

THE HIDDEN RISK

The implications for Chinese financial institutions of forest-related risk within the palm oil supply chain



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ABOUT THIS REPORT

This report seeks to highlight the interconnections between China's financial sector and palm oil-driven deforestation, offering an overview of Chinese financial institutions' exposure to forest-related risk, as well as actionable insights to manage the risk and influence key players across the sector for sustainable success.

The report presents an analysis of financial flows, based on research by CDP, followed by a set of recommendations to both investors and policy makers to reduce their exposure to forest-related risks. In doing so, it intends to make a clear case for Chinese financial institutions to play a critical role in the transition to a low-carbon and deforestation-free economy, in support of China's commitment to achieve net zero emissions by 2060.



KEY FINDINGS

Key insights and recommendations



China is the second largest palm oil importer globally. It is highly dependent on the world's top exporters, Indonesia and Malaysia, concentrating its exposure to forest-related risks within its palm oil value chain.



Chinese financial institutions can reduce their exposure to these risks by looking to international peers for best practice in developing forest safeguards. Financiers in the palm oil supply chain can also seek to incorporate forest-related risks into their investment decision-making through sector-specific policies, both protecting their own interests and incentivizing wider sectoral change.



Most Chinese banks have some form of environment, social and governance (ESG) risk management systems in place to meet regulatory requirements.

Investments are often policy-orientated, financing projects or clients encouraged by the government authorities.



Beyond addressing forest-related risks in their investment and credit portfolios, Chinese financial institutions should develop and improve sustainable finance policies and practices to address broader environmental challenges, including deforestation, and proactively engage with clients to hold them accountable and align their forest policies with broader sustainability-related objectives.



Among the top ten creditors and top five investors in China's palm oil supply chain, none have published a dedicated sustainable finance policy for forest commodities.



The significance of a select group of creditors across China's palm oil supply chain presents an opportunity for sectoral leadership by embedding sustainability into their offers and services.



Chinese policy makers should provide financial institutions with more comprehensive taxonomies of sustainable forest-risk commodities (FRCs). Financial institutions should be given incentives to increase their awareness and improve their policies to incorporate forest sector-related risks into their decision-making processes. Strengthened transparency would enable a better understanding and analysis of the exposure to forest risks.

KEY FINDINGS

Key figures

- Between 2013 and 2020, Chinese financial institutions provided **US\$5.1 billion** in loans and underwriting to Chinese companies in the palm oil value chain. In January 2021, the most recent filing date, Chinese investors held **US\$500 million** in palm oil-attributable bonds and shares issued by Chinese companies active in the palm oil value chain.
- Over half (**56.4%**) of total loans and underwritings to palm oil businesses exposed to forest-related risks are provided by five Chinese financial institutions: Industrial and Commercial Bank of China, Bank of China, China Construction Bank, Agricultural Bank of China and CITIC.
- The most significant investor in China's palm oil supply chain is Hillhouse Capital Management, representing about **35%** of the total value of shares held by Chinese investors.
- Between 2013 and 2020, Chinese financial institutions provided the greatest share of its palm oil-attributable loans and underwriting services to companies engaged in the production of edible oils (**US\$1.8 billion, 36%**), followed by upstream and midstream segments of the palm oil value chain (**US\$1.7 billion, 33%**) and the dairy industry (**US\$1.2 billion, 24%**).
- As of January 2021, the majority of Chinese investments in palm oil-attributable bonds and shares are related to personal care and detergents (**US\$225 million, 45%**) and dairy products (**US\$209 million, 42%**).

An aerial photograph of a landscape. In the foreground, there is a dense, vibrant green forest. To the right, a large, cleared, light-brown area, possibly a deforested hillside or a construction site, slopes downwards. This cleared area is bordered by a line of young, thin trees. Beyond this, the terrain rises into a series of rolling hills covered in lush green vegetation and forests. In the far background, a dark, forested mountain range is visible under a sky with scattered white clouds.

CHAPTER 1

SETTING THE CONTEXT

WHY SUSTAINABLE PALM OIL IS CRUCIAL TO CHINA'S GREEN GOALS

Recent years have seen an increase in the frequency of catastrophic climate change events globally. A notable example is the 2020 flood in China, which cost 0.17% of the country's GDP that year¹. Forests are of crucial importance in slowing the detrimental impact of climate change, as they could provide more than one-third of the total reduction in CO₂ emissions required to keep global warming well below 2°C, as a natural carbon sink².

Forests also provide habitats to around 80% of the world's terrestrial biodiversity³. Species diversity is fundamental in safeguarding the productivity of agricultural commodities and food security, through pollination, pest control, healthy soils, and water filtration. Forests also protect against zoonotic virus spillovers: the more wildlife habitats are threatened by deforestation, the higher the chance for the next pandemic outbreak and global economic slowdown⁴.

Despite their critical role, 220 million hectares of tropical forests have been lost since 1990⁵. The world has experienced an average decline of 68% in monitored population sizes of birds, amphibians, mammals, and reptiles over the last 50 years⁶. Permanent land use change for the production of agricultural forest-risk commodities (FRCs), such as cattle ranching, soybeans, palm oil and timber, has been identified as the main driver

of deforestation, accounting for around 27% of forest loss between 2001 and 2015⁷. Indonesia is a case in point: the largest palm oil-producing country in the world lost 270,057 hectares of its primary forests in 2020 alone⁸.

FRC production, despite being currently the leading driver of deforestation, does not necessarily have to take place at the expense of forests. Under good agricultural practices and careful management, production can be achieved with minimal negative environmental and social impact. There are several multi-stakeholder industry standards that define what constitutes 'sustainable' production. In the palm oil sector, the Roundtable for Sustainable Palm Oil (RSPO) is the most commonly used certification standard. Unsustainable palm oil production is linked to various negative environmental impacts, including deforestation, forest fires, loss of biodiversity, and greenhouse gas (GHG) emissions⁹.

1. Grady McGregor, 2020. Why China's catastrophic floods will barely dents its economy. <https://fortune.com/2020/08/08/china-2020-floods-economy-gdp/>

2. Griscom, B. W. et al, 2017. Natural climate solutions. <https://pubmed.ncbi.nlm.nih.gov/29078344/>

3. FAO, 2020. The world's forests: a wealth of biodiversity. <http://www.fao.org/publications/highlights-detail/en/c/1267161/>

4. Johnson CK, et.al, 2020. Global shifts in mammalian population trends reveal key predictors of virus spillover risk. <https://royalsocietypublishing.org/doi/10.1098/rspb.2019.2736>

5. Vancutsem, et.al, 2021. Long-term (1990–2019) monitoring of forest cover changes in the humid tropics, Science Advances. <https://doi.org/10.1126/sciadv.abe1603>

6. WWF & ZSL, 2020. Living Planet Report 2020. Bending the curve of biodiversity loss. <https://www.zsl.org/sites/default/files/LPR%202020%20Full%20report.pdf>

7. Curtis, P.G., Slay, C.M., Harris, N.L., Tyukavina, A. and M.C. Hansen, 2018. "Classifying drivers of global forest loss", Science, 361: 1108-1111

8. World Resource Institute, 2021. Global Forest Watch. <https://research.wri.org/gfr/forest-pulse>

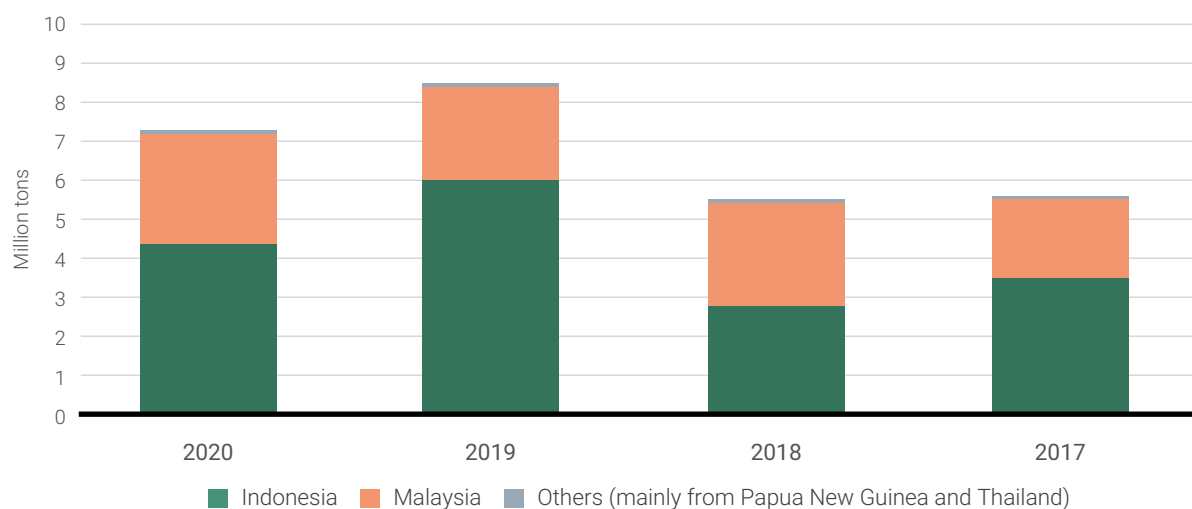
9. UNDP China, 2019. Mapping the palm oil value chain: opportunities for sustainable palm oil in Indonesia and China.

China's palm oil demand

China's palm oil demand has been increasing throughout the years, primarily driven by its use as a cooking oil and a major ingredient in instant noodles, as well as its application in the oleochemical sector, which includes soaps and cosmetics (see Figure 1). Globally, China has become the second largest palm oil importer and third largest consumer¹⁰. Recognizing the critical role of palm oil, Chinese companies have become involved in upstream palm oil production. For example, in 2006, Julong Group established its overseas palm oil plantation in Indonesia, and later added processing facilities in 2011. To date, it owns 50,000 hectares of palm oil plantations in Indonesia¹¹, and at least three palm oil mills that supply multinational brands¹².

In 2020, China's total palm oil related products imports reached 7.2 million metric tons, of which 59% were imported from Indonesia¹³. Despite these substantial volumes, only 2% were RSPO certified sustainable palm oil¹⁴. The low uptake on certified sustainable palm oil was partly attributable to the lack of regulatory requirement from the Chinese Government as well as price sensitivity¹⁵.

Figure 1. China palm oil imports by country of production 2017-2020 (data source: General Administration of Customs, China)



10. China Dialogue, 2020. Sustainable palm oil seeks breakthrough in China. <https://chinadialogue.net/en/food/sustainable-palm-oil-seeks-breakthrough-in-china/>

11. Julong Group, 2021. <https://julongindonesia.com/about.html>

12. CDP, 2020. The Hidden Commodity. How China's palm oil imports can help halt deforestation. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/005/270/original/CDP_China_Palm_Oil_Report_2020.pdf?1594112746

13. GACC online data source: <http://43.248.49.97/>

14. China Dialogue, 2020. Sustainable Palm Oil Seeks Breakthrough in China. <https://chinadialogue.net/en/food/sustainable-palm-oil-seeks-breakthrough-in-china/>

15. Ibid.

China's potential for green leadership

From the regulatory perspective, China's high-level domestic commitments and policies clearly signal its resolution and its efforts to take the lead in addressing climate change and biodiversity issues. The Chinese Government proposed six principles for upholding ecological civilization to reiterate the importance of the natural environment including forests, and the necessity of the strictest regulations and laws, in May 2018¹⁶. China is also expected to facilitate the agreement of more ambitious biodiversity goals as the host country of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP CBD) in 2021. It has also expressed its climate ambitions by pledging to achieve peak carbon emissions by 2030 and achieve net zero emissions by 2060, with the help of more forceful policies and measures in China's 14th Five Year Plan (2021-2025) and the long-range objective through the year 2035¹⁷.

China recognizes the important role of the financial sector in climate change, biodiversity, and the Sustainable Development Goals (SDGs). As a consequence, it has launched various green finance policies, regulations, and guidelines to mobilize financial support for low-carbon, greener and more sustainable industries. Additionally, China has been attaching more importance to its ecological footprint management in overseas investments since the launch of the Belt and

Road Initiative (BRI) in 2013. The Chinese Government's efforts in greening the BRI to align with local climate actions and SDGs clearly lean towards a stricter regulatory context for Chinese overseas investment. This shift should drive companies and financial institutions to manage the underlying regulatory risks in their overseas investment portfolios. To comply, investors will need to work to develop policies that favour sustainable palm oil in supply chains.

From the producer countries' perspective, stringent measures have been implemented to achieve environmental targets such as Nationally Determined Contributions (NDCs). Specifically, Indonesia has implemented peatland restoration as well as a moratorium on the conversion of primary natural forests and peatlands for oil palm, pulpwood and logging concessions. These measures contributed to a 45% reduction in annual forest loss in 2018, compared to average annual losses from 2002-2016¹⁸. While large areas of forest are still lost each year, the decreasing trend continued in 2019 and 2020, with a 17% decrease year-on-year in 2020 (270,057 hectares compared to 324,000)¹⁹. The implementation of the moratorium combined with more stringent requirements from certification standards carry an increasing risk of stranded assets for companies. In 2019, around 28.4% of Indonesia's palm oil landbank was considered as stranded²⁰.

