, driven by factors such as increased yield efficiency, land availability, low production costs, demand from domestic and international markets, and the government's accommodative policy stance towards the palm oil industry⁸. Consequently, the country is likely to have experienced significant land use changes for plantations, leading to increased forest clearing and loss⁹.

Figure 2. Global palm oil production 1970-2020 (tonne)



Source: Our World in Data, 2020

Indonesia consumes a quarter of the world's palm oil production domestically.

Palm oil consumption is dispersed among a handful of countries, with Indonesia consuming the most domestically, at a quarter of the world's palm oil production according to Index Mundi¹⁰. This is driven by its large and growing population alongside its recent implementation of a biodiesel blending policy.

The main use of palm oil differs between countries. While India and China predominantly use it for cooking oil, European countries direct most of their supply towards fuel production. Furthermore, the stringency of the environmental and social safeguard requirements of palm oil products varies between jurisdictions. This leads to the issue of 'leakage markets' (non-NDPE-compliant markets), which could fuel deforestation due to the continuous demand for cheap and unsustainable palm oil in countries with low environmental and social policies¹¹.

7. <https://ourworldindata.org/palm-oil>

8. Casson, A. (2000). The Hesitant boom: Indonesia's Oil Palm sub-sector in an era of economic crisis and political change. Center for International Forestry Research (CIFOR), Bogor. <https://doi.org/10.17528/cifor/000625>

9. [https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/659335/EPRS_ATA\(2020\)659335_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/659335/EPRS_ATA(2020)659335_EN.pdf)

10. <https://www.indexmundi.com/agriculture/?commodity=palm-oil&graph=domestic-consumption>

11. <https://www.thejakartapost.com/business/2022/10/04/moving-towards-sustainable-development-with-g20-momentum.html>

The supply chain of palm oil

The palm oil industry has a complex supply chain (Figure 3). It is generally divided into two main stages: the upstream stage consisting of growers, processors, and traders, and the downstream stage consisting of manufacturers and retailers. Growers comprise both companies that own large-scale plantations and millions of plasmas (see below) and independent smallholders.

Plasma smallholders initially referred to farmers participating in Indonesia's Plasma Transmigration Program, which started in 1987¹². The scheme aimed to empower smallholders by providing them with 2.5 ha and partnering local communities with large-scale plantations, enabling them to receive support and sell their produce more securely¹³. The companies must allocate 20% of their plantation area to cultivation by smallholders^{14,15}. Smallholders can also be independent, meaning they have no guaranteed selling partners and are not bound to a mill or company.

These smallholders play an important role in the palm oil industry as they own around 46% of oil palm plantations in Indonesia and supply approximately 40.6% of Indonesian palm oil^{16,17}. However, their productivity is below that of large-scale plantations, and their supply chains often do not adhere to NDPE – making them prone to forest encroachment and complicating the production of sustainable palm oil¹⁸.

The trading side of the supply chain is made up of a handful of giant conglomerates, including Wilmar, Musim Mas, Cargill, Golden Agri Resources (GAR), and Royal Golden Eagle (RGE)¹⁹. Most of these are vertically integrated and thus control the production process from plantation to refinery and retail. These corporations play a key role in setting the direction of the palm oil industry's sustainability ambitions.

The palm oil supply chain's downstream end caters to diverse end-users, ranging from large manufacturing companies and supermarket chains to smaller retailers. Additionally, various palm oil conglomerates like Wilmar, GAR and Indofood Group sell retail and consumer goods products on domestic and regional markets, including India and China²⁰. Downstream companies also play a major role in choosing to purchase responsibly and can positively influence the upstream market with sourcing policies that incorporate environmental and social safeguards²¹.

Smallholders play an important role in the palm oil industry.

They own around

46%

of palm oil plantation in Indonesia

and supply approximately

40.6%

of total Indonesian palm oil

12. <https://www.bbc.com/indonesia/dunia-61519343>

13. Ibid

14. <https://jdih.kemenkeu.go.id/fullText/2014/39TAHUN2014UU.pdf>

15. <https://peraturan.bpk.go.id/Home/Details/149750/uu-no-11-tahun-2020>

16. <https://journal.unhas.ac.id/index.php/fs/article/view/10912>

17. <https://sposindonesia.org/wp-content/uploads/2021/07/28.-eng-Oil-palm-smallholders-on-the-edge-Why-business-partnerships.pdf>

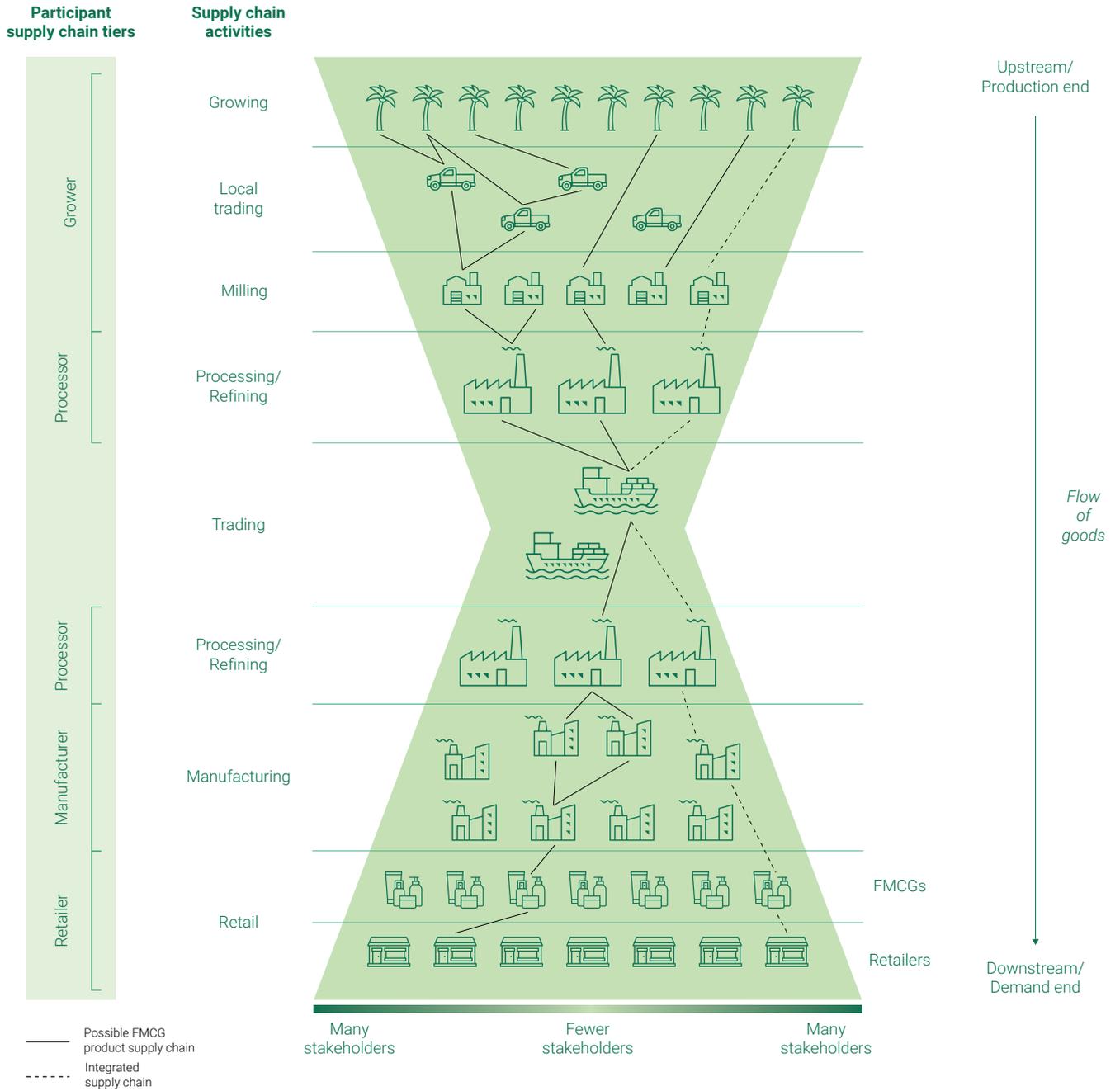
18. https://www.cifor.org/publications/pdf_files/articles/ANashr2101.pdf

