An Investor Brief on Impacts that Drive Business Risks:

PALM OIL

ENGAGE the CHAIN

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Ceres
This brief provides a summary of the main environmental and social factors that affect palm oil production worldwide; however, it spotlights key players in the U.S. value chain and provides examples of actions being taken by companies operating or headquartered in the U.S.

**KEY TAKEAWAYS**

- Palm oil production has more than tripled during the past two decades. It is used in many goods that people use regularly, from processed foods and cosmetics, to detergents, chocolate and biofuel.
- Palm oil sourcing has attracted significant and growing attention and debate by NGOs, investors, companies and consumers due to the commodity's significant environmental and social challenges.
- The palm oil sector employs millions, and a large proportion are smallholders. While the industry is creating economic opportunity, the rapid and poorly managed expansion of production is linked to human rights challenges, large scale deforestation and significant greenhouse gas emissions from the clearcutting and burning of tropical forests.
- About 90 percent of palm oil is grown in Indonesia and Malaysia, where production is the leading driver of habitat and biodiversity loss - notably for endangered animals, such as orangutans and Sumatran tigers.
- Investors should address business risks in the palm oil supply chain through direct engagement with their portfolio companies and support of relevant policies and multi-stakeholder collaborations. Effective implementation of a company’s policies requires promoting commodity traceability and having a clear approach to supplier engagement, verification and disclosure of progress.

**COMMODITY OVERVIEW**

*The Global Food Sector Uses Around 70 percent of All Palm Oil*

Palm oil’s high yield and relatively low labor costs make it one of the lowest cost vegetable oils. It therefore accounts for about a third of all vegetable oil produced globally.

The fruit of the oil palm tree produces seven to 10 times more vegetable oil than any other leading oil crop.

Palm oil can be found in a wide range of food products including frozen pizzas, biscuits, chocolate and margarine, as well as in non-food products, including animal feed, body creams, soaps, makeup, candles and detergents. It can also be used as biofuel, and has been so largely in Indonesia and the European Union (EU). In developing countries, palm oil is commonly used for cooking oil.

India and China together account for about 25 percent of global consumption of palm oil; Malaysia and Indonesia (the top producing countries), account for 20 percent, while the U.S. and EU markets account for only about 13 percent.
GLOBAL PRODUCTION DATA

Indonesia and Malaysia are the Leading Palm Oil Producers with 90 Percent of Global Production

55 MILLION METRIC TONS
Average global palm oil production

$37.3 BILLION
Global production value

75 PERCENT
Proportion of global production exported

TOP PRODUCTION REGIONS

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U.S. PALM OIL CONSUMPTION

Palm oil use in the U.S. more than doubled since 2005, driven by demand for an alternative to trans fats. Palm oil is found in more than half of all packaged products purchased by Americans (food and non-food), though it is often only a minor ingredient. While the U.S. only consumes around 1.7 million metric tons of palm oil, or about 2.5 percent of total global consumption, the U.S. and the EU are lucrative markets because they buy higher-priced derivatives of palm oil.
Global Production of Palm Oil Doubled Over the Last Decade, Driven by Population Demands and Income Growth

Over the last two decades, oil palm plantations expanded more rapidly than almost any other agricultural commodity.\textsuperscript{17} Palm oil expansion is greatest in Indonesia and Malaysia, where clearing for plantations is the leading cause of carbon dioxide emissions and human rights challenges. The spike in production is likely to continue, given the commodity's versatility and affordability. Demand is expected to push production to nearly 80 million metric tons by 2026, compared to an annual average of 55 million metric tons produced during 2012-2014.\textsuperscript{18} This increase is partly influenced by consumers in developing countries buying more processed food and from palm oil being used for a wider variety of non-food products.\textsuperscript{19}

HISTORICAL PALM OIL PRODUCTION, 1994-2014\textsuperscript{20}
THE PALM OIL VALUE CHAIN

Palm oil supplies from different sources are mixed together at multiple stages of the production cycle, making it difficult to trace palm oil through the supply chain.
PALM OIL

REFINERS, TRADERS AND DISTRIBUTORS

Traders purchase palm oil from the companies that manage palm plantations and produce crude palm oil (CPO) and palm kernel oil (PKO). About 70 percent of global refining capacity is controlled by seven companies, all of which are based in Asia.21 There are a number of large companies among the world’s palm oil producers and traders. The largest publicly-traded companies (with a market capitalization over $5 billion) are Archer Daniels Midland (ADM), Wilmar, Sime Darby Plantation, Bunge, IOI, Kuala Lumpur Kepong (KLK) and Olam.22