16. Xi Jinping, 2019. Pushing China's development of an Ecological Civilization to a New Stage, Qiushi Journal. http://www.qstheory.cn/dukan/qs/2019-01/31/c_1124054331.htm

17. The Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035. http://www.xinhuanet.com/fortune/2021-03/13/c_1127205564.htm

18. Arief Wijaya, Tjokorda Nirarta "Koni" Samadhi and Reidinar Juliane, 2019. Indonesia Is Reducing Deforestation, but Problem Areas Remain. <https://www.wri.org/blog/2019/07/indonesia-reducing-deforestation-problem-areas-remain#:~:text=A%20moratorium%20policy%20that%20bans,moratorium%20permanent%20later%20this%20year.>

19. World Resource Institute, 2021. Global Forest Watch. <https://research.wri.org/gfr/forest-pulse>

20. Chain reaction research, 2019. 28 Percent of Indonesia's palm oil landbank is stranded. <https://chainreactionresearch.com/report/28-percent-of-indonesias-palm-oil-landbank-is-stranded/>

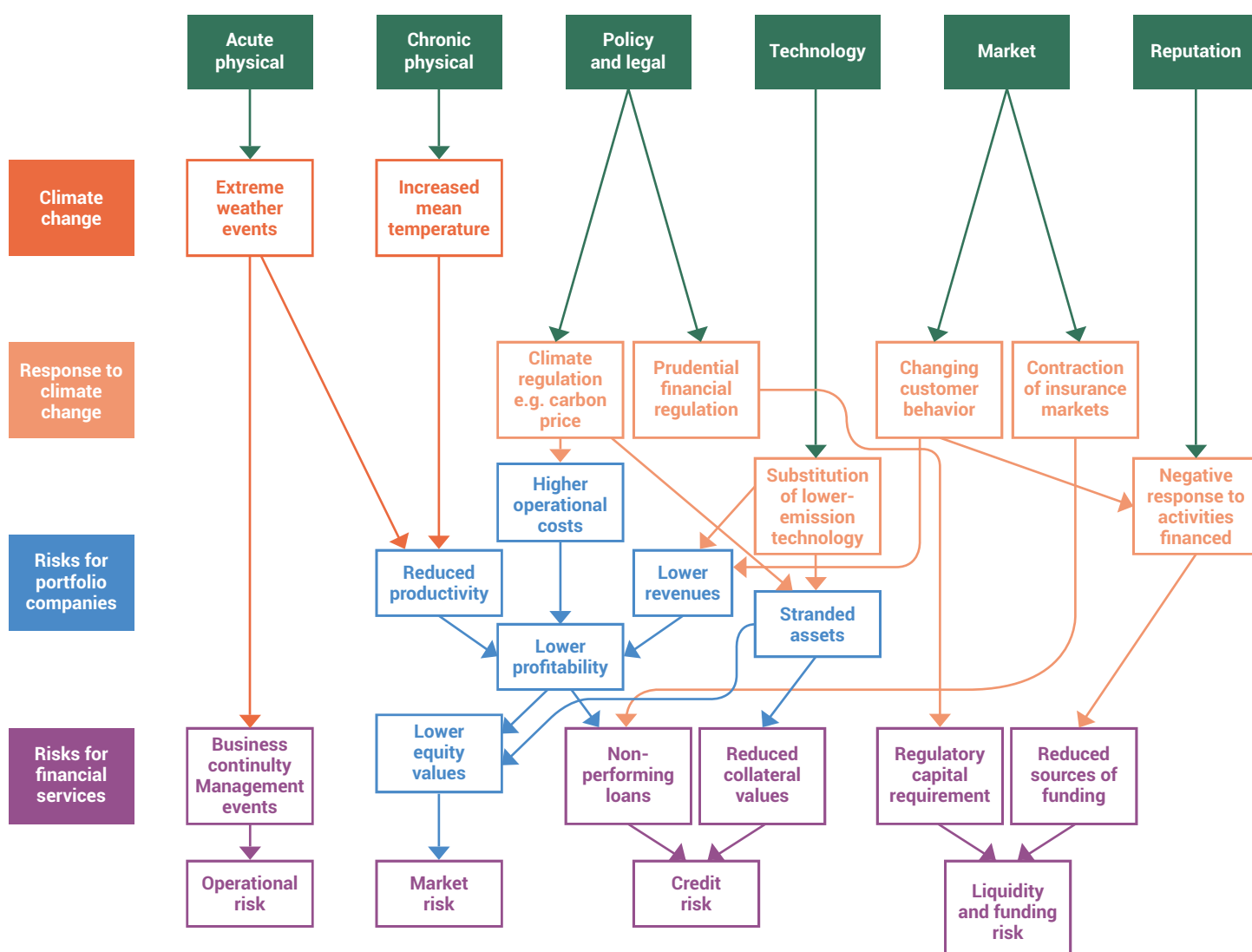
WHY A SUSTAINABLE PALM OIL SUPPLY CHAIN MATTERS FOR FINANCIAL INSTITUTIONS

Companies that produce and/or source uncertified palm oil are increasingly posing risks to their lenders and investors. These risks are the result of more stringent regulations of agricultural commodity supply chains affecting the palm oil sector, changes in end-consumer and buyer preferences in favor of sustainably produced palm oil, as well as physical risks, to supply and more broadly, due to environmental change.

These risks can materialize in the form of non-performing loans (NPL), reduced value of collateral, lower solvency ratios and slimmer profit margins. Financial institutions can be directly or indirectly exposed to forest-related risks

through their lending and investment portfolios in palm oil value chains. Details of causal factors underlying the financial sector's risk exposure, and how they interrelate, can be seen in Figure 2.

Figure 2. The underlying risks faced by financial sector and companies²¹.




21. CDP Financial Services Disclosure Report 2020, 2021. The Time to Green Finance. <https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/005/741/original/CDP-Financial-Services-Disclosure-Report-2020.pdf?1619537981>

Financial institutions need to be able to assess these underlying risks, including impacts on their capital, and start adopting measures to manage palm oil deforestation risk. They could start by integrating forest-related risks into their financing decisions. A second important step would be through active ownership: engaging their debtors and/or investees to improve their sustainability policies in line with their internal policies, so as to reduce portfolio risk.

There has been increasing awareness among investors of the urgency to tackle climate change and deforestation. To date, 590 institutional investors with assets worth over US\$110 trillion have become signatories to CDP, one of the most established environmental reporting platforms. Despite the substantial number, only one signatory is a Chinese investor (Harvest Fund). In September 2019, driven by forest fires in the Brazilian Amazon, 251 investors with more than US\$17.7 trillion in assets urged companies to adopt no-deforestation policies that cover their supply chains and to regularly report on their progress²². Of

the investors that endorsed this initiative, only one was Chinese (China Asset Management).

Specifically in relation to palm oil, more than 90 investors representing over US\$6.7 trillion in assets under management called on the RSPO to strengthen its standards for certifying the sustainable production of palm oil in 2018²³. Moreover, the PRI investor working group on sustainable palm oil, representing more than 50 investors with approximately US\$8 trillion in assets under management, have endorsed a statement ('Investor Expectations on Sustainable Palm Oil') laying out their expectations for companies operating across the palm oil value chain and highlighting their continued support for a sustainable palm oil industry in 2019²⁴. The statement encourages companies to become RSPO members, adopt No Deforestation, No Development on Peatland, and No Exploitation (NDPE) policies, set time-bound plans, and regularly report on progress and practices. Despite its importance, no Chinese financial institutions joined this initiative.



In September 2019,
driven by forest fires in
the Brazilian Amazon,

251

**investors (including one
from mainland China)**

with more than US\$17.7 trillion in
assets urged companies to adopt
no-deforestation policies that
cover their supply chains and to
regularly report on their progress

22. Investor statement on deforestation and forest fires in the Amazon, 2019. https://d8g8t13e9vf2o.cloudfront.net/Uploads/r/q/s/investorstatementondeforestationandforestfiresintheamazon_29_oct_2019_665598.pdf

23. The full letter and list of investor recommendations and signatories call for stronger standard from RSPO, 2018. https://www.ceres.org/sites/default/files/Letters/RSPO%20P%26C%20Review%20Investor%20Letter_08.01.2018.pdf

24. Investor expectations statement from PRI investor working group on sustainable palm oil, 2019. <https://www.unpri.org/download?ac=10612>

INITIATIVES FOR SUSTAINABLE PALM OIL

Financial institutions have an important role to play in driving sustainability in the palm oil sector. They have the power to decide where money flows, and so can promote the adoption of more responsible ESG practices among companies. Participation in sustainable palm oil initiatives can indicate the commitment of financial institutions to more sustainable business models and help to limit risks across the sector.

Several initiatives have been established by different stakeholders in the palm oil industry, including companies, financial institutions, and governments. Often these are developed as multi-stakeholder platforms. The section below highlights a selection of these which can promote action for a more sustainable palm oil and forest sector and help to manage related risks.



Investors and financial institutions

Principles for Responsible Investment (UN-PRI)

This UN-backed network of institutional investors works together to understand the ESG-impact of investments, and how to integrate these concerns into their investment practices²⁵. The PRI Investor Working Group on Palm Oil was established in 2011. In 2019, 50 PRI members issued the 'Investor Expectation in Sustainable Palm Oil', highlighting their support for sustainable palm oil and urging companies to adopt NDPE policies²⁶. In the same year, the PRI released a guide on forestry-related risks in investments²⁷. To date, the PRI has 55 members from China, including two asset owners, 41 investment managers and 12 service providers.

Task Force for Climate-related Financial Disclosures (TCFD)

The TCFD was established in 2015 by the Financial Stability Board to develop consistent climate-related financial disclosures to be used by companies, banks, and investors²⁸. It focuses on several high impact sectors including energy and transportation, as well as agriculture, food, and forest products. To date, more than 1,900 stakeholders from 78 countries have expressed commitments to support the TCFD. These include 19 Chinese stakeholders²⁹, such as the Industrial and Commercial Bank of China (ICBC) and Bank of China. Due to the wide adoption of TCFD, financial institutions with palm oil exposure are expected to disclose climate related risk relating to their lending or investment portfolio on the sector.

Task Force for Nature-related Financial Disclosures (TNFD)

This initiative aims to standardize reporting on nature-related risks to improve transparency and accountability linked to deforestation. The intention is to enable and incentivize financial institutions to deliver on zero-deforestation commitments³⁰. The TNFD is currently still in development. The informal Working Group tasked with developing the framework consists of 73 members, including 40 financial institutions. Its co-chairs represent the United Nations Convention on Biological Diversity and the London Stock Exchange Group.

25. About the PRI. <https://www.unpri.org/pri/about-the-pri>

26. PRI Investor Working Group on Sustainable Palm Oil, <https://www.unpri.org/sustainable-land-use/pri-investor-working-group-on-sustainable-palm-oil/5873.article>

27. PRI, An introduction to responsible investment in forestry. <https://www.unpri.org/download?ac=6441>

28. About TCFD. <https://www.unepti.org/climate-change/tcfd/#:~:text=The%20Task%20Force%20on%20Climate,in%20providing%20information%20to%20stakeholders.>

29. TCFD supporters, <https://www.fsb-tcfd.org/supporters/>

30. Taskforce on Nature-related Financial Disclosure (TNFD), 2020. https://wwf.panda.org/wwf_news/?666111/Global-Call-for-a-Taskforce-on-Nature-related-Financial-Disclosure-TNFD



Certification bodies and multi- stakeholder forums

Roundtable on Sustainable Palm Oil (RSPO)

The RSPO is a non-profit organization that brings together key actors in the palm oil sector. Its members include growers, traders, manufacturers and retailers, as well as financial institutions and NGOs. Together they seek to develop and implement global standards for sustainable palm oil³¹. To date it has more than 5,000 members, including 191 Chinese companies. The RSPO is currently the most widely used palm oil certification standard and is considered to have the most stringent requirements³².

China Sustainable Palm Oil Alliance (CSPOA)

The CSPOA was jointly developed by the RSPO, China Chamber of Commerce of Import & Export of Foodstuffs, Native Produce & Animal By-Products (CFNA), and the World Wildlife Fund for Nature (WWF), with the aim to mainstream sustainable palm oil in the Chinese market³³. As of April 2021, it has 15 members including AAK China, Cargill China, HSBC, L'Oréal, Mingfai Group, CDP, Tropical Forest Alliance (TFA), and Musim Mas.

Indonesia Sustainable Palm Oil (ISPO)

ISPO is the mandatory certification standard for palm oil producers in Indonesia. It was established in 2011 by the Indonesian government to improve the sustainability of the Indonesian palm oil. It is referred to as Indonesia's 'legality standard' as it emphasizes alignment with the existing legal and regulatory requirements³⁴.

Malaysian Sustainable Palm Oil (MSPO)

MSPO is the Malaysian national certification scheme for oil palm plantations and independent and organized smallholders, as well as palm oil processing facilities³⁵. Similar to ISPO, MSPO is based on the existing national and legal regulatory requirements. It was launched in 2015.

31. RSPO about, <https://rspo.org/about>

32. Forest peoples programme, a comparison of leading palm oil certification standards. https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf

33. WWF, 2018. Launch the China Sustainable Palm Oil Initiative. <http://wwfchina.org/pressdetail.php?id=1835>

34. Forest peoples programme, a comparison of leading palm oil certification standards. https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf

35. MSPO Certification scheme, <https://www.mpocc.org.my/about-mspo>



RESEARCH OBJECTIVES

China plays a crucial role in the palm oil supply chain, particularly through its financial sector. This study presents an analysis of the investment and credit flows of Chinese financial institutions involved in the palm oil sector, shedding light on their forest-related risk, and offers recommendations to manage and mitigate these risks.

The research mapped the financial flows from Chinese financial institutions to 31 companies (see table 1), and reviewed their existing environmental management practices. The companies were selected on the basis of palm oil consumption in key sectors, including food and beverage (edible oil, instant noodles, baked goods, dairy products), food service/ restaurants, personal care and detergents, and cosmetics³⁶. They represent the companies most exposed to forest-related risk across China's entire palm oil supply chain. Details of the

research methodology can be found in the Appendix of this report (page 48).

This report provides best practice insights and lessons learned to support the integration of forest-related policies into the lending and investment portfolios of international financial institutions. It culminates in a set of recommendations to Chinese financial institutions and policy makers to kickstart action to manage palm oil-related risk and drive a more sustainable supply chain.