19. https://www.researchgate.net/publication/320182826_Implementation_and_effectiveness_of_sustainability_initiatives_in_the_palm_oil_sector_a_review

20. Ibid

21. <https://rspo.org/rspo-engages-private-labels-retailers-and-feed-producers-in-europe/>

Figure 3. Palm oil supply chain



Source: Lyons-White & Knight, 2022

Palm oil-based biofuel

37%

of all greenhouse gas emissions annually is contributed by the transportation sector

The climate and biodiversity crises are among the most prominent concerns for the world today. One of the significant contributors to climate change is the transportation sector, accounting for approximately 37% of annual GHG emissions²². Given the scale and intensity of this sector's impacts, alternative fuels are being explored – notably biofuel. Derived directly or indirectly from biomass such as palm oil, biofuel is considered to produce lower exhaust emissions²³. With countries aiming for a larger share of renewable energy across their national infrastructure, there is growing demand for palm oil for use as biodiesel feedstock.

53%

of palm oil consumption was used for biofuel

For instance, in 2009 the European Union implemented the Renewable Energy Directive (RED)²⁴, requiring 20% renewable energy in the total energy use in the EU by 2020. Although this has now been achieved²⁵, it involves categorizing biofuel as a suitable renewable energy source. Thus, the EU became a primary destination for Indonesian palm oil exports²⁶. In 2018, 53% of palm oil consumption was for biofuel, 12% for heating and electricity, and the remainder for food and oleochemicals²⁷.

12%

was used for heating and electricity

The EU amended the RED by issuing the RED II in 2018²⁸. This amendment categorizes palm oil as a high Indirect Land Use Change (ILUC)-risk biofuel²⁹, deeming it unsustainable. There are, however, exemptions for certified biomass with low ILUC risk. These require the palm oil to have been sourced sustainably and have demonstrated a lower emissions intensity³⁰. Due to this policy and more stringent measures, palm oil demand is likely to decline in the EU, and producers are increasingly looking to export to 'leakage markets' such as China, India, and Pakistan³¹.

22. <https://www.cdp.net/en/articles/companies/new-research-highlights-an-urgent-need-for-the-transport-sector-to-collaborate-and-scale-sustainable-fuels>

23. https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/003/647/original/CDP-technical-note-on-biofuels.pdf?1651855056

24. https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en

25. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220119-1>

26. Tandra, H., Suroso, A. I., Syaukat, Y., & Najib, M. (2021). Indonesian oil palm export market share and competitiveness to European Union countries: Is the roundtable on sustainable palm oil (RSPO) influential? *Jurnal Manajemen Dan Agribisnis*. <https://doi.org/10.17358/jma.18.3.342f>

27. <https://www.transportenvironment.org/wp-content/uploads/2021/07/final%20palm%20briefing%202019.pdf>

28. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001&from=EN>

29. https://ec.europa.eu/commission/presscorner/detail/en/MEMO_19_1656

30. Ibid

31. <https://chinadiologue.net/en/food/chinas-market-influence-can-make-or-break-green-supply-chains/>

Palm oil consumption in Indonesia



The palm oil industry contributed

3.5%

of the country's GDP



and accounted for

14%

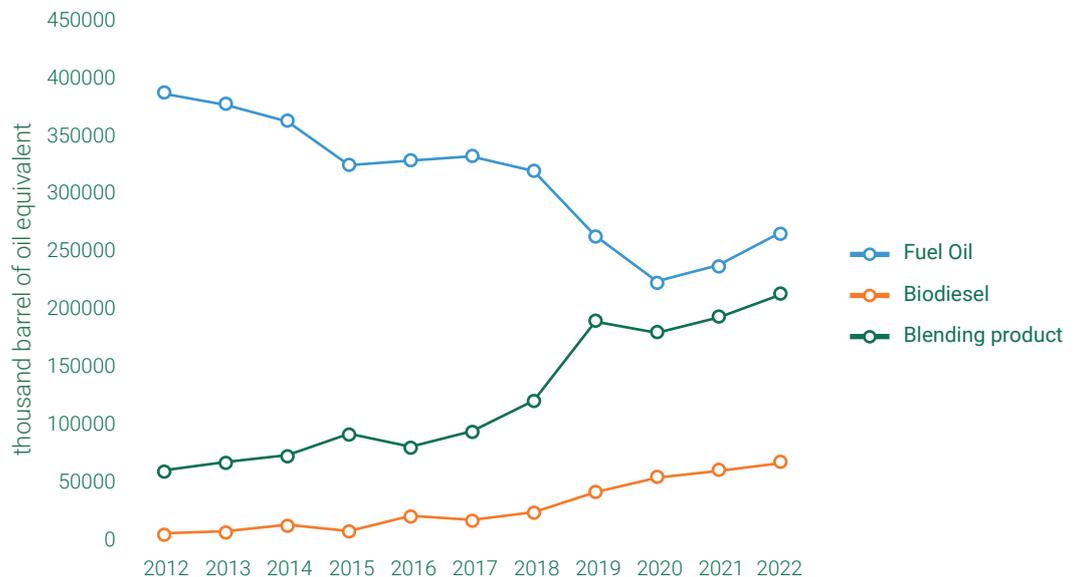
of Indonesia's non-oil and gas exports

As the world's largest palm oil producer and exporter, Indonesia's economy is largely driven by the industry. In 2021, it contributed 3.5% of country's gross domestic product (GDP), accounting for 14% of non-oil and gas exports^{32,33}, and employed 4.2 million people directly and 12 million indirectly³⁴.

Hence, the Government of Indonesia (GOI) is committed to expanding the palm oil industry through several measures, including a biodiesel blending policy³⁵.

Energy security and independence were the primary drivers of the biodiesel blending policy amid Indonesia's position as a net oil-importing country and the soaring crude oil prices of 2004-2006³⁶. The declining trend in consumption from 2012 to 2022 shows that this policy has reduced the country's dependence on fuel oil (Figure 4)³⁷.

Figure 4. Oil consumption in Indonesia by type in 2012-2022



Source: The Indonesian Ministry of Energy and Mineral Resources, 2023

32. <https://www.republika.co.id/berita/rd3s1q383/kemenkeu-sektor-sawit-sumbang-35-persen-terhadap-pdb-indonesia#:~:text=Kemenkeu%3A%20Sektor%20Sawit%20Sumbang%203%2C5%20Persen%20Terhadap%20PDB%20Indonesia,-Selasa%2007%20Jun>

33. <https://voi.id/en/news/22466/palm-oil-becomes-the-largest-non-oil-and-gas-foreign-exchange-producer-in-indonesia-how-much-value>

34. <https://gapki.id/en/news/20660/palm-oil-has-irreplaceable-role-in-indonesian-economy>

35. <https://www.tropenbos-indonesia.org/resources/publications/new%20ispo:%20a%20new%20hope%20to%20strengthen%20oil-palm%20governance?>

36. https://www.jstor.org/stable/pdf/resrep02312.5.pdf?refreqid=excelsior%3A07c0036bbc67fae3fe8c73c2b08dc820&ab_segments=&origin=

37. <https://www.esdm.go.id/assets/media/content/content-handbook-of-energy-and-economic-statistics-of-indonesia-2022.pdf>

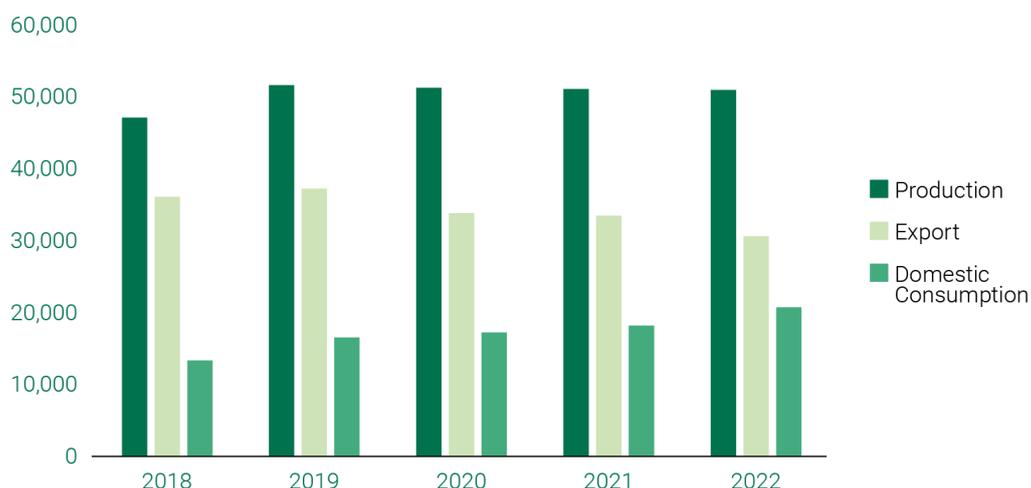
The GoI has been implementing the 'B35' which increases the required ratio of palm oil in biodiesel blending to **35%**

Indonesian palm oil exports are declining, while domestic consumption shows an increasing trend.

In addition, the GoI has steadily increased the required ratio of palm oil in biodiesel blending, such as the B35 in 2023, which brought the percentage to 35%³⁸. As of July 2023, this mandate had distributed 5.6 billion liters of biodiesel from the total targeted allocation of 13.15 billion liters³⁹. Now, the government plans to supply 50% blends, which will require an additional 22 million ha of plantations at least⁴⁰, severely hampering the country's efforts to curb deforestation.

Figure 5 shows that Indonesian palm oil exports are declining. Conversely, domestic consumption shows an increasing trend⁴¹, driven mainly by biodiesel use, highlighting its increasing role in palm oil demand^{42,43}.

Figure 5. Production, export, and domestic consumption of Indonesian palm oil in 2018-2022 (thousand tonne)



Source: GAPKI, 2023

As Indonesia's domestic market has less stringent standards, increased domestic palm oil consumption could adversely affect the industry's overall sustainability performance. According to a study comparing seven palm oil certification standards based on aspects such as access to remedy, smallholder inclusion, and social and environmental safeguards, the ISPO was ranked the lowest⁴⁴. Meanwhile, the Roundtable of Sustainable Palm oil (RSPO) standard ranked highest, highlighting the importance of its industry-wide adoption.

38. <https://ebtke.esdm.go.id/post/2023/06/08/3495/pertamina.lakukan.penyaluran.perdana.biosolar.b35>

39. <https://ekonomi.bisnis.com/read/20230709/44/1673063/esdm-penyaluran-biodiesel-b35-sentuh-56-juta-kl-per-juli-2023>

40. <https://news.mongabay.com/2020/12/indonesia-biofuel-deforestation-oil-palm-plantation-b30/>

41. <https://databoks.katadata.co.id/datapublish/2023/01/26/konsumsi-minyak-sawit-indonesia-naik-terutama-untuk-biodiesel>

42. https://gapki.id/allies/uploads/2021/02/PAS_PERMINTAAN-MINYAK-SAWIT-INDONESIA-2019-2021.jpg

43. <https://www.sei.org/featured/zero-palm-oil-deforestation/>

44. https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf

The palm oil industry's exposure to deforestation

Forests play a key role in mitigating climate change, acting as a carbon sink that absorbs atmospheric carbon. Clearing forests releases carbon dioxide back into the atmosphere, raising global temperatures⁴⁵. Forests also provide a wide range of crucial ecosystem services: they hold over 80% of terrestrial biodiversity, maintain productive soils, regulate groundwater, offer space for recreational services, and mitigate disaster risks⁴⁶.

Globally, deforestation is the second-largest source of anthropogenic GHG emissions, with 75% of forest loss being driven by agriculture^{47,48,49} mainly due to four forest risk commodities (FRCs): cattle, soybean, palm oil, and timber. Figure 6 shows that oil palm plantation is the second biggest contributor to deforestation, converting 10.5 million ha of forest – an area equal to the size of South Korea – from 2001 to 2015. As the conventional production of these commodities requires the conversion of land and natural ecosystems, many forests – especially in the tropics – are degraded or lost. The upward trend of the deforestation rate is expected to continue due to global population growth and economic development⁵⁰.

7%

of global deforestation between 2000 and 2018 was caused by oil palm expansion

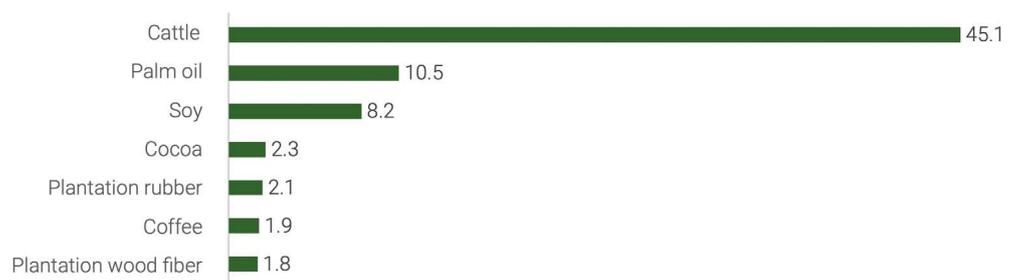
32%

of Indonesia's forest loss between 2001 and 2019 was caused by oil palm expansion

55%

of Indonesia's total emissions are caused by deforestation, contributing significantly to climate change

Figure 6. Commodities driving deforestation 2001 – 2015 (million hectares)



Source: World Resources Institute, 2021

Palm oil is facing significant scrutiny from stakeholders, including global investors and NGOs. Data from the Food and Agriculture Organization (FAO) show that palm oil expansion was responsible for 7% of global deforestation between 2000 and 2018⁵¹, raising concerns about the industry's impacts on ecosystems and communities.