Table 1. Sample companies

Company	Key Sector(s)
Yihai Kerry Awarana (Wilmar SG)	Upstream / Midstream, Food & Beverage / Edible oil
Intercontinental Oils & Fats, Shanghai Continental (Musim Mas SG)	Upstream / Midstream
China Oil and Foodstuffs Corporation (COFCO)	Midstream, Food & Beverage / Edible oil
Borneo Agri-Resources International (SG)	Upstream / Midstream
First Resources (SG)	Upstream / Midstream
Yizheng Fangshun Grain and Oil Industry Co.	Midstream, Food & Beverage / Edible oil
Tingyi Holding	Food & Beverage / Instant noodles
Tainan Group	Food & Beverage / Instant noodles
Jinmailang	Food & Beverage / Instant noodles
Dali Food Group	Food & Beverage / Bread & bakery

36. CDP, 2020. The Hidden Commodity. How China's palm oil imports can help halt deforestation. https://6fefcb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/005/270/original/CDP_China_Palm_Oil_Report_2020.pdf?1594112746

Company	Key Sector(s)
Toly Bread	Food & Beverage / Bread & bakery
Fujian JinJiang FuYuan Foodstuff	Food & Beverage / Bread & bakery
Inner Mongolia Yili Industrial Group	Food & Beverage / Dairy products
China Mengniu Dairy	Food & Beverage / Dairy products
Bright Dairy	Food & Beverage / Dairy products
Want Want China Holdings	Food & Beverage / Dairy products
YUM China Holdings	Food Service / Restaurants
Xiabu Xiabu	Food Service / Restaurants
Haidilao International Holding	Food Service / Restaurants
Ajisen (China) Holdings	Food Service / Restaurants
Hop Hing Group Holdings	Food Service / Restaurants
Sinograin	Food & Beverage / Edible oil
Beidahuang Group	Food & Beverage / Edible oil
Tianjin Julong Group	Food & Beverage / Edible oil
Guangzhou Liby Enterprise Group	Oleochemical / personal care and detergents
Nice Group	Oleochemical / personal care and detergents
Procter & Gamble (China) P&G (US)	Oleochemical / personal care and detergents
Unilever (China) Unilever (UK)	Oleochemical / personal care and detergents
Bluemoon	Oleochemical / personal care and detergents
L'Oréal (China) L'Oréal (France)	Oleochemical / Cosmetics
Shanghai Jahwa	Oleochemical / Cosmetics

CHAPTER 2

KEY FINANCIAL SECTOR ACTORS IN CHINA'S PALM OIL SUPPLY CHAIN



OVERVIEW OF FINANCIAL FLOWS IN CHINA'S PALM OIL SUPPLY CHAIN

Financial institutions, including creditors such as banks and institutional investors such as asset managers, have a critical role in the transition to a low-carbon, deforestation-free economy.

Currently, the forces driving climate change and ecosystem destruction, including unsustainable production of palm oil, are deeply intertwined with our financial system. Capital must be shifted away from companies with unsustainable practices, and towards those who are building our future systems. This presents an opportunity for the sector to be a key driver

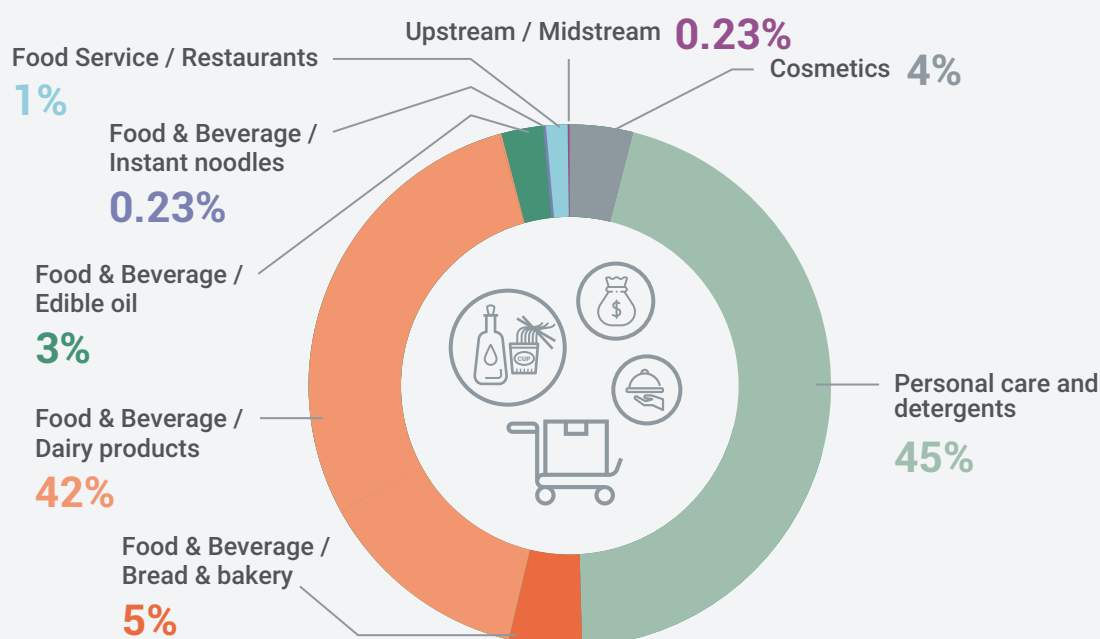
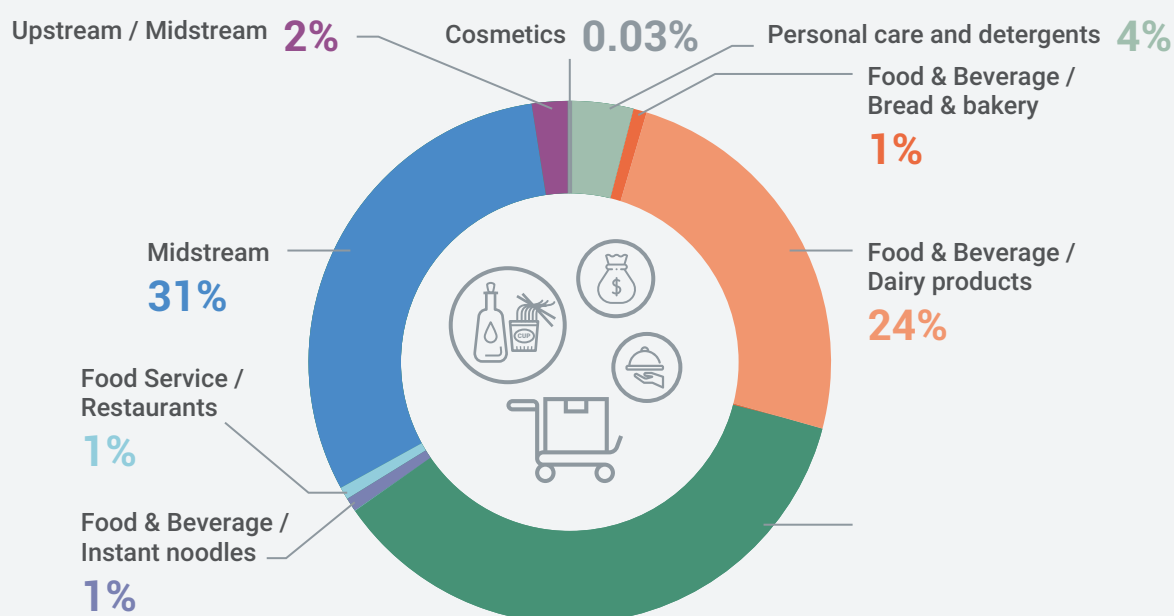
of change. In China, commitment from the government to achieve net zero by 2060 requires massive investment in low-carbon technologies and sustainable agriculture. Additionally, financial institutions' influence in the wider economy means they can catalyze change by engaging with the companies they lend to, invest in, and insure.



Measuring the flow

- Between 2013 and 2020, the 31 companies most exposed to forest-related risk in China's palm oil supply chain attracted US\$28.7 billion in loans and underwriting services linked to palm oil in China. Of this total, an estimated **US\$5.1 billion (18%)** was provided by China's financial institutions.
- At the most recent filing date in January 2021, Chinese investors held **US\$500 million** in palm oil attributable bonds and shares issued by Chinese companies active in the palm oil value chain, focused on the food and beverages, personal care and detergent sectors.
- Chinese financial institutions provided the most palm oil-attributable loans and underwriting services to companies engaged in the production of edible oils (**US\$1.8 billion, 36%**), followed by upstream and midstream segments of the palm oil value chain (**US\$1.7 billion, 33%**) and the dairy industry (**US\$1.2 billion, 24%**).
- As of January 2021, the biggest shares of Chinese investments in palm oil attributable bonds and shares are related to personal care and detergents (**US\$225 million, 45%**) and dairy products (**US\$209 million, 42%**).

Figure 3. Chinese financial flows (Top – creditors; Bottom – investors) by sector (multiple data sources, see Appendix I)



KEY FINANCIAL SECTOR ACTORS IN CHINA'S PALM OIL SUPPLY CHAIN

Creditors

Bank of China was the largest lender to the palm oil supply chain with approximately

US\$266 million

in palm oil-related financing from 2013 to 2020

Credit in China's palm oil sector is highly concentrated among a select group of financial actors, increasing their exposure to forest-related risk. The significant leverage of these actors across the supply chain also presents an opportunity for sectoral leadership by embedding sustainability into their offers and services.

The top 15 creditors collectively account for more than 85% of loans and underwriting services to the 31 companies selected for this research (see Table 2). Just five state-owned financial institutions provided more than US\$100 million in loans over the period 2013-2020: Bank of China, China Construction Bank (CCB), Agricultural Bank of China, Industrial and Commercial Bank of China (ICBC) and China Development Bank (CDB). Of these, CDB is a policy bank, while the others are known as the 'Big Four' Chinese commercial banks.

Bank of China was the largest lender to the palm oil supply chain with approximately US\$266 million in palm oil-related financing from 2013 to 2020. It was also the largest lender to the soy supply chain with over US\$676 million in soy-related financing in the period 2013 to 2017³⁷. This indicates that the Bank

of China is exposed to risks associated with FRCs through its lending services.

ICBC provided the most bond and share issuance underwriting services. The bank supplied over US\$563 million in palm oil attributable underwriting services, accounting for 14.3% of the total provided by Chinese financial institutions.

From 2013 to 2020, Chinese financial institutions provided more financial support through underwriting services to companies engaged in the sector than through loans. The sum of underwriting services is **six times higher** than that of loans. This pattern is similar to that identified in the previous CDP soy finance research^{38,39}.

Table 2 presents an overview of the palm oil-attributable financing per financial institution in 2013-2020.

37. CDP, 2019. The Neglected Risk: Why deforestation risk should matter to Chinese financial institutions.

38. Ibid

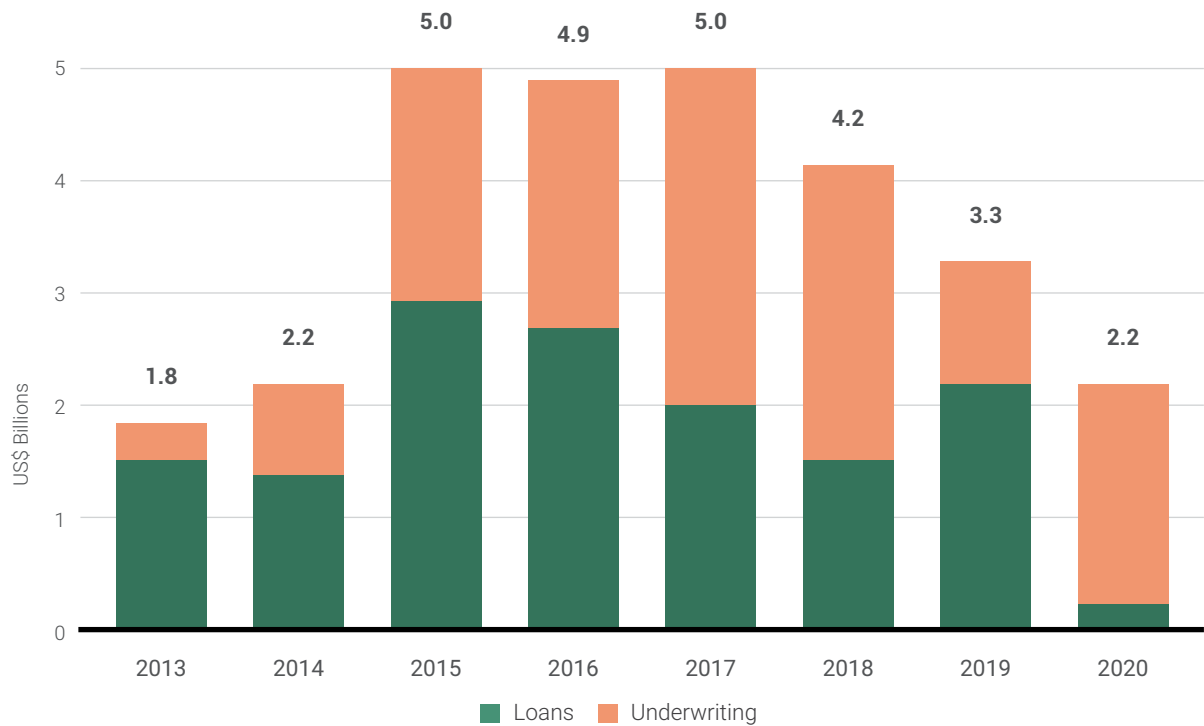
39. Bond issuances have become an important source of company financing in China. This is due to several factors. Firstly, companies in China find it more difficult to attract loans from banks. Banks in China – directed by the government to reduce their non-performing loans – have strict criteria for their lending services. As a result, companies sought alternative sources of financing. More companies started to find the capital markets as such a source of financing by issuing shares and bonds. These bond issuances had less strict criteria than conventional loans. Moreover, there was high demand for shares and bonds issued by Chinese companies. This demand came both from within China – with an increasingly wealthy population using investments to increase the value of their savings – and from abroad from investors eager to invest in a stable and rapidly growing economy.