From 2001 to 2019, oil palm expansion in Indonesia accounted for 3.09 Mha of deforestation, representing 32% of the country's forest loss⁵². Forest fires in 2019 that were linked to oil palm expansion covered an area half the size of Belgium, burning 1.6 Mha and releasing 708 megatons of CO₂ – more than the annual emissions of Germany^{53,54,55}. Deforestation accounts for 55% of Indonesia's total emissions, contributing significantly to climate change⁵⁶.

45. <https://www.carbonbrief.org/deforestation-has-driven-up-hottest-day-temperatures/>

46. https://www.un.org/esa/forests/wp-content/uploads/2018/05/UNFF13_BkgdStudy_ForestsEcoServices.pdf

47. <https://www.lse.ac.uk/granthaminstitute/explainers/whats-redd-and-will-it-help-tackle-climate-change/#:~:text=Forests%20and%20trees%20store%20carbon,contribute%20to%20climate%20change%EF%BB%BF%20>

48. <https://www.c2es.org/content/international-emissions/#:~:text=Globally%2C%20the%20primary%20sources%20of,72%20percent%20of%20all%20emissions.>

49. <https://ourworldindata.org/what-are-drivers-deforestation>

50. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf

51. <https://www.fao.org/newsroom/detail/global-deforestation-slowing-but-rainforests-under-threat-fao-report-shows-030522/en>

52. <https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0266178&type=printable>

53. <https://news.mongabay.com/2020/02/indonesia-forest-fires-widodo-jokowi-burning-2019-emissions/>

54. <https://atmosphere.copernicus.eu/copernicus-year-fire>

55. <https://www.statista.com/statistics/723163/g20-carbon-dioxide-emissions/>

56. Austin, K.G. et al. (2019). Environmental Research Letters, 14, 024007. <https://iopscience.iop.org/article/10.1088/1748-9326/aaf6db>

Policies and commitments to curb commodity-driven deforestation

The GoI has implemented policies to slow deforestation and promote sustainable palm oil production, including a permanent moratorium on primary forest and peatland conversion through Presidential Instruction No. 5/2019, a social forestry program, and an oil palm rejuvenation scheme. The latter aims to improve smallholder yields by providing financing and ensuring good agricultural practices⁵⁷. Additionally, the ISPO standard is now mandatory for all palm oil producers, including smallholders, which must be certified by 2025^{58,59}. Smallholders' initial objections to the certification cost were addressed through Presidential Regulation No. 44/2020 by financing the certification process, although a land legality issue remains⁶⁰.

Indonesia committed to curbing

60%

of its emissions by transforming the AFOLU sector into a net-carbon sink by 2030

Concerning international commitment, under the enhanced Nationally Determined Contribution (NDC) announced at the United Nations Climate Change Conference of Parties (COP), Indonesia committed to curbing 60% of its emissions by transforming the AFOLU (Agriculture, Forestry and Other Land Use) sector into a net-carbon sink by 2030⁶¹. In 2022, Indonesia and Norway agreed to form a new partnership to support Indonesia's 2030 net-carbon sink plan, which includes reducing emissions from deforestation and forest degradation by protecting forests through community participation, biodiversity conservation, and peat fire prevention⁶².

The private sector has also taken several steps to address deforestation across the supply chain, including the adoption of NDPE commitments – key to tracking forest-related progress, identifying gaps in action, and ultimately reducing forest loss⁶³. Nearly all major companies in the palm oil supply chain have committed to the NDPE commitment, including 83% of refiners as of 2020⁶⁴.

Nearly all major companies in the palm oil supply chain have committed to the NDPE commitment, including

83%

of refiners as of 2020

Thanks to these policy measures and commitments, until recently there had been a significant decline in primary forest loss in Indonesia from 2013 to 2022^{65,66}. Compared to other forest-risk commodities, companies disclosing information on palm oil production and/or consumption have made the most progress in addressing deforestation: nearly all disclosing companies (98%) have taken at least one industry-accepted measure to address forest loss⁶⁷.

57. <https://ekon.go.id/publikasi/detail/4049/the-government-accelerates-the-implementation-of-the-peoples-palm-oil-replanting-program-by-implementing-good-agriculture-practice-through-multi-stakeholder-strategic-cooperation>

58. <https://coaction.id/katalog/langkah-strategis-ispo-dalam-transisi-energi-program-bbn-nasional-tinjauan-perspektif-sektor-lahan-dan-pekebun-swadaya/>

59. <https://www.tropenbos-indonesia.org/resources/publications/new+ispo:+a+new+hope+to+strengthen+oil-palm+governance%3f>

60. <https://www.tropenbos-indonesia.org/resources/publications/new+ispo:+a+new+hope+to+strengthen+oil-palm+governance%3f>

61. https://www.menlhk.go.id/site/single_post/4779/menju-indonesia-s-folu-net-sink-2030-melalui-pengelolaan-hutan-lestari

62. <https://kemlu.go.id/oslo/en/news/21256/indonesia-and-norway-signed-a-new-partnership-to-reduce-greenhouse-gas-emissions-from-forestry-and-other-land-use>

63. <https://www.unpri.org/sustainable-land-use/pri-investor-working-group-on-sustainable-palm-oil/5873.article>

64. <https://chainreactionresearch.com/report/ndpe-policies-cover-83-of-palm-oil-refineries-implementation-at-75>

65. <https://www.globalforestwatch.org/blog/data-and-research/global-tree-cover-loss-data-2021/>

66. <https://news.mongabay.com/2024/02/palm-oil-deforestation-makes-comeback-in-indonesia-after-decade-long-slump/>

67. <https://www.cdp.net/en/research/global-reports/global-forests-report-2020>

Forest-related financial risk and sustainability performance

2

Forest-related financial risks

The costs of managing forest-related financial risks are only

0.37%
of the total risks' value

67%

of disclosing companies reporting at least one reputational and market risk

The value of risk related to sourcing or producing palm oil from Indonesia is estimated to reach US\$18.3 billion.

Forests and financial institutions have a two-way relationship⁶⁸.

Financial institutions finance not only companies that contribute to deforestation⁶⁹, but also those that directly or indirectly depend on forests as their source of goods or services. Hence, deforestation may alter their risk-return profiles⁷⁰.

Deforestation risks can materialize into financial risks through several channels, including physical risk and transition risk. Physical risk can be acute physical risk, such as increasingly frequent extreme weather events causing decreased production capacity, or chronic physical risk, such as rising mean temperatures, potentially impacting crop quality and yields⁷¹. Transition risk due to sudden changes in policy, technology, and consumer preferences in response to deforestation impacts can substantially impact a company's reputation and financial performance⁷².

CDP has identified several forest-related financial risks related to unsustainable palm oil⁷³. These can be managed through actions to achieve sustainable palm oil supply chains, whereby the costs would amount to only 0.37% of the risks' total value⁷⁴. The 2022 CDP Palm Oil Report highlights reputational risk as the most common risk, with 67% of disclosing companies reporting at least one reputational and market risk⁷⁵. Some companies report physical risks, including crop yield reductions due to climatic change, and regulatory risks, such as the exclusion of unsustainable palm oil from the EU market. The value of risk related to sourcing or producing palm oil from Indonesia is estimated to reach US\$18.3 billion – an 80% increase from the previous year⁷⁶. Despite its significant implications, this risk value is generally underestimated, with the reported rise likely due to the increase in the number of disclosures.

The direct effects of forest-related risks and the repercussions on share price are clear. In 2016, the share price of IOI – one of the largest palm oil producers in Malaysia – dropped 9% from its peak following RSPO's publicly announced suspension of its certification⁷⁷. Similarly, the stock price of Malaysia's largest palm oil producer, FGV Holding Berhad, fell substantially in early 2020 when its RSPO certification was suspended following its failure to meet labor standards⁷⁸. In the same year, the firm's share price fell further after its palm oil shipments were blocked by US Customs and Borders over concerns about forced labor practices⁷⁹.

68. <https://www.dnb.nl/media/4c3fqawd/indebted-to-nature.pdf>

69. <https://documents1.worldbank.org/curated/en/105041629893776228/pdf/Nature-Related-Financial-Risks-in-Brazil.pdf>

70. Ibid

71. <https://docs.wbcsd.org/2020/04/WBCSD-TCFD-Food-Agriculture-and-Forest-Products%C2%AC-Preparer-Fourm-report.pdf>

72. Ibid

73. https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/522/original/CDP_Palm_Oil_Report_2022_Final.pdf?1660576150

74. Ibid

75. Ibid

76. Ibid

77. <https://www.thestar.com.my/business/business-news/2016/04/04/impact-of-suspension-by-rspo-on-ioi-corp/>

78. <https://www.reuters.com/article/us-malaysia-palmoil-fgv-idUSKBN1ZE149>

79. <https://www.bbc.com/news/business-54366607>

Sustainability and profit

Companies that adequately implement Environmental, Social, and Governance (ESG) commitments experience higher equity returns. For example, reducing downside risk through strong ESG implementation positively correlates with higher equity returns⁸⁰, and a 2019 study found a correlation between palm oil sustainability and stock returns⁸¹. Figure 7 compares cumulative returns between companies with the highest and lowest SPOTT scores, which assess the ESG performance of commodity producers, processors and traders.

Figure 7. Cumulative return of top vs bottom half of listed SPOTT-assessed palm oil companies from 2014 – 2019



Source: SPOTT, 2019

80. [https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx#:~:text=From%20our%20experience%20and%20research,capital%20expenditures%20\(Exhibit%202\).](https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx#:~:text=From%20our%20experience%20and%20research,capital%20expenditures%20(Exhibit%202).)

81. https://www.spott.org/wp-content/uploads/sites/3/dlm_uploads/2019/12/Palm-oil-a-business-case-for-sustainability-1.1.pdf

Summary of performance



Sustainability performance of Indonesian listed palm oil companies

The forest-related financial risks outlined above are only visible to investors when their portfolio companies disclose through CDP, facilitating action and monitoring progress towards sustainable palm oil supply chains. To show investors what criteria to look for when assessing a company's oil palm supply chain sustainability, this section provides examples of sustainability performance assessment based on publicly available self-disclosed information. We selected the five largest palm oil companies on the Indonesian Stock Exchange, in terms of market capitalization, which have not disclosed their progress towards no-deforestation commitment through CDP. Our data were taken from grey literature, including the companies' 2022 annual reports, sustainability reports, RSPO Annual Communication of Progress (ACOP), and SPOTT palm oil assessments.

The methodology is based on the CDP's Forests Key Performance Indicators (see Appendix), which are industry-accepted measures for companies targeting a deforestation-free future⁸². Due to the inadequate availability and comparability of the information, we use only seven of the KPI's fifteen essential actions:

1 Traceability

Traceability is a company's ability to trace its products to specific areas, producers, or intermediate suppliers with known performance⁸³. This clarifies how its raw materials are produced, reducing risks and ensuring that the supply chain involves no deforestation or human rights abuses⁸⁴. The best practice is having 'Traceability to Plantation' level above 90% of the production and/or consumption volume.

2 Certification

Certification is crucial for achieving and verifying palm oil products' sustainability⁸⁵. Certification standards use criteria to ensure the credibility of sustainability claims⁸⁶, address deforestation in operations, and assure buyers that products have been sourced ecologically and ethically⁸⁷. The best practice is a certified volume above 90% and the implementation of the mandatory ISPO standard alongside international certification standards, eg, the RSPO, International Sustainability and Carbon Certificate (ISCC), RA Sustainable Agriculture Network (SAN), and/or Roundtable on Sustainable Biomaterial (RSB) standards.



82. <https://www.cdp.net/en/articles/media/cdp-finds-that-only-22-of-companies-sourcing-or-producing-palm-oil-in-indonesia-have-implemented-public-and-comprehensive-no-deforestation-policies>

83. <https://accountability-framework.org/the-framework/topics/traceability>

84. Ibid

85. <https://accountability-framework.org/how-to-use-it/related-initiatives/certification-and-roundtables/>

86. <https://chinadialogue.net/en/business/11629-how-palm-oil-is-certified-sustainable/>

87. <https://rspo.org/certification>

3 No-Deforestation Policy

Forest-related policies are essential for companies to produce and source commodities while protecting forests and other ecosystems⁸⁸. They indicate a company's recognition of its responsibility to prevent primary forest loss throughout its production or sourcing processes⁸⁹. The best practice is when the following aspects are incorporated into company policies:

- ▼ 'Zero gross deforestation/no-deforestation' AND 'no development on peat regardless of depth'
- ▼ 'No conversion of natural ecosystems' AND 'no land clearance by burning or clearcutting'
- ▼ 'Secure Free, Prior and Informed Consent (FPIC) of Indigenous people and local communities' OR 'adoption of the UN International Labor Organization principles'
- ▼ 'No sourcing of illegally produced and/or traded forest risk commodities' OR 'recognition of legal and customary land tenure rights'

4 Forest-related Risks Assessment

By assessing risks for forest-risk commodities specifically, companies can understand to what extent their business is exposed to forest-related risks. The best practice is having a risk assessment to identify and address forest-related risks within their operations and supply chains, strengthening their ability to manage future uncertainties and liabilities.

5 Forests-related Targets

A company's ambition to safeguard forests while producing or sourcing forest commodities can be seen in its targets. Setting targets helps track progress toward a sustainable supply chain. The best practice is having forest-related time-bound targets of 100% traceability to plantation and 100% certified volume.

6 Ecosystem Restoration

Participating in ecosystem conservation and/or restoration initiatives demonstrates companies' commitment to environmental stewardship, reflecting their support of the GoI's goal to reduce 60% of emissions through the AFOLU sector. The best practice is participation in an ecosystem restoration and protection initiative.

7 Landscape or Jurisdictional Approach

Many companies recognize commodity-driven deforestation as a complex problem requiring collective action from multiple stakeholders in the supply chain⁹⁰. Such efforts may occur via a jurisdictional approach, with actors in the same landscape collaborating to advance common sustainability goals across sectors and land uses⁹¹. Companies may hereby align their sustainable supply chain targets with the wider collective goal for the landscape, prompting support from key stakeholders such as governments and investors⁹². The best practice is participating in external activities or initiatives to promote the implementation of forest-related policies through landscape or jurisdictional approaches.

88. <https://accountability-framework.org/the-framework/topics/deforestation-and-conversion/>

89. <https://wri-indonesia.org/en/blog/primary-rainforest-destruction-increased-12-2019-2020>

90. <https://www.tropicalforestalliance.org/en/insights/blogs/ending-commodity-driven-deforestation-requires-innovative-collective-action-bringing-together-industry-government-and-communities>

91. <https://www.cdp.net/en/articles/forests/the-value-of-landscapes-and-jurisdictional-approaches-to-achieving-sustainability>

92. https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/971/original/CDP_Global_Corporate_Report_on_Forest___Jurisdictional_Approaches.pdf?1638207724

Although these five non-disclosing companies meet several KPIs, gaps remain regarding third-party international certification, an NDPE policy that includes 'no conversion of natural ecosystems', forest-related risk assessment, and landscape approach initiative involvement. Disclosing these indicators through CDP would ensure that their data are standardized, comparable, and decision-useful for investors to address deforestation risks in the palm oil industry. Through such disclosure, investors can more effectively engage with portfolio companies in transitioning towards sustainable supply chains.