Table 2. The top 15 creditors providing loans and underwriting service to selected companies

Financial institution	Loans (US\$million)	Underwriting (US\$million)	Total (US\$million)	Share of total
Industrial and Commercial Bank of China	128	563	691	13.6%
Bank of China	266	377	643	12.6%
China Construction Bank	219	402	620	12.2%
Agricultural Bank of China	209	338	546	10.7%
CITIC	15	355	370	7.3%
China Merchants Group	84	271	354	7.0%
China Development Bank	136	63	199	3.9%
Bank of Communications	30	168	198	3.9%
China Minsheng Bank	8	133	142	2.8%
China Everbright Group	23	119	142	2.8%
Ping An Insurance Group	-	127	127	2.5%
Bank of Ningbo	-	85	85	1.7%
Bank of Beijing	-	79	79	1.6%
Shanghai Pudong Development Bank	6	69	75	1.5%
Donghai Securities	-	71	71	1.4%
Cumulative share of top 15	1,124	3,222	4,345	85.5%
Total	1,157	3,930	5,086	100%

Complex factors mean credit flows to the palm oil supply chain fluctuate significantly from year to year (see Figure 4). For instance, they increased by over 2.7 times between 2013-2015, and then remain almost unchanged until 2017. Then, in 2020⁴⁰, these flows decreased to US\$2.2 billion, similar to 2014 levels – likely in response to COVID.

Figure 4. Annual loans & underwriting (2013-2020) attributable to palm oil supply chain in China



40. The 2020 data may be incomplete and not updated from financial database due to the cut off data of this research, hence the actual figure may be higher than US\$ 2.2 billion. Meanwhile, although we see the falls in loans and underwriting from 2018, and total value of finance flow in palm oil sector is relatively small compared to other industry, China still play an important role in global palm oil market as the second biggest importer and third largest consumer of palm oil. In addition, since 2015, Chinese financial institutions have provided US\$ 14.9 billion in forest-risk credit and held US\$ 198 million in forest-risk investments in June 2020. See the research here: https://www.banktrack.org/download/chinese_banks_forestrisk_financing/chinesebanksforestriskfinancing.pdf

From the corporate perspective, COFCO received the greatest share of palm oil attributable loans and underwriting services, totalling US\$3.1 billion (61% of the total) in the period 2013-2020. It was followed by

Bright Food Group, which received US\$1.01 billion from Chinese financial institutions (19.9% of the total). See Table 3 for an overview of finance received.

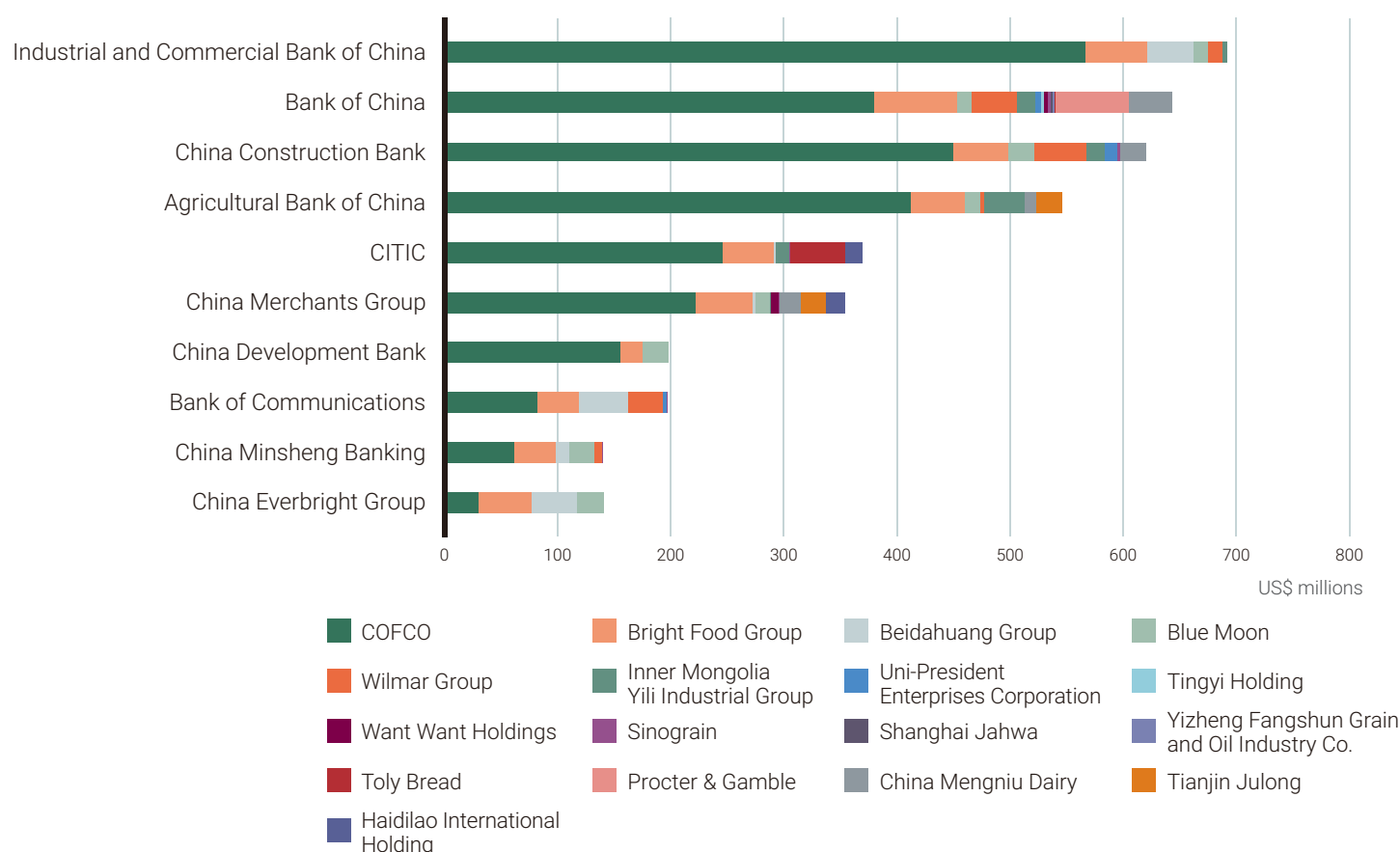
Table 3. Chinese debtors: Loans & underwriting per company (2013-2020)

Company	Loans (US\$Million)	Underwriting (US\$Million)	Total (US\$Million)
COFCO	695	2,418	3,114
Bright Food Group	47	969	1,016
Beidahuang Group		155	155
Wilmar Group	131		131
Blue Moon	17	109	126
Tianjin Julong	113		113
Inner Mongolia Yili Industrial Group		109	109
China Mengniu Dairy	40	65	105
Procter & Gamble	65		65
Toly Bread	1	49	50
Haidilao International Holding	22	19	41
Uni-President Enterprises Corporation	19	9	28
Want Want China Holdings	3	8	11
Sinograin		9	9
Tingyi Holding		9	9
Yizheng Fangshun Grain and Oil Industry Co.	3		3
Shanghai Jahwa	2		2
Total	1,157	3,930	5,086

The credit relationships presented in Figure 5 are supported and enabled by qualitative relationships between financial institutions and companies. These 'client relationships' are not quantifiable, but suggest relatively stable partnerships between companies and financial institutions, with the capacity to influence companies' business decisions. For instance, COFCO has entered into strategic cooperation with various banks, including ICBC, China Construction Bank,

Agricultural Bank of China, Bank of China, China Merchant Bank⁴¹, and CITIC, all of which have provided loans and underwriting services to COFCO. Similarly, Bright Food Group signed strategic cooperation agreements with ICBC⁴² and China Merchant Bank⁴³ in April and August 2014, respectively. Generally, financial institutions that have entered strategic cooperation agreements with the companies have also provided or have intended to provide them with financial services.

Figure 5. Top 10 Chinese creditors with US\$ 100 million loan and underwriting flow to selected companies (2013-2020)



41. Cofco met with China Merchants Bank, 2016. <http://www.cofco.com/cn/News/Allnews/Latest/2016/1124/40644.html>

42. ICBC invest in Bright Food Group, 2014. <https://icbc.51credit.com/zixun/10701038.shtml>

43. Bright Food Group signed strategic cooperation agreements with China Merchant Bank, 2014. www.cmhk.com/main/a/2015/k13/a24037_24092.shtml

Institutional Investors

Exposure to forest-related risks in the palm oil supply chain is also highly concentrated, with a single asset manager representing over one-third of total shares. As with creditors, the concentrated nature of investments both points to significant exposure to risk for primary actors, and a significant opportunity for leadership towards more sustainable management of the palm oil sector among them.

As of January 2021, Chinese institutional investors collectively held approximately US\$500 million in palm oil attributable bonds and shares. The largest identified shareholders were asset managers, of which the top

15 companies are shown in Figure 6. Among these, the biggest investor is Hillhouse Capital Management, representing approximately 35% of the total shares in the palm oil sector held by Chinese investors. Its largest investment, at US\$210 million, is in Blue Moon (Table 4), and was the highest palm oil-attributable investment within the scope of our research. Inner Mongolia Yili Industrial Group received the second largest investment from several investors including Orient Securities, CITIC and E Fund Management, with a total value of US\$186 million. These were the only two listed companies receiving more than US\$100 million in palm oil-attributable investments from the Chinese institutional investors.

Figure 6. Top 15 Chinese investors (US\$million, 2021 January most recent filing date)

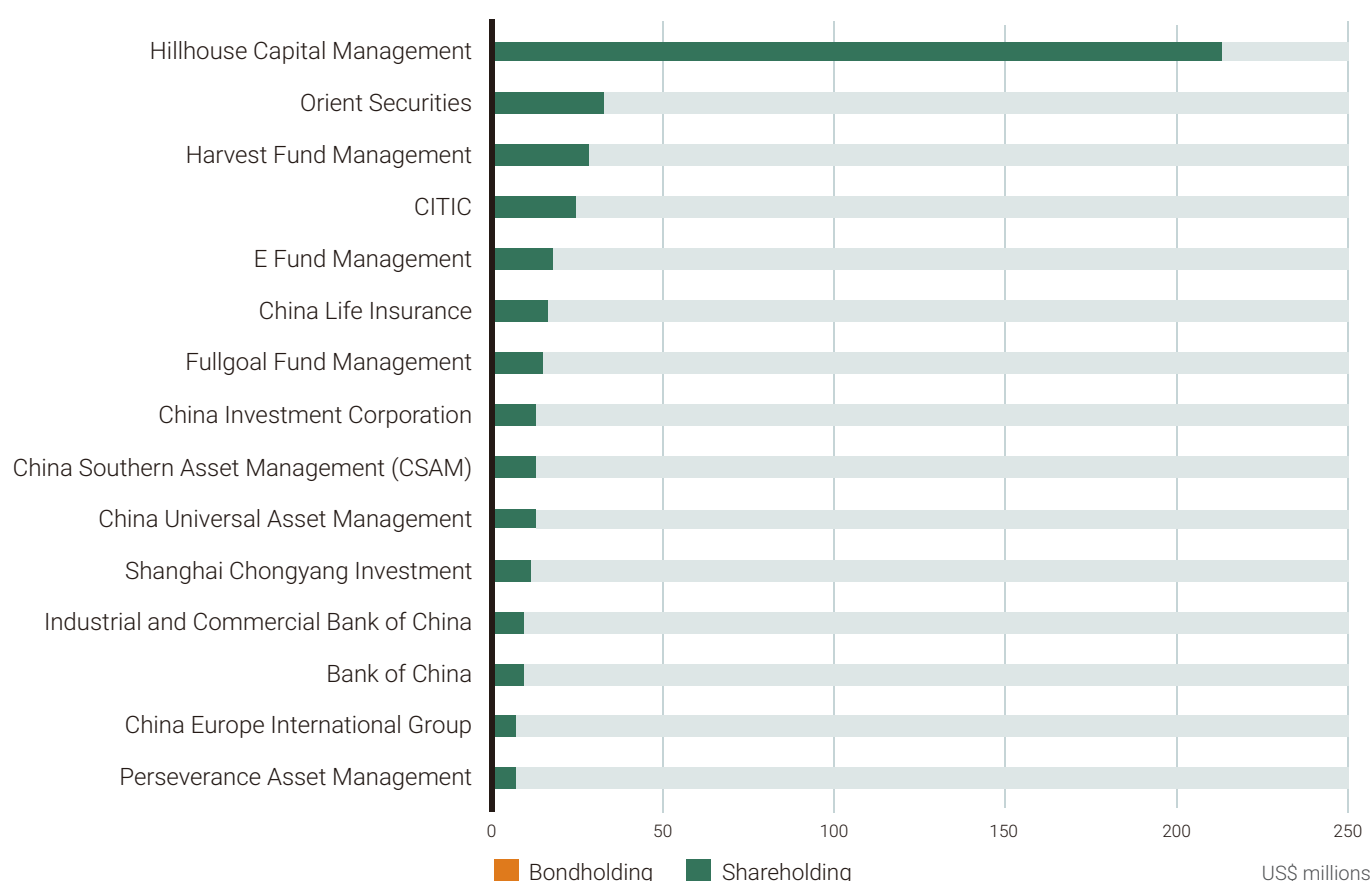
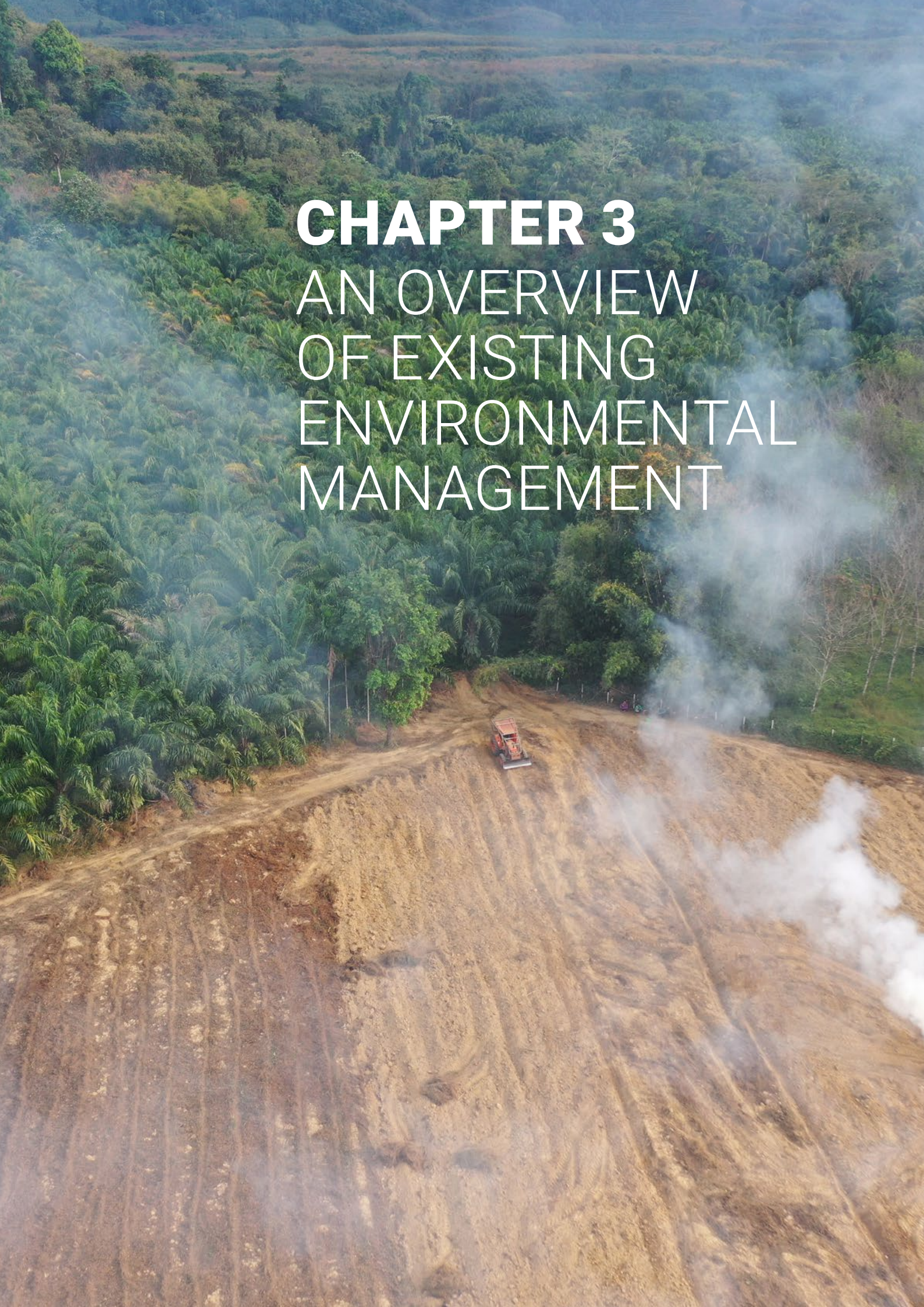


Table 4. Bond & shareholding owned by Chinese institutional investor per company (US\$ million, as of January 2021)

Company	Bondholding	Shareholding	Total
Blue Moon		210	210
Inner Mongolia Yili Industrial Group		186	186
Toly Bread		23	23
Shanghai Jahwa		21	21
Bright Food Group	5	10	15
Beidahuang Group	1	10	11
Unilever		11	11
China Mengniu Dairy	0.1	7	7
Xiabu Xiabu		4	4
Procter & Gamble		3	3
Wilmar Group		2	2
Haidilao International Holding		2	2
Want Want Holdings		1	1
Yum China Holdings		1	1
Uni-President Enterprises Corporation		1	1
Dali Food Group		1	1
Tingyi Holding	0.01	0.3	0.3
L'Oréal		0.3	0.3
Total	6	494	500

An aerial photograph showing a large area of deforestation. A red bulldozer is visible in the center, clearing a path through a dense forest. Thick white smoke is rising from the cleared area, suggesting a fire or controlled burn. The surrounding forest is lush green, with many palm trees visible. The text "CHAPTER 3 AN OVERVIEW OF EXISTING ENVIRONMENTAL MANAGEMENT" is overlaid in white, bold, sans-serif font.

CHAPTER 3

AN OVERVIEW OF EXISTING ENVIRONMENTAL MANAGEMENT

ESG FRAMEWORK AND POLICIES AMONG CHINESE BANKS

CDP's analysis of Chinese banks shows that awareness of transparency and ESG risks varies greatly. Among the top ten creditors and top five investors in China's palm oil supply chain, none have published a dedicated sustainable finance policy for forest commodities.

However, the potential for leadership in green finance is evident in the work of ICBC to promote and develop sustainable banking in collaboration with the United Nations Environment Programme Finance Initiative (UNEP-FI). Certain banks in the same sample have also established ESG risk mitigation frameworks and report on their green financing flows following China's Green Credit Guidelines and reporting requirements.

These findings, drawn from CDP's analysis of publicly available information, indicate that Chinese financial institutions are mainly driven by regulatory requirements, particularly as most are state-owned enterprises.

Disclosure among these institutions, beyond regulatory requirements, is partial and inconsistent. Some disclose data on volumes of green credit provided and the international initiatives they have signed up to, while some state that they have internal policies. Details of forest management policy across Chinese financial institutions is presented in Table 5.

China Development Bank (CDB) declares that it is taking measures to further improve the transparency of green finance. It describes its green finance policy in its latest sustainability report, which reflects its organizational structure in categorizing measures by green finance, green projects, green finance products, and risk management of green finance⁴⁴. Green agriculture is

one of CDB's prioritized industries for green finance. In addition, CDB states that it has an internal policy titled "Risk Identification and Assessment Management Method" for all its investments. However, it lacks a publicly disclosed forest commodity specific policy.

Similarly, Bank of Communications publishes some of its sectoral green credit policies, including for agriculture, energy saving and environment, petroleum and the mining industry⁴⁵. The bank states that it applies conditions to financial support for companies involved in forestry, agriculture and related industries; however, it has not publicly disclosed this sector-specific policy. Bank of Communications is also the only Chinese bank to disclose the proportion of 'green' companies among its clientele in its CSR report.

China's Green Finance Committee (GFC) specializes in the promotion of Chinese and international green finance⁴⁶. Members include ICBC, Bank of China and China Construction Bank to name a few. ICBC is the most active GFC member in addressing climate change and boosting green finance. It was part of the UNEP-FI core group tasked to develop a set of "Principles for Sustainable Global Banking⁴⁷" as well as the first Chinese financial institution to express support for the TCFD recommendations. In addition, ICBC has actively pushed forward sustainable finance research and released the first ESG Green Financial Rating and Green Index Research Report in China⁴⁸.

44. CDB Sustainable Development Report, 2019. http://www.cdb.com.cn/shzr/kcxfzbg/shzr_2019/

45. CSR Reports of Bank of Communications, 2019. http://www.bankcomm.com/BankCommSite/shtml/jyjr/cn/7804/7820/list_1.shtml?channelId=7804

46. Members of China's Green Finance Committee (GFC), 2020. <http://greenfinance.org.cn/displaynews.php?cid=75&id=2807>

47. Principles for responsible banking signatories. <https://www.unepfi.org/banking/bankingprinciples/prbsignatories/>

48. ICBC, 2018. ICBC Actively Participates in Development of International Standards for Green Finance. <http://www.icbc.com.cn/icbc/en/newsupdates/icbc%20news/ICBCActivelyParticipatesinDevelopmentofInternationalStandardsforGreenFinance.htm>

Table 5. Comparison of forest management policy across selected Chinese financial institutions

Creditor / Investor	Discloses % of portfolios exposed to forest commodities	Discloses general E&S considerations in due diligence processes	Discloses data regarding green credit in the reporting year	Discloses the participation in any network / standards regarding environment information disclosure (TCFD)	Discloses adoption of any international responsible investment principles (PRI, PRB)	Discloses the sustainable investment policy or related commitment	Discloses forest-risk sector policy
Industrial and Commercial Bank of China⁴⁹	x	√	√	√	√	x	x
Bank of China⁵⁰	x	√	√	√	x	x	x
China Construction Bank⁵¹	x	√	√	√	x	x	x
Agricultural Bank of China⁵²	x	√	√	x	x	x	x
CITIC⁵³	x	√	√	x	x	x	x
China Merchants Group⁵⁴	x	√	√	x	x	x	x
China Development Bank⁵⁵	x	√	√	x	x	x	x
Bank of Communications⁵⁶	x	√	√	x	x	x	x
China Everbright Group⁵⁷	x	√	√	x	x	x	x
China Minsheng Bank⁵⁸	x	√	√	x	x	x	x
Hillhouse Capital Management⁵⁹	x	x	NA	x	x	x	x
Orient Securities⁶⁰	x	√	NA	x	√	√	x
Harvest Fund Management⁶¹	x	√	NA	√	√	√	x
E Fund Management⁶²	x	x	NA	√	√	x	x

Note: 1) This table only shows the disclosure status of selected financial institutions and intends to demonstrate the transparency of their environmental risk management, with √ indicating

2) The indicators chosen in this table are considered key indicators reflecting key elements of responsible investment policy regarding the forest-related risk.

49. CSR Reports of ICBC, 2020. <http://v.icbc.com.cn/userfiles/Resources/ICBCLTD/download/2021/2020shzrCN202103.pdf>

50. CSR Report of BoC, 2020. <https://pic.bankofchina.com/bocappd/report/202103/U020210330646990226066.pdf>

51. CSR Reports of CCB, 2019. <http://group.ccb.com/cn/ccbtoday/common/include/report.html>

52. CSR Reports of ABC, 2020. http://www.abchina.com/cn/AboutABC/CSR/CSRReport/202103/t20210330_1978190.htm

53. CSR report of CITIC https://www.group.citic/html/Corporate_Citizenship/

54. CSR Reports of China Merchants Group, 2019. https://www.cmhk.com/main/a/2020/f30/a40780_42569.shtml

55. CDB Sustainable Development Report, 2019. http://www.cdb.com.cn/shzr/kcxfzbg/shzr_2019/

56. CSR Reports of Bank of Communications, 2019. http://www.bankcomm.com/BankCommSite/shtml/jyjr/cn/7804/7820/list_1.shtml?channelId=7804

57. CSR Reports of China Everbright Group, 2019. <https://www.ebchina.com/ebchina/shzr/index.html>

58. CSR reports of China Minsheng Bank, 2019. <https://www.cmbc.com.cn/jrms/shzr/shzr/index.html>

59. Hillhousecap, <https://www.hillhousecap.com/>

60. CSR report of Orient Securities, 2020. https://staticpacific.blob.core.windows.net/press-releases-attachments/1295355/600958_20210331_8.pdf

61. Harvest Fund. <http://www.jsfund.cn/main/AboutHarvest/InvestmentResearch/SustainableInvestment/index.shtml>

62. Efunds. <http://www.efunds.com.cn/html/menu/1.htm>

ENVIRONMENTAL COMPLIANCE AND SCOPE FOR IMPROVEMENT

Chinese financial institutions acknowledge that ESG risks are becoming the main focus of their internal sustainable finance policies, largely due to the development of green finance regulation in China.

Moreover, financial institutions have started to explore the methodologies required to incorporate climate factors into traditional financing decisions. They have also realized the importance of high-quality data to identify and assess the ecological footprint of their portfolios.

Several Chinese banks recognize the importance of integrating climate change and biodiversity considerations into their investment decisions and green finance policy, through an environment and social risk assessment for instance (see Table 5). However, such assessments mainly focus on compliance with the national environmental regulations and green finance policies. Chinese banks and other financial institutions are government policy-oriented and hesitant to take more comprehensive measures before being required to do so. Certain banks explicitly state that they are cautious to provide financial support to the companies categorized as 'key polluters' by the Ministry of Ecology and Environment.

At the same time, they tend to fund the projects/clients active in industries encouraged by the governmental authorities, regardless of their environmental impacts.

More forceful policies and measures are coming into play, driven by the Chinese Government's pledge to achieve peak carbon emissions by 2030 and achieve net zero emissions by 2060. Chinese banks and other financial institutions are therefore striving to meet incoming green policies and guidelines (details are listed in the appendix), while learning from the experience and best practice of their international peers, as discussed in Chapter 4.

There is a case for anticipating such measures to achieve best practice in line with international peers, rather than playing catch-up when regulations come into play, if financial institutions want to minimize their exposure to risk and attract a clientele increasingly motivated by ESG factors.



OVERVIEW OF FINANCIAL INSTITUTIONS' ENVIRONMENTAL MANAGEMENT

Forest-related risks have not yet attracted the attention of key Chinese financial institutions, CDP has found. This reflects low awareness and understanding of the complex dynamics linking biodiversity with their business. Only a handful of banks have incorporated biodiversity conservation and sustainable utilization of natural resources into the environmental and social risk assessment (EIA) in their due diligence processes.

Among these are ICBC, CDB and Agricultural Bank of China, respectively representing 13.5%, 10.7% and 4% of total identified palm oil-attributable credit in this study.

Those financial institutions that have set standards for investment have yet to publish any details of these and of their due diligence processes, and to specify which financial services (corporate loans, revolving credit facilities, bond and share issuance underwriting services) are affected. Their capacity to assess, measure and quantify the importance of biodiversity conservation and climate change in their decision-making and services is therefore uncertain. Likewise, their grasp of the importance of forest risk commodities in addressing climate and biodiversity problems is unclear.