Figure 8. Performance by KPI and company

KPI	Description	DSNG	TAPG	AALI	SIMP	SSMS
Traceability	Above 90% of volume is traceable to plantation	✓	✓	✓	✓	✗
Certification	Above 90% of volume is ISPO-certified	✗	✓	✓	✗	✓
	Above 90% of volume is internationally certified	✗	✗	✗	✗	✗
Policy	NDPE policy that includes prevention of ecosystem conversion	✗	✗	✓	✗	✗
Risk assessment	Forest-related risks assessment	✗	✗	✓	✗	✗
Target	Timebound target of 100% traceability to plantation and 100% certified volume	✓	✓	✓	✓	✗
Ecosystem restoration and protection	Participation in ecosystem restoration and protection initiative	✓	✓	✓	✓	✓
Landscape or jurisdictional approach	Participation in activities to promote landscape or jurisdictional approach	✓	✓	✓	✗	✗

Note:

DSNG = PT Dharma Satya Nusantara Tbk
SIMP = PT Salim Ivomas Pratama Tbk

TAPG = PT Triputra Agro Persada Tbk
SSMS = PT Sawit Sumbermas Sarana Tbk

AALI = PT Astra Agro Lestari Tbk

PT Dharma Satya Nusantara Tbk

- Traceability: Achieved 96% traceability to plantation; its palm oil supply originates from its nucleus estate (62%), plasma estate (16%), other estates (2%) and other suppliers (20%)⁹³.
- Certification: Its palm oil mills have been certified by RSPO and ISPO at 58% and 67%, respectively⁹⁴.
- Policy: Has a publicly available NDPE policy but does not follow best practices on 'no conversion of natural ecosystem' commitments⁹⁵.
- Risk assessment: Performs no explicit forest-related risk assessment, but its climate risk assessment is aligned with the Task Force for Climate-Related Financial Disclosure (TCFD) recommendations⁹⁶. In terms of transitional risk, it identified market and reputational risks as significant due to sustainability-related concerns among customers and shareholders, including NGOs.
- Targets: Aims to achieve 100% RSPO certification for all its estates and mills by 2024, 100% RSPO certification of scheme smallholders by 2025, and 100% RSPO for all Fresh Fruit Bunches (FFB) regardless of source by 2030⁹⁷.

PT Dharma Satya Nusantara Tbk

- Ecosystem restoration and protection: Managed a conservation area of 11,876 ha (8,728 ha within its concession and 3,148 ha off-concession)⁹⁸.
- Landscape or jurisdictional approach: Received a US\$30 million loan from &Green Fund to incorporate third-party suppliers in a traceable no-deforestation supply chain as part of its Muara Wahau Landscape Protection Plan in Kalimantan, Indonesia. Additionally, it obtained a US\$15 million loan from the Asian Development Bank (ADB) to expand sustainable wood processing, rural livelihood development and climate-resilient agroforestry in Java, Indonesia. This includes technical training for around 4,000 farmers, of which 30% are female, to obtain certification from the Forest Stewardship Council (FSC)^{99,100,101}.

93. <https://dsn.co.id/id/esg/our-supply-chain-and-landscapes/ffb-supplier-traceability/>

94. https://dsn.co.id/wp-content/uploads/2023/05/SR_DSNG_20062023_EN_low-1.pdf

95. https://dsn.co.id/wp-content/uploads/2021/02/NDPE_Statement_DSNG.pdf

96. <https://dsn.co.id/wp-content/uploads/2022/03/DSNG-Climate-Approach-Methods-Impacts-Risks-Opportunities.pdf>

97. <https://rspo.org/members/1-0135-12-000-00/>

98. https://dsn.co.id/wp-content/uploads/2023/05/SR_DSNG_20062023_EN_low-1.pdf

99. *ibid*

100. <https://www.andgreen.fund/portfolio/pt-dharma-satya-nusantara-tbk-dsng/>

101. https://www.andgreen.fund/wp-content/uploads/2021/12/DSNG-Landscape-Protection-Plan_2020.pdf

PT Triputra Agro Persada Tbk

- Traceability: Achieved 100% traceability to plantation of FFB originating from its nucleus estate (60%), plasma smallholders (9%), and third parties (31%)¹⁰².
- Certification: 100% of its subsidiaries have been confirmed to receive ISPO certificates after fulfilling the prerequisites, and 15% of its palm oil mills and 22% of its plantations are RSPO-certified^{103,104}.
- Policy: Has a publicly available sustainable palm oil policy, including elements of NDPE commitments such as no deforestation, FPIC, and no development on peatland¹⁰⁵. However, the policy does not adopt the best practices of 'no conversion of natural ecosystems'.
- Risk assessment: Performs no explicit forest-related risk assessment. It has a physical risk assessment to prevent forest fire – a common process among palm oil companies – but conducts no transitional risk assessment related to palm oil that identifies reputational and market risks.
- Targets: Aims to achieve 100% RSPO certification for all its estates and mills by 2026 and 100% RSPO for all FFB regardless of source by 2030¹⁰⁶.
- Ecosystem restoration and protection: Managed a 600 ha conservation area to develop Multi-Function Conservation Areas (AKMF) at Mayong Merapun Forest¹⁰⁷.
- Landscape or jurisdictional approach: Has implemented a landscape approach by partnering with producers, government, local communities, smallholders and an NGO called Yayasan Konservasi Alam Nusantara (YKAN) to develop integrated forest and land fire prevention management in East Kalimantan and Central Kalimantan, Indonesia¹⁰⁸.

PT Astra Agro Lestari Tbk

- Traceability: Achieved 100% traceability in its 31 palm oil mills, whereby the FFB supply was 46% from its nucleus plantation, 48% from third parties, and 6% from associated plantations¹⁰⁹.
- Certification: 100% of its subsidiaries have been ISPO certified¹¹⁰. This is one of two companies that is not an RSPO member and does not certify its palm oil products through international certification schemes.
- Policy: Has a publicly available no-deforestation policy that includes no new development in HCV/ HCS areas, peatland conservation, zero fires and responsible sourcing¹¹¹.
- Risk assessment: Conducted a supplier risk assessment to monitor forest-related risks such as deforestation and land fires through spatial analysis using Global Land Analysis and Discovery (GLAD) and Radar for Detecting Deforestation (RADD) systems as well as news coverage¹¹².
- Targets: Aims to maintain 100% traceability to plantation and undergo HCV reassessment by 2025.
- Ecosystem restoration and protection: Carried out riparian and mangrove rehabilitation involving 33,614 trees in conservation areas covering more than 116 ha¹¹³.
- Landscape or jurisdictional approach: Has established over 111 Community Cares for Fire (Masyarakat Peduli Api) groups to support engagement with communities, villages and district governments to develop the Landscape-scale Peat Restoration Model. Has also implemented a rehabilitation program in collaboration with the local government of Pasangkayu, West Sulawesi, Indonesia¹¹⁴.