In light of this, it is unsurprising that the selected institutional investors have also not yet made discernible progress in managing forest-related risks. As mentioned above, not one of them has published a forest-related risk mitigation policy. However, some have acknowledged climate and general ESG risks. For example, Hillhouse Capital Management has established an investment team on climate issues and integrates ESG into investment decisions⁶³. Harvest Fund Management applies sustainable investment principles, including the integration of ESG into investment decisions, and engages with companies as part of the due diligence process⁶⁴. More time will be needed for key financial institutions in China to respond effectively to forest-related risk through robust and comprehensive ESG procedures. Stronger policies and legal weight will also be among the driving factors.



63. Hillhouse voice on climate issue, 2021. <http://finance.stockstar.com/IG2021032200000298.shtml>

64. Harvest Fund. <http://www.jsfund.cn/main/AboutHarvest/InvestmentResearch/SustainableInvestment/index.shtml>

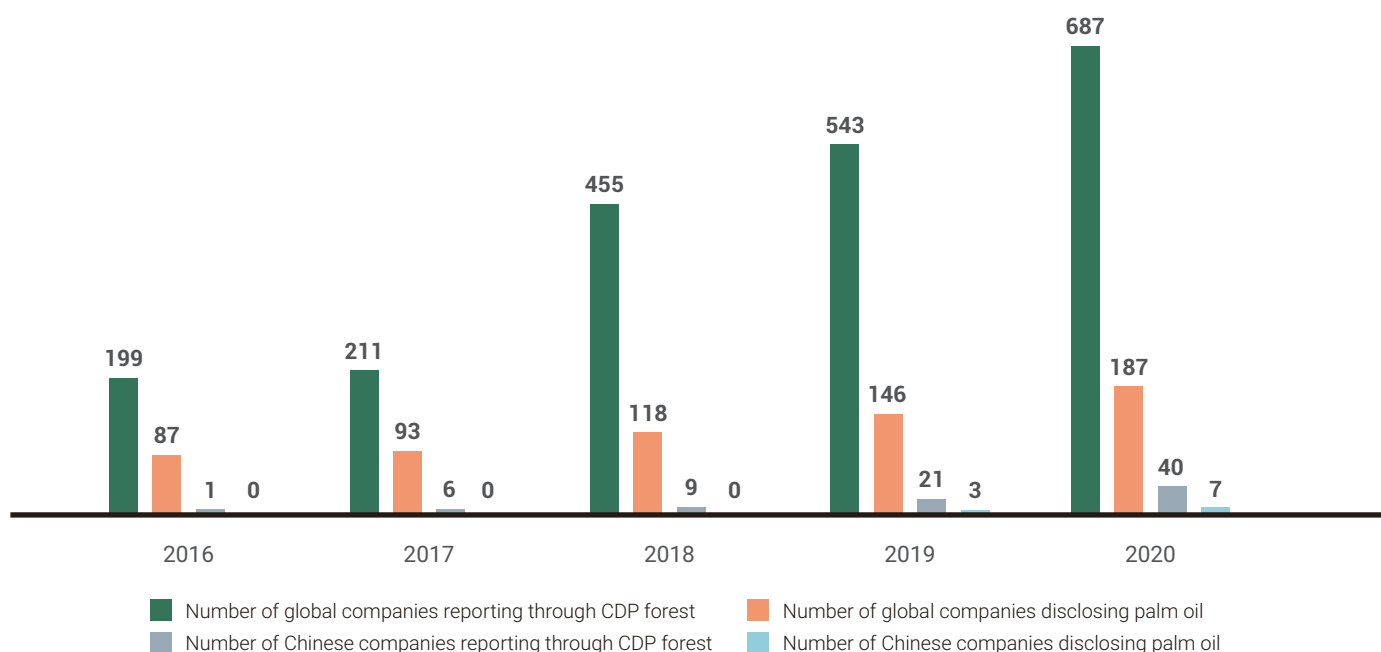
OVERVIEW OF CORPORATES' FOREST-RELATED RISK MANAGEMENT

Companies unable to manage forest-related risks are a liability for lenders and investors. Without transparency and accountability throughout their forest-related value chains, it is impossible for banks and investors to assess the risks in their portfolios.

In 2020, 687 global companies disclosed their data to CDP Forests. Of these, 553 disclosed details of forest-related risks in the production and/or sourcing of the most important commodities driving deforestation, including palm oil, soy, cattle, and timber products, and of how they are managing these risks. Among these, 57% (317) identified forest-related risks in their

businesses, and collectively reported potential underlying financial impacts valued at up to US\$53.1 billion. Further, 187 companies (among those 553 that disclosed forest-related risks) reported producing and/or sourcing palm oil commodities. Two-thirds of these identified forest-related risks, and reported potential financial impacts of up to US\$13.2 billion.

Figure 7. Number of companies reporting through CDP forest questionnaire and disclosing palm oil information 2016-2020



In 2020, CDP invited 22 of the 31 companies selected for this study due to their high exposure to forest-related risks to respond to a CDP Forests questionnaire⁶⁵. Only five companies responded to this request, four of these (L'Oreal, Unilever, Inner Mongolia Yili Industrial Group and Musim Mas) disclosed specific policies and actions to manage forest-related risks throughout their supply chains. An overview of these disclosures is presented in Table 6.

L'Oreal and Unilever are corporate leaders in forest action, scoring respectively A and A- for their CDP palm oil score in 2020. Both companies disclosed detailed data and information through their corporate publications and CDP responses, including forest policies and commitments, risks and opportunities, supply chain management procedures, as well as transparent accounts of their progress towards implementing specific commitments.

65. Every year CDP on behalf of its investor signatories invite company to report their environmental data through CDP platform. CDP develop sample consist of companies with high exposure on environmental risk including forest-related risks as well as their market capitalization as the based to request the information from companies. In this research, the sample companies are selected based on palm oil consumption in the key sectors. Thus, due to different methodology, not all of the 31 companies in this research were invited to respond to CDP forest in 2020.

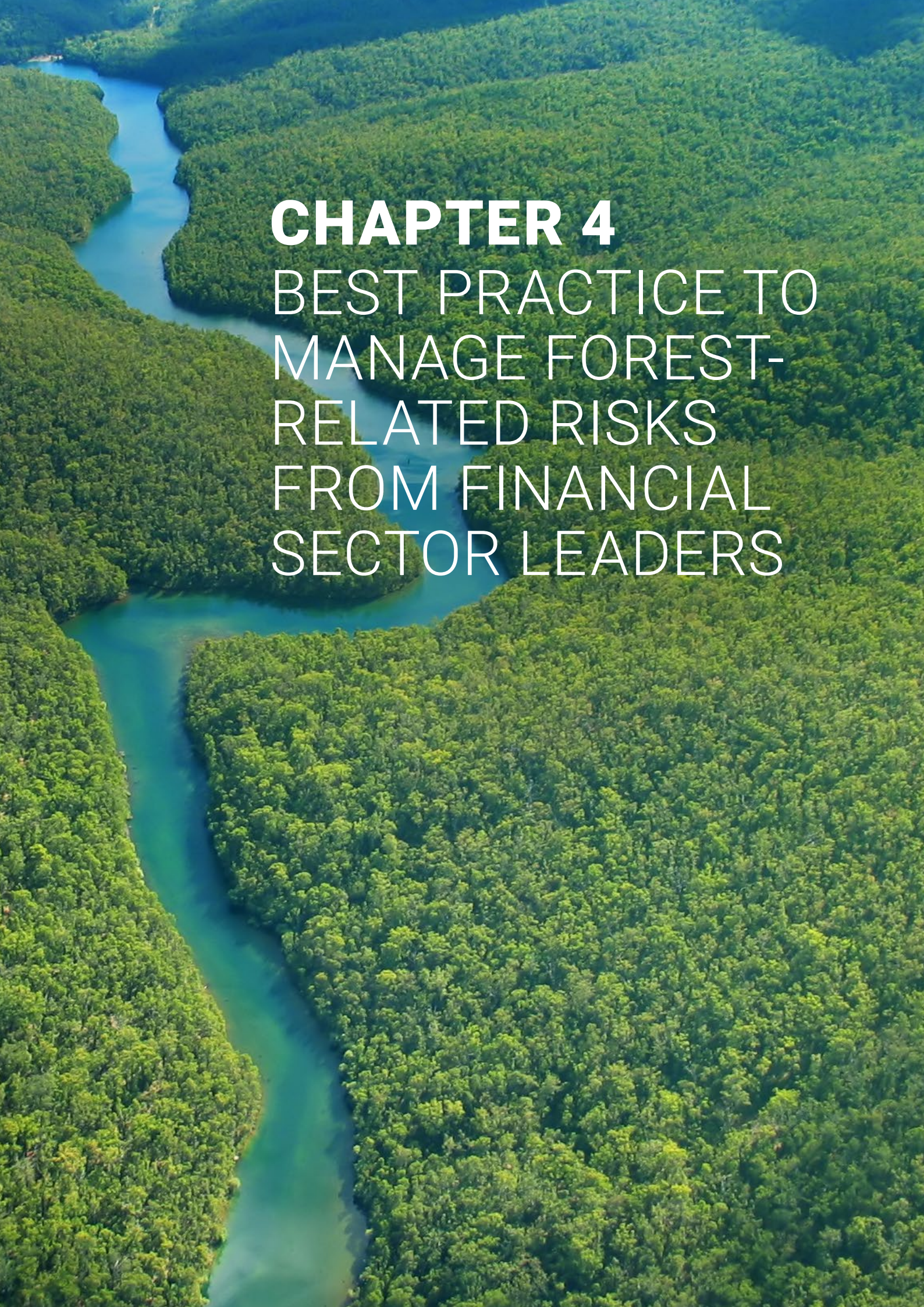
Table 6. Comparison of forest management across the sample companies.

Company	Invited for CDP forest questionnaire 2020	Responding to the invitation	Discloses % of commodity-specific revenue in reporting year	Discloses deforestation-free policy or commitment	Discloses process to identify and assess forest-related risk	Discloses risks and opportunities regarding forest risk commodities	Discloses traceability and monitoring system of supply chain	Discloses participation in network to promote sustainable palm oil practices	CDP Score (palm oil)
Yihai Kerry	√	x	x	x	x	x	x	x	--
Musim Mas	√	√	√	√	√	√	√	√	B
COFCO	√	x	x	x	x	x	x	x	--
Tanjung Lingga Group	x	x	x	x	x	x	x	x	--
Surya Dumai (First Resources)	√	x	x	x	x	x	x	x	--
Yizheng Fangshun	x	x	x	x	x	x	x	x	--
Tingyi Holding	√	x	x	x	x	x	x	x	--
Uni-President Enterprises Corporation	√	x	x	x	x	x	x	x	--
Jinmailang	√	x	x	x	x	x	x	x	--
Dali Food Group	√	x	x	x	x	x	x	x	--
Toly Bread	√	x	x	x	x	x	x	x	--
Fujian JinJiang FuYuan Foodstuff	x	x	x	x	x	x	x	x	--
Inner Mongolia Yili Industrial Group	√	√	√	√	√	√	√	√	C
China Mengniu Dairy	√	x	x	x	x	x	x	x	--
Bright Dairy	√	x	x	x	x	x	x	x	--
Want Want Holdings	√	x	x	x	x	x	x	x	--

Company	Invited for CDP forest questionnaire 2020	Responding to the invitation	Discloses % of commodity-specific revenue in reporting year	Discloses deforestation-free policy or commitment	Discloses process to identify and assess forest-related risk	Discloses risks and opportunities regarding forest risk commodities	Discloses traceability and monitoring system of supply chain	Discloses participation in network to promote sustainable palm oil practices	CDP Score (palm oil)
YUM China Holdings	√	x	x	x	x	x	x	x	--
Xiabu Xiabu	√	√	x	x	x	x	√	x	--
Haidilao International Holding	x	x	x	x	x	x	x	x	--
Ajisen (China) Holdings	√	x	x	x	x	x	x	x	--
Hop Hing Group Holdings	x	x	x	x	x	x	x	x	--
Sinograin	x	x	x	x	x	x	x	x	--
Beidahuang Group	x	x	x	x	x	x	x	x	--
Tianjin Julong Group	√	x	x	x	x	x	x	x	--
Guangzhou Liby Enterprise Group	√	x	x	x	x	x	x	x	--
Nice Group	√	x	x	x	x	x	x	x	--
Procter & Gamble	√	x	x	x	x	x	x	x	--
Unilever	√	√	√	√	√	√	√	√	A-
Bluemoon	x	x	x	x	x	x	x	x	--
L'Oréal	√	√	√	√	√	√	√	√	A
Shanghai Jahwa	x	x	x	x	x	x	x	x	--

Note: 1) This table only shows the disclosure status of sample companies and intends to demonstrate the transparency of their environmental management, with √ indicating “disclosed” and x indicating “undisclosed”.

2) The chosen indicators reflect key elements of forest risk management.

An aerial photograph showing a winding river with a light blue-green hue, surrounded by a vast, dense forest of lush green trees. The river flows from the top left towards the bottom center of the frame. The text is overlaid on the right side of the image.

CHAPTER 4

BEST PRACTICE TO MANAGE FOREST- RELATED RISKS FROM FINANCIAL SECTOR LEADERS

WORLD-LEADING EXAMPLES FROM FINANCIAL INSTITUTIONS

Chinese financial institutions can look to an increasing number of high-profile initiatives by international financial institutions as examples of best practice. For instance, leading financial institutions have adopted publicly available policies and safeguards to manage forest-related risks in their credit and investment decision-making and portfolios.

Not only have they implemented robust due diligence procedures, but they also engage with their clients and investees to ensure compliance with their policies⁶⁶. Several financial institutions have demonstrated their

commitment to new standards by divesting from companies that violate forest-related policies and fail to take corrective action. In this section we highlight some of the leading examples from financial institutions globally.

BNP Paribas

Specific policies to address palm oil-driven forest-related risks

BNP Paribas has established a set of financing and investment policies outlining its sustainable finance principles and standards. These apply to all of the bank's businesses across its entire global operations. The bank has identified nine key sectors for which it has formulated specific policies to address ESG and forest-related risks, stipulating the minimum standards it expects clients to meet. These include the palm oil, agriculture and wood pulp supply chains⁶⁷.

In its Palm Oil Sector Policy, BNP Paribas expresses its full support for sustainable palm oil and urges companies to adopt No Deforestation, No Development on Peatland, and No Exploitation (NDPE) policies and join the RSPO. BNP Paribas sets specific criteria for palm oil-related companies, across two categories: mandatory requirements which must be met without exception before BNP Paribas considers providing financial products and services, and evaluation criteria, which are part of the due diligence process. BNP Paribas reserves its right to call for additional requirements based on these evaluation criteria or decline financing even if all mandatory requirements are met⁶⁸.

66. Warmerdam, W. (2021, March), Chinese forest-risk financing – Financial flows and clients risks, Amsterdam, The Netherlands: Profundo

67. BNP PARIBAS, Financing and investment policies. <https://group.bnpparibas/en/financing-investment-policies>

68. BNP PARIBAS, 2017. Sector policy-palm oil. https://group.bnpparibas/uploads/file/csr_sector_policy_palm_oil_2017.pdf

HSBC

Continuously improved sustainability risk policies, including palm oil

HSBC's sustainability risk policies were first launched in 2002 to ensure that financial services to customers did not result in unacceptable impacts on people or the environment. HSBC identifies major sectors that may have such adverse impacts and where it has a significant number of customers, and formulates applicable policies to help address and manage potential risks.

Palm oil is one of these sectors. HSBC requires customers to obtain RSPO or equivalent certification as verification of compliance with its dedicated policy. As one of the initiators of the RSPO, HSBC has progressively raised the sustainability standards it applies to the palm oil sector since the establishment of its first agricultural commodities policy in 2004. This policy was updated in 2014, emphasizing the requirement for customers to obtain independent certification that their businesses operate legally and sustainably. In 2017, HSBC further strengthened the Agricultural Commodities Policy by expanding its prohibited business commitment, consistent with NDPE policies⁶⁹.

HSBC's palm oil policy implementation requirements are differentiated according to the activities of its customers. For instance, palm oil growers/mills need to be members of the RSPO, hold 100% certification of management units under RSPO, make public commitments on the protection of high carbon stock (HCS) and peat, and publish evidence of independent verification of HCS and peat commitments. In addition to these requirements, palm oil refiners and traders need to make plans to exclude palm oil from controversial sources by providing traceability information.

Asian Development Bank (ADB)

Safeguards and forestry policy

As one of the most influential multilateral development banks, ADB established a set of environmental and social safeguards (ADB safeguards) to secure inclusive economic growth and environmentally sustainable growth in the Asia Pacific region, approved in July 2009. These comprise policies on environment, involuntary resettlement and indigenous people. The safeguards require clients to assess the significance of project impacts and risks in relation to biodiversity and natural resources as an integral part of the environmental impact assessment. Based on this, clients need to identify measures to avoid, minimize or mitigate potentially adverse impacts and risks and, as a last resort, propose compensatory measures such as biodiversity offsets. In its safeguard statement, ADB also specifies requirements for information disclosure, consultation and participation, grievance redress mechanisms, as well as monitoring and reporting.

To effectively address deforestation issues, ADB published a dedicated forestry policy in 1995⁷⁰. This stipulated the basic principles of its forestry sector financing requirements. It covered a range of sectors with inherent forest risks, such as agriculture, agroforestry, rural infrastructure, energy, and land use. The forestry policy clearly describes activities that are unacceptable, and activities for which the bank prioritizes financing. While it does not include specific elements on the palm oil supply chain, the requirement that projects/clients should comply with the ADB's safeguards, environmental requirements, biodiversity investment rules and forestry policies, affects all clients/projects in the palm oil supply chain.

69. HSBC, 2017. Agricultural Commodities Policy, Revised Agricultural Commodities Policy: Palm Oil <https://www.hsbc.com/our-approach/risk-and-responsibility/sustainability-risk>

70. ADB, 1995. The Bank's Policy on Forestry.

Aegon N.V. and Aegon Asset Management

Strategy-oriented responsible investment policy

Aegon is one of the world's leading providers of life insurance, pensions and asset management. As a signatory to the Principles for Responsible Investment (PRI), the institutional investor integrates sustainability and responsible investment principles into its core business to enable positive impacts for the environment and society.

Aegon Asset Management has established a detailed responsible investment framework. Forest risks are integrated into ESG factors due to the materiality of the risk to companies operating in forest sectors. Aegon Asset Management endorsed the Investor Expectations on Sustainable Palm Oil in April 2019, which encourages companies to become members of the RSPO, to apply the RSPO's principles and criteria, and to adopt and implement an NDPE policy⁷¹.

Robeco

Responsible Investment Policy

Robeco, a leading asset manager from the Netherlands and since 2013 part of the Japanese diversified financial services group ORIX Corporation, has a detailed sustainability risk policy, detailing investment and risk management processes⁷². As a signatory to the PRI, Robeco also follows the PRI guidelines to integrate ESG factors into their investment decisions⁷³.

Robeco Institutional Asset Management became a member of the RSPO in 2019. In the same year, it also published its "Sustainable Investment Position Paper" on sustainable palm oil investments⁷⁴. The investor presents three principles for its investments in palm oil companies:

- ▼ engage with all palm oil companies in its portfolio;
- ▼ exclude laggards, and;
- ▼ be an active member of the RSPO.

Companies with less than 20% of their operations RSPO-certified are excluded from Robeco's investment universe. Companies with 20% to 80% certification are subject to enhanced engagement. The enhanced engagement trajectory stipulates that companies have until December 2021 to achieve at least 50% RSPO certification of their operations, or be excluded from Robeco's investment universe. Companies with over 80% RSPO certification are considered the focus of Robeco's sustainable palm oil investment strategy. Like Aegon NV and Aegon Asset Management, Robeco also endorsed the Investor Expectations on Sustainable Palm Oil in April 2019⁷⁵.

71. Investor Expectations on Sustainable Palm Oil, 2019. https://www.domini.com/uploads/files/20190403_InvestorExpectationsOnSustainablePalmOil_PRI_Signatory.pdf

72. Robeco Institutional Asset Management, Sustainability risk integration & organizational impact. <https://www.robeco.com/docm/docu-robeco-sustainability-risk-policy.pdf>

73. Robeco Institutional Asset Management B.V, RSPO member. <https://rspo.org/members/8950>

74. Robeco Institutional Asset Management, 2019. Our approach to sustainable investing in palm oil. <https://www.robeco.com/docm/docu-2019-03-palm-oil-positioning-paper.pdf>

75. Investor Expectations on Sustainable Palm Oil, 2019. https://www.domini.com/uploads/files/20190403_InvestorExpectationsOnSustainablePalmOil_PRI_Signatory.pdf

A photograph of a dense tropical forest. The scene is filled with lush greenery, including large ferns and moss-covered tree trunks. The lighting is soft and dappled, suggesting a canopy above. The text 'CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS' is overlaid in white, bold, sans-serif font in the upper right quadrant.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

While several Chinese financial institutions linked to the palm oil sector have integrated forest-related risk into their lending and investing decision making process, their international peers have gone much further by developing robust forest safeguards and systems to ensure compliance and incentivize best practice.

As the majority of any financial institution's environmental risks come from its portfolio, it is imperative that they establish standards and policies to manage these risks and guard against detrimental impacts for forests and biodiversity.

The demand for robust, timely and actionable environmental data that the market can use to inform decisions is growing, and the need is urgent. Transparency and accountability can help financial institutions measure and manage environmental risks and provide basis for financial and investment decisions. Current levels of transparency among Chinese financial institutions involved in the palm oil supply chain are far below minimum requirements for any degree of risk management.



RECOMMENDATIONS

For Chinese financial institutions

Chinese financial institutions should formulate systematic and transparent sustainability criteria to effectively manage their exposure to ESG risks, including those specifically related to forests, through their financing of companies active in FRC value chains. Based on the findings and analysis in this report, CDP recommends that Chinese financial institutions:



Identify and understand the exposure to forest-related risks in their investment and credit portfolios

- ▼ Analyze and quantify the risks and impacts for investment and credit portfolios related to FRC on climate change and biodiversity loss, including deforestation and the subsequent loss of ecosystem services.
- ▼ Integrate and anticipate potential regulatory pressure from China's green finance policies and green BRI commitments. This means addressing the physical, market, technological and reputational risks of unsustainable financing practices.



Develop forest-related risks policy

- ▼ Develop public and time-bound policies addressing identified material climate change, biodiversity and forest-related risks and opportunities. These policies should be integrated into sustainable finance/ESG risk management processes in line with best practice.
- ▼ Periodically review policies for continuous improvements as risk profiles change and new best practice approaches emerge.
- ▼ Set exclusion lists for FRC businesses, stipulating procedures for managing non-compliance and clearly outlining the consequences for clients and investees.



Strengthen engagement with companies

- ▼ Proactively engage with clients to ensure compliance with the financial institution's sustainable financing policies.
- ▼ Urge clients to conduct assessments to identify risks and opportunities as well as develop forest risk policies and/or safeguards.
- ▼ Promote transparency and accountability to their clients through standardized and global reporting frameworks to fully disclose their governance, risk assessment, and supply chain management, including implementation of commitments.



Disclosure of progress

- ▼ Continually report progress on the implementation of deforestation-free commitments in a standardized and comparable format.



RECOMMENDATIONS

For the Chinese policy makers

China's sustainable financial regulations are playing a crucial role in driving the financial and corporate sectors to improve their environmental risk management. CDP urges policy makers to:



Identify and understand the exposure to forest-related risks in their investment and credit portfolios

- ▼ Strengthen policy frameworks for financial institutions with regards to China's climate action, biodiversity, SDGs and the green BRI. These policies should integrate forest risk considerations.
- ▼ Develop sustainable FRC taxonomies and guidelines for Chinese financial institutions to safeguard forests and manage related risks. These should introduce leading international examples to improve investment policy and practice.
- ▼ Incentivize Chinese financial institutions to incorporate forest risk assessments into their due diligence processes.
- ▼ Improve transparency in the Chinese financial sector by issuing mandatory disclosure requirements for financial institutions and listed companies, including forest aspects. In addition, promote the adoption of best practice reporting frameworks, such as TCFD.
- ▼ Promote deforestation-free value chains in key global environmental governance platforms, such as the CBD COP15 and UNFCCC COP 26 in 2021, and lead the engagement with FRC-producer countries, particularly Indonesia and Malaysia, through the green BRI.



APPENDICES



APPENDIX I

METHODOLOGY AND LIMITATIONS

The report addresses Chinese financial institutions as its primary audience, aiming to raise awareness of forest-related risks and make the case for swift action to align their investment approach with deforestation-free practices, specifically in the palm oil industry. Considering that the actions taken by Chinese financial institutions are mainly regulation-driven, related policy makers are a key secondary audience.

The research identifies key financial institutions and estimates the amount of capital exposed to palm oil-related forest risks. It investigates financial flows to high-impact companies in the palm oil supply chain in China to identify opportunities to leverage influence among their financiers.



Research scope

The research focused on those Chinese financial institutions, primarily banks, funding the companies most exposed to forest-related risks through their operations across China’s entire palm oil supply chain⁷⁶. This includes:

- ▼ Up- and midstream companies importing significant volumes of palm oil to China.
- ▼ Downstream companies engaged in seven sectors of the palm oil value chain in China, comprising food & beverage (edible oil, instant noodles, bread & bakery, dairy products), food service/restaurants, personal care and detergents, and cosmetics.



Company selection methodology

Companies were selected depending on their market impacts. For instance, the most significant importers of Indonesian and Malaysian palm oil into China by volume were selected, according to trade statistics. Downstream companies were identified by market share using secondary data, aiming to include the leading market players in China. Based on the analysis, 31 sample companies were identified, with cumulative market shares as displayed in Table A1.

A number of these companies, or the groups they are affiliated with, are also included in the Forests & Finance database⁷⁷. As publicly available company financial data is often limited, especially for non-listed and state-owned

companies, the research looked into their parent companies or subsidiaries, and used financial flows to parent companies or subsidiaries as proxies to identify key financial institutions. For instance, Borneo Agri-Resources International was identified as a key importer of palm oil in China. The company is part of the Tanjung Lingga Group through its affiliation with Sawit Sumbermas Sarana. Financing to Tanjung Lingga Group was therefore researched. The first phase of the research identified Yihai Kerry Awarana as a key importer of palm oil and edible oils producer in China, which is affiliated to the Wilmar Group. Financing to Wilmar Group was therefore researched, as well as to Yihai Kerry Awarana directly.

76. Global Canopy Programme, The Forest 500: Company Selection Methodology
77. A database of financial flows to companies in the up- and midstream segments of six forest-risk value chains in three forest-rich regions.



Financial flow analysis methodology

The analysis seeks to highlight the interconnections between China's financial sector and palm oil-driven deforestation, as well as to raise awareness of those Chinese financial institutions that provide finance to companies active throughout the palm

oil supply chain. It mainly focuses on bilateral financial relationships between Chinese financial institutions and the selected companies. Two types of financial flow are analyzed: credits, including loans and underwriting, and investment through shareholdings.



Credits

▼ **Loans:** Loans covered in the analysis include corporate loans, revolving credit facilities and mortgages, provided by commercial and policy banks. Loans and credits are the most common financing measures. Banks' potential environmental impacts usually arise from the provision of financial services to client companies operating in sensitive sectors. In the case of deforestation, banks might indirectly finance deforestation activities via business relationships with companies involved in the production, trading and processing of

forest-risk commodities. In the case of mortgages, banks can be directly exposed to environmental risks if assets taken as collateral are directly affected by environmental impacts.

▼ **Underwriting:** The underwriting of the issuance of both shares and bonds was included in this research. Underwriters' potential environmental impacts arise from their exposures to the reputation, compliance, creditworthiness and profitability of client companies.