102. https://admin-web.tap-agri.com/storage/files/1/SR/SR_2022.pdf

103. *ibid*

104. <https://rspo.org/id/members/1-0038-07-000-00/>

105. https://admin-web.tap-agri.com/storage/files/1/Keberlanjutan/Kebijakan%20Keberlanjutan/Kebijakan%20Kelapa%20Sawit%20Berkelanjutan%202022_Bilingual.pdf

106. <https://rspo.org/id/members/1-0038-07-000-00/>

107. https://admin-web.tap-agri.com/storage/files/1/SR/SR_2022.pdf

108. <https://www.spott.org/palm-oil/triputra-agro-persada-group-pt/>

109. <https://www.astra-agro.co.id/wp-content/uploads/2023/03/Sustainability-report-2022-PT-ASTRA-AGRO-LESTARI-Tbk-.pdf>

110. *ibid*

111. https://www.astra-agro.co.id/wp-content/uploads/2022/02/ActionPlan_2022-1.pdf

112. <https://www.astra-agro.co.id/wp-content/uploads/2023/03/Sustainability-report-2022-PT-ASTRA-AGRO-LESTARI-Tbk-.pdf>

113. *ibid*

114. <https://www.spott.org/palm-oil/astra-agro-lestari-tbk-pt/>

PT Salim Ivomas Pratama Tbk

- Traceability: Achieved 100% traceability to plantation, with 75% of FFB from the nucleus estate and 25% from plasma smallholders¹¹⁵.
- Certification: 86% of its plantation is ISPO certified¹¹⁶. It withdrew its RSPO membership in 2019 as it failed to take steps to address a non-compliance complaint regarding worker exploitation¹¹⁷. It does not certify its palm oil products through other international certification schemes such as ISCC.
- Policy: Has a sustainable agriculture policy in place and has committed to sourcing from suppliers that do not cultivate oil palm in areas cleared of primary forest and peatland¹¹⁸. However, the company fails to take sufficient measures to ensure 'no conversion of natural ecosystems'.
- Risk assessment: There is no evidence that the company conducts forest-related risk assessments.
- Targets: Aims for 100% ISPO certification of its palm oil mills and nucleus estate by the end of 2024¹¹⁹.
- Ecosystem restoration and protection: Has identified 24,936 ha of HCV area with an HCV rehabilitation plan. It is reported to have planted approximately 195,732 trees in over 783 ha of HCV area since 2016¹²⁰.
- Landscape or jurisdictional approach: No indication of participation in jurisdictional approach initiatives.

PT Sawit Sumbermas Sarana Tbk

- Traceability: The only company in this study that provides no details on its traceability levels, although it cites traceability as a key commitment in its most recent sustainability policy¹²¹.
- Certification: Its plantations are RSPO certified and ISPO certified, at 75% and 100%, respectively^{122,123}.
- Policy: Has a publicly available NDPE policy. However, it does not include targets to ensure 'no sourcing of illegally produced and/or traded forest risk commodities' or 'recognition of legal and customary land tenure rights'. It does not follow best practices to guarantee that its oil palm has been cultivated through 'no conversion of natural ecosystems'¹²⁴.
- Risk assessment: Conducts no forest-related risk assessment.
- Targets: Aims to achieve 100% RSPO certification for all its plantations and mills by 2024 and 100% RSPO for all FFB by 2025¹²⁵.
- Ecosystem restoration and protection: Provided 7.21% of its concession for an environmental conservation area¹²⁶.
- Landscape or jurisdictional approach: No indication of participation in jurisdictional approach initiatives.

115. https://www.simp.co.id/userfiles/CSR/Sustainability2022/docs/Sustainability_Report_SIMP_2022.pdf

116. https://www.simp.co.id/userfiles/CSR/Sustainability2022/docs/Sustainability_Report_SIMP_2022.pdf

117. <https://rspo.org/news-and-events/news/rspo-secretariats-statement-on-complaints-panel-decision-regarding-pt-salim-ivomas-pratama-tbk>

118. https://www.simp.co.id/userfiles/CSR/Sustainability2020/docs/SUSTAINABLE_AGRICULTURE_POLICY.pdf

119. https://www.simp.co.id/userfiles/CSR/Sustainability2022/docs/Sustainability_Report_SIMP_2022.pdf

120. *ibid*

121. [https://ssms.co.id/uploads/2019/01/New-Sustainability-Policy-SSMS\(ENG\)1548128088.pdf](https://ssms.co.id/uploads/2019/01/New-Sustainability-Policy-SSMS(ENG)1548128088.pdf)

122. https://kelola.ssms.co.id/uploads/2023/07/SR-SSMS-2022_lowres_Rev-2007_OK1690247904.pdf

123. <https://rspo.org/members/1-0111-07-000-00/>

124. <https://ssms.co.id/uploads/2022/01/NDPE-Policy1641262703.pdf>

125. <https://rspo.org/members/1043/PT.-Sawit-Sumbermas-Sarana>

126. https://kelola.ssms.co.id/uploads/2022/05/SSMS_Sustainability-Report-20211652929635.pdf

Recommendations

4

Investors' roles in tackling deforestation

A company's profitability can be significantly affected by its association with unsustainable palm oil supply chains, with negative impacts on its overall financial stability and considerable financial risks for its investors' portfolios. Forests play a key role in climate change mitigation and ecosystem services provision, highlighting the need for investors to pursue no-deforestation to align their portfolios with the 1.5°C pathway and biodiversity conservation.

To manage the deforestation risks introduced into their portfolios by the palm oil industry, investors can implement investment policies and engage with laggard companies to foster a transition towards a sustainable supply chain. In 2017, CDP developed an investor roadmap for tackling deforestation that includes the points below¹²⁷. This roadmap aligns with the Accountability Framework Initiative (AFI) recommendations for financial institutions seeking to assess and manage deforestation and human rights issues related to soft commodities¹²⁸.

1 Request disclosure from investee companies

Requesting environmental disclosure from investee companies is fundamental for their transparency. By understanding companies' actions and progress toward tackling deforestation, investors can comprehend their portfolios' exposure to forest-related risks. CDP's forests questions in its integrated questionnaire offer investors relevant data on disclosing companies, showing how these are identifying and managing the risks associated with their consumption and production of forest-risk commodities.

2 Draft a no-deforestation policy

By drafting a no-deforestation policy, investors can provide clear expectations for companies. An example from the banking sector is BNP Paribas's palm oil policy, which provides a clear outline of mandatory requirements alongside evaluation criteria for upstream and downstream palm oil companies.

3 Understand the risks, opportunities, and progress of portfolio companies

CDP's KPIs outline fifteen essential actions needed to eliminate deforestation from the corporate supply chain (see Appendix). Data from CDP's questionnaire highlight companies' efforts to tackle forest-related risks and realize opportunities in the transition toward sustainable supply chains.

For investor signatories, CDP's Forests Champion Program facilitates the assessment of portfolio companies' deforestation risk exposure and performance toward eliminating deforestation from their operations. Investors can thus make better-informed investment decisions, identify deforestation-related risks in their portfolios, and determine priorities in their engagement. CDP's Forests Champion Program includes the following tailored support for deforestation risk exposure assessment:

- ▶ Training on emerging initiatives or sector-specific standards related to forests, including expertise on up-to-date forest-related issues.
- ▶ Engagement support through insights on where investors can focus efforts in corporate engagement.
- ▶ Data insights and custom analytics on companies' performance and progress against CDP's KPIs.