Investment

▼ **Shareholdings:** Shares of listed companies can be bought by investment companies, securities houses, mutual funds, private equity funds and the investment departments of banks or investment banks. Financial institutions investing in shares are known as institutional investors. They

are exposed to environmental risks through their partial ownership of portfolio companies operating in sensitive sectors. Thus, the reputation, compliance and profitability of portfolio companies is closely linked to those of the institutional investor.



Sources

This research sourced bilateral financial data from major databases including the Forests & Finance database, Refinitiv, Bloomberg, Trade Finance Analytics and IJGlobal, as well as from corporate publications, such as annual reports. For loans and stock or bond underwriting, the research collected data from the period 2013 to 2020. Shareholding data was sourced from January 2021. Qualitative information was collected from corporate websites and media articles. In addition to quantitative financial flows in the forms noted above, the research also collected qualitative information describing 'relationships' between the selected companies and financial institutions.

The research had to navigate inconsistencies and gaps in financial

databases, which often record loans and issuance underwriting provided by a syndicate of financial institutions. Company reports and publications, company register filings, and the media will also provide information on loans provided bilaterally, such as between one bank and the company in question. The level of detail per deal often varies in these cases. Some sources may omit the maturity date or term of the loan, the use of proceeds, or even the exact issue date. Financial databases often do not report on the proportions of a given deal that can be attributed to the participants in the deal. In such instances, this research calculated an estimated contribution based on the rules of thumb described below.



Data collection methodology

Individual bank contributions to syndicated loans and underwriting (for both bond and share issuance) were recorded to the largest extent possible where these details are included in financial databases or company and media publications. In many cases, the total value of a loan or issuance is known, as are the banks that participate in this loan or issuance. However, often the amount that each individual bank commits to the loan or issuance must be estimated.

In the first instance, this research attempted to calculate each individual bank's commitment based on the fee it received as a proportion of the total fees received by all financial institutions. This proportion (e.g., Bank

A received 10% of all fees) was then applied to the known total deal value (e.g. $10\% \times \text{US\$10 million} = \text{US\$1 million}$ for Bank A). Where the deal fee data was missing or incomplete, the book ratio was used to determine the spread over bookrunners and other managers. When the number of total participants in relation to the number of bookrunners increases, the share that is attributed to bookrunners decreases. This prevents very large differences in amounts attributed to bookrunners and other participants. The number and value of shares and bonds held by individual financial institutions are reported in financial databases.



Estimation of financial flows to palm oil-involved business activities






Data collected from public sources described financial flows at the corporate level. Companies redistribute finance raised into their various business activities and operational purposes, some of which involve palm oil, while some do not. To acquire a precise estimation of capital exposed to palm oil-driven deforestation, the data had to be adjusted from the corporate level to the palm oil-related segment level.

To do so, adjusters were developed to approximate the share of capital specifically used for the palm oil business, and therefore exposed to palm oil-driven forest-related risk. For the companies included in the Forests & Finance database, the Forests & Finance segment adjusters were used, as shown in the dedicated website⁷⁸. For the Food & Beverage / Edible oil companies not included in Forests & Finance, the segment adjuster for COFCO was applied as a proxy, as COFCO is included in Forests & Finance. For the companies

engaged in the Food & Beverage/ Instant noodles industry, annual company level segment adjusters were developed using a similar methodology to Forests & Finance. Where available, segment capital expenditures were used for the instant noodles business, and further adjusted with 17% for the average palm oil content in instant noodles. For the remaining companies, general industry level adjusters were used (see Table 7).

There is a general lack of transparency in relation to commodity consumption of individual companies. A large number of ingredients in consumer products can be derived from palm oil, especially in the cosmetics and chemical sector. At the same time, palm oil content may differ for products falling into the same sector (e.g. bread and cookies). Therefore, the adjusters had to be based on averages and estimates for palm oil use in different products.

Table 7. Segment adjusters for key sectors

Key sector	Adjuster
 Cosmetics	5% ⁷⁹
 Personal care and detergents	20% ⁸⁰
 Food & Beverage (Bread and bakery)	10% ⁸¹
 Food & Beverage (Dairy products)	5% ⁸²
 Food Service (Restaurants)	5% ⁸³

78. Forests & Finance (n.d.), "Adjusters", 2021. <http://forestsandfinance.org/wp-content/uploads/2020/08/Adjusters-01Sep2020.xlsx>

79. Cosmetics include a wide range of products. E.g. Nivea crème includes two ingredients that are commonly derived from palm oil. Based on WWF estimates, e.g. shampoos include 5% palm oil-derived ingredients. Inci Decoder (n.d.), "Nivea Creme", <https://incidecoder.com/products/nivea-creme>, viewed in January 2021; WWF, 2019. *The Impact of the Consumption of Palm Oil in Poland on the Global Natural Environment and Analysis of the Possibility of Replacing it by Other Vegetable Oils*, pp. 62-63.

80. As an example, a product analysis of P&G's Tide detergent shows that five out of 26 ingredients are surfactants made primarily from palm oil. The WWF uses a 20% estimate for surfactants. Tufts University (n.d.), "Tide detergent & the use of palm oil", online: <https://sites.tufts.edu/sarinatscott/report/>, viewed in January 2021; WWF (2019), *The Impact of the Consumption of Palm Oil in Poland on the Global Natural Environment and Analysis of the Possibility of Replacing it by Other Vegetable Oils*, pp. 62-63.

81. Estimate considering use in cookies and sweet snacks with fillings as well as bread. Bakerpedia (n.d.), "Palm oil", online: <https://bakerpedia.com/ingredients/palm-oil/>, viewed in January 2021; WWF (2019), *The Impact of the Consumption of Palm Oil in Poland on the Global Natural Environment and Analysis of the Possibility of Replacing it by Other Vegetable Oils*, pp. 62-63.

82. Wide variety of products in this segment may contain palm oil, such as ice cream, infant formula and processed dairy products. WWF, 2019. *The Impact of the Consumption of Palm Oil in Poland on the Global Natural Environment and Analysis of the Possibility of Replacing it by Other Vegetable Oils*, pp. 62-63; Bronsky, J., Campoy, C., Embleton, N. et al. (2019, May), "Palm oil and beta-palmitate in infant formula: A position paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition", *Journal of Pediatric Gastroenterology and Nutrition*, Vol. 68(5): 742-760; Walls Ice Cream (n.d.), "Wall's Soft Scoop Vanilla", online: <https://www.wallsicecream.com/uk/our-brands/softscoop/wall's-soft-scoop-vanilla-.html>, viewed in January 2021.

83. Based on Yum China's 2019 palm oil consumption of 103,663 tons, multiplied by an average crude palm oil price of US\$ 800, and divided by Yum China's 2019 cost of sales. Yum China Holding (2020), RSPO Annual Communication of Progress 2019, p. 2; Yum China Holding (2020, March), Annual Report 2019: *Innovation Powering Growth* - Form-10k, p. 64; IndexMundi (n.d.), "Crude Palm Oil Futures End of Day Settlement Price", online: <https://www.indexmundi.com/commodities/?commodity=palm-oil&months=300>, viewed in February 2020.



Research limitations

The research methodology has three major limitations. First, the analysis is based on publicly available data and information, which can be both inconsistent and incomplete, especially for non-listed and state-owned companies. Major financial institutions and their identified financial flows do not truly provide a comprehensive picture of the palm oil sector, nor of the financial flows related to deforestation.

Secondly, this research calculates the 'adjusters' based solely on public sources, mainly Forests & Finance. This approach is unlikely to reflect the exact allocation of finance raised by each company. However, these data are rarely publicly available. Improvements could be made by acquiring precise information directly from sample companies through engagement or field visits. As the scope and quality of disclosures vary significantly between companies, the

calculation of adjusters lacks consistency and accuracy. Further studies could improve precision through collaboration with financial institutions involved in the palm oil supply chain for higher-quality and more complete datasets.

Lastly, the research analyzes the environmental management level of Chinese financial institutions based on the public information provided mainly on their official websites, in CSR reports, media coverage and previous communications on green finance, which partly show their existing sustainability policies and practices. The transparency of environmental and social risk management and green finance policies is important for Chinese financial institutions to make their clients and other stakeholders understand their ESG requirements, helping them to improve their environmental and social risk management.



APPENDIX II

CHINESE POLICIES FOR GREEN FINANCE

Table 8. Chinese policies for green finance

Data	Document Name	Published by
02/04/2021	Green Bond Endorsed Project Catalogue (2021 Version)⁸⁴	The Peoples' Bank of China, National Development and Reform Commission and China Securities Regulatory Commission
02/02/2021	Guidance on Accelerating the development of a Green and Low-carbon and Circular Economic Development System⁸⁵	The State Council
05/11/2020	Regulation on Green Finance of Shenzhen Special Economic Zone⁸⁶	Standing Committee of Shenzhen Municipal People's Congress
21/10/2020	Guiding Opinions on Promoting Investment and Financing to Address Climate Change⁸⁷	Ministry of Ecology and Environment, National Development and Reform Commission, The Peoples' Bank of China, China Banking and Insurance Regulatory Commission and China Securities Regulatory Commission
30/12/2019	Guiding Opinion on Promoting the High-Quality Development of the Banking and Insurance Sectors⁸⁸	China Banking and Insurance Regulatory Commission
14/02/2019	Green Industry Catalogue (2019 Version)⁸⁹	Ministry of Ecology and Environment, National Development and Reform Commission, The Peoples' Bank of China, Ministry of Industry and Information Technology, Ministry of Natural Resource, Ministry of Housing and Urban-Rural Development and National Energy Administration
31/08/2016	Guiding Opinions on Establishing Green Financial System⁹⁰	The Peoples' Bank of China, Ministry of Finance, National Development and Reform Commission, Ministry of Environment Protection, China Banking Regulatory Commission, China Securities Regulatory Commission and China Insurance Regulatory Commission
29/01/2012	Green Credit Guideline⁹¹	China Banking Regulatory Commission

84. Green Bond Endorsed Project Catalogue (2021 Version), 2021. <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4236341/index.html>

85. Guidance on Accelerating the development of a Green and Low-carbon and Circular Economic Development System, 2021. http://www.mof.gov.cn/zhengwuxinxi/caizhengxinwen/202102/t20210223_3660602.html

86. Regulation on Green Finance of Shenzhen Special Economic Zone, 2020. http://www.szrd.gov.cn/szrd_zyfb/szrd_zyfb_cwhgb/202011/t20201105_19353014.html

87. Guiding Opinions on Promoting Investment and Financing to Address Climate Change, 2020. http://www.mee.gov.cn/xxgk/xxgk03/202010/t20201026_804792.html

88. Guiding Opinion on Promoting the High-Quality Development of the Banking and Insurance Sectors, 2019. <http://www.cbirc.gov.cn/cn/view/pages/governmentDetail.html?docId=881921&itemId=861&generalType=1>

89. Green Industry Catalogue (2019 Version), 2019. https://www.ndrc.gov.cn/fggz/hjzy/stwmjs/201903/t20190305_1220625.html

90. Guiding Opinions on Establishing Green Financial System, 2016. http://www.mee.gov.cn/gkml/hbb/gwy/201611/t20161124_368163.html

91. Green Credit Guideline, 2012. http://www.gov.cn/gongbao/content/2012/content_2163593.html

APPENDIX III

CHINESE POLICIES FOR GREENING THE BRI

Table 9. Chinese policies for greening the BRI

Data	Document Name	Published by
12/01/2018	Belt and Road Green Investment Principles (GIP)⁹²	Green Finance Leadership Program
09/05/2017	Environmental Risk Management Initiative for China's Overseas Investment⁹³	Green Finance Committee, Investment Association of China, China Banking Association, Asset Management Association of China, Insurance Asset Management Association of China, China Trustee Association, Foreign Economic Cooperation office of Ministry of
12/05/2017	Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road⁹⁴	National Development and Reform Commission, National Energy Administration
05/16/2017	Guiding Principles on Financing the Belt and Road⁹⁵	Ministry of Finance of People's Republic of China
05/14/2017	The Belt and Road Ecological and Environmental Cooperation Plan⁹⁶	Ministry of Environmental Protection
05/08/2017	Guidance on Promoting Green Belt and Road⁹⁷	Ministry of Ecology and Environment
04/08/2017	Guidelines on Further Guiding and Regulating Overseas Investments⁹⁸	National Development and Reform Commission, Ministry of Commerce, The Peoples' Bank of China, Ministry of Foreign Affairs
03/30/2015	Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road⁹⁹	National Development and Reform Commission, Ministry of Foreign Affairs, Ministry of Commerce

92. Belt and Road Green Investment Principles (GIP), 2018. <https://www.163.com/dy/article/EMUV8S9H0511GRIG.html>

93. Environmental Risk Management Initiative for China's Overseas Investment, 2017. <http://www.greenfinance.org.cn/displaynews.php?id=1465>

94. Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road, 2017. http://www.nea.gov.cn/2017-05/12/c_136277478.html

95. Guiding Principles on Financing the Belt and Road, 2017. <https://en.imsilkroad.com/p/314204.html>

96. The Belt and Road Ecological and Environmental Cooperation Plan, 2017. http://english.mee.gov.cn/Resources/Policies/policies/Frameworkp1/201706/t20170628_416864.shtml

97. Guidance on Promoting Green Belt and Road, 2017. http://english.mee.gov.cn/Resources/Policies/policies/Frameworkp1/201706/t20170628_416864.shtml

98. Guidelines on Further Guiding and Regulating Overseas Investments, 2017. http://www.gov.cn/zhengce/content/2017-08/18/content_5218665.html

99. Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road, 2015. https://en.ndrc.gov.cn/newsrelease_8232/201503/t20150330_1193900.html





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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 590 investors with over \$110 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 10,000 organizations around the world disclosed data through CDP in 2021, including more than 9,600 companies worth over 50% of global market capitalization, and over 940 cities, states and regions, representing a combined population of over 2.6 billion. 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.

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