127. <https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/860/original/CDP-2017-forests-report.pdf?1511199969>

128. <https://accountability-framework.org/about/whos-it-for/financial-institutions/>

4 Engagement

Engaging portfolio companies allows lenders and investors to express their expectations on deforestation and assess companies' awareness and management of forest-related risks throughout their supply chains. CDP supports investor signatories in their engagement via the annual CDP Non-Disclosure Campaign.

This campaign enables investors to engage with high-impact non-disclosing companies. The objective is to drive corporate transparency around climate change, deforestation and water security by encouraging companies to respond to CDP's disclosure request. In 2023, over 288 global financial institutions with over

US\$29 trillion in assets joined the campaign to engage with the highest-impact companies, calling for the disclosure of their environmental data. This campaign's substantial impact was evidenced by targeted companies being 6.8 times more likely than non-engaged companies to disclose their progress towards no-deforestation through CDP.

In addition to the Non-Disclosure Campaign, investors can directly engage with palm oil companies by referring to the assessment criteria used in this report. Another avenue is engaging with companies, as well as the GoI, to support smallholders while further strengthening the ISPO.



The way forward



This report has highlighted the importance of palm oil as a globally versatile commodity and clarified its notable role in the Indonesian economy. However, unsustainable palm oil production continues to have adverse social and ecological impacts. Proactive measures by the GoI and some leading private sector actors have achieved a reduction in the country's deforestation rate, but continuous action is needed. The ever-increasing domestic palm oil consumption, inadequate collective smallholder support, and insufficient transparency and action from major non-disclosing Indonesian palm oil producers can still slow and reverse deforestation rate declines.



1

Requesting environmental disclosure from portfolio companies.

2

Adopting a no-deforestation investment policy.

3

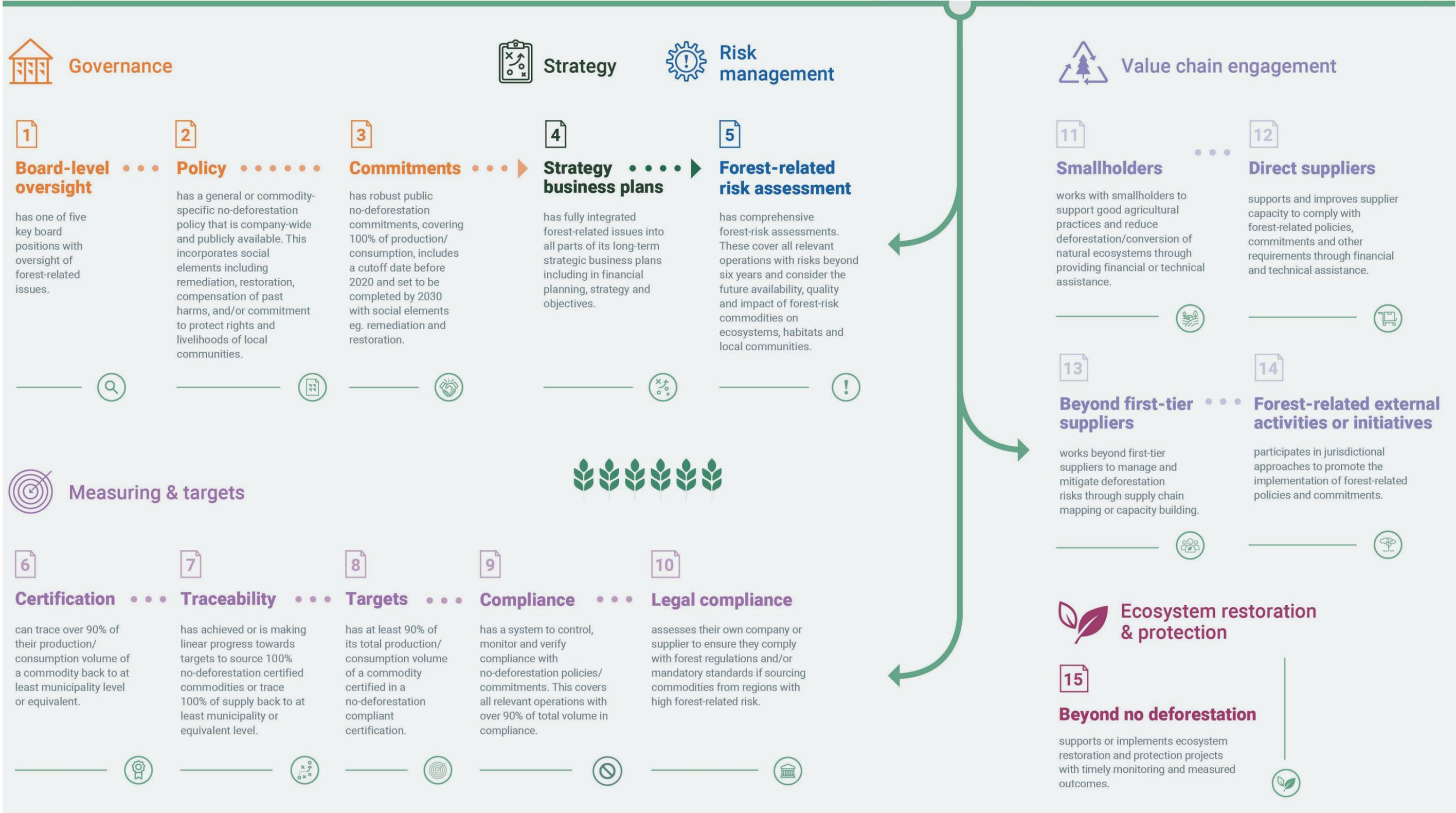
Identifying deforestation risks based on disclosure data.

4

Engaging continuously and proactively with portfolio companies and other key stakeholders, such as the government and the private sector.

Appendix

CDP Forest KPI: A company's journey towards a sustainable supply chain



Authors

Rida Nurafiati

Wisnu Rizki Wibisono

Acknowledgements

Dennis Wan
Thomas Maddox
Tomasz Sawicki
Claire Prescott
Rini Setiawati
Radhika Mehrotra
Maddy Bravery
Emily Peddle
Henry Fogarty
Fitriannisa Soegiharto
Nur Maliki Arifiandi
Devyandra Putri
Elizabeth Lo

CDP Southeast Asia and Oceania

The Great Room Level 8
Afro Asia
63 Robinson Road
Singapore 068894
sea@cdp.net

For further queries, please contact:

Rida Nurafiati
Capital Markets Senior Project Officer, CDP
rida.nurafiati@cdp.net

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About CDP

CDP is a global non-profit that runs the world's environmental disclosure system for companies, cities, states and regions. Founded in 2000 and working with more than 740 financial institutions with over \$136 trillion in assets, CDP pioneered using capital markets and corporate procurement to motivate companies to disclose their environmental impacts, and to reduce greenhouse gas emissions, safeguard water resources and protect forests. Over 24,000 organizations around the world disclosed data through CDP in 2023, with more than 23,000 companies – including listed companies worth two thirds global market capitalization - and over 1,100 cities, states and regions. Fully TCFD aligned, CDP holds the largest environmental database in the world, and CDP scores are widely used to drive investment and procurement decisions towards a zero carbon, sustainable and resilient economy. CDP is a founding member of the Science Based Targets initiative, We Mean Business Coalition, The Investor Agenda and the Net Zero Asset Managers initiative. Visit cdp.net or follow us @CDP to find out more.