In the U.S. palm oil market, Cargill (privately held and headquartered in the U.S.) is one of the most significant traders. ADM also trades palm oil and has a large stake in Wilmar, the world’s dominant trader (headquartered in Singapore). Bunge trades a smaller amount of palm oil, though much of it comes from Sarawak, a region in Malaysia where there’s been significant and controversial peatland destruction as well as community conflict.23 Two other significant importers into the U.S. market are Fuji Oil (headquartered in Japan) and AAK (headquartered in Sweden).24

PACKAGED FOOD MANUFACTURERS

Among food manufacturers, no single company uses a large portion of the world’s palm oil in its products. Oxfam calculated that the 10 largest food and beverage companies use six percent, or around 3.5 million metric tons, of worldwide supply.25 For example, while Unilever is one of the largest buyers of palm oil globally - using it in products such as margarine, ice cream and shampoo - it only buys about three percent of the total world volume, or 1.5 million metric tons.26

While the total amount of palm oil used by U.S. companies is relatively low, it is found in many products. In its 2015 report, “Fries, Face Wash, Forests,” the Union of Concerned Scientists ranked corporate palm oil policy commitments and highlighted the wide variety of companies and food products using palm oil. Examples include:

- Conagra Brands (Act II Popcorn, Marie Callender’s)
- General Mills (Pillsbury, Nature Valley)
- Kellogg Company (Pop-Tarts, Nutri-Grain)
- Kraft/Heinz (Ore-Ida, Smart Ones, Cool Whip, JELL-O)
- Mondelez (Cadbury, Oreo, Ritz, Nutter Butter)
- PepsiCo (Quaker, Frito-Lay)
- Unilever (Ben & Jerry’s, Popsicle)

Although U.S. and global packaged food manufacturing companies have a small palm oil footprint compared to their producer/trader counterparts, these companies are still exposed to business risks associated with deforestation. By adopting and implementing robust palm oil no-deforestation policies, packaged food manufacturers can mitigate these environmental and social risks before they impact the company’s bottom line. In addition, these companies can influence production practices on the ground with producers and traders.

RESTAURANTS AND RETAILERS

Restaurants and retailers play an important role in the palm oil supply chain. These companies can indirectly influence production practices and supplier standards within their supply chain. Moreover, they are sensitive to external pressures as well as responsive to market trends and consumer preferences.

Restaurants are heavy users of palm oil as a product ingredient or as a frying oil (though other vegetable oils are used more commonly than palm oil for frying in U.S. outlets). The four largest limited-service restaurants in the U.S. are McDonald’s, Yum! Brands (Taco Bell, Pizza Hut, KFC), Restaurant Brands International and Starbucks.27 In terms of food retailers, the four largest in the U.S. are Walmart, Kroger, Albertsons Companies and Ahold Delhaize USA.28
Globally, the environmental and social impacts linked to palm oil production include significant greenhouse gas (GHG) emissions, biodiversity loss and poor working conditions. The impacts related to palm oil are made worse in certain countries by deep-seated, systemic problems related to poor governance and an inability to enforce existing laws. Because the political landscape and production systems vary significantly across regions and even within countries, the impacts of palm oil production vary in terms of severity, scale and scope.

1. PLANTATION EXPANSION CONtributes TO TROPICAL DEFORESTATION & GHG EMISSIONS

The rapid and poorly managed expansion of palm oil production is causing massive large scale deforestation and associated significant GHG emissions from clearcutting and burning tropical forests. Tropical forests are considered to be carbon sinks, which absorb and store more carbon than is emitted and are therefore critical to keep intact to slow global climate change.

- In Indonesia, for example, from 2000 to 2010, the total harvested palm area grew dramatically, tripling to 6 million hectares. Of this, 500,000 hectares was observed to be from peat swamp deforestation. The Draining and burning of these carbon-rich peat soils can emit up to 30 times more greenhouse gases than simply clearing the forest.

- The smoke and haze from these blazes contribute to air pollution and cause devastating health and economic consequences throughout Southeast Asia. Researchers from Harvard and Columbia University estimate the fires in 2015 alone contributed to the premature deaths of over 100,000 people across the region. The World Bank estimated it cost Indonesia $16 billion, equivalent to about 2 percent of its gross domestic product.

- Due to its high deforestation rate, Indonesia is now one of the world's biggest emitters of greenhouse gases (2.47 billion MTCO2e in 2014, including land-use change and forestry, totaling 5 percent of global GHG emissions).

- From 2000 to 2010 in Indonesia, deforestation in palm oil concessions and associated peat decomposition is estimated to have resulted in the release of 1.3 to 2.3 billion tonnes of CO2. This is roughly equal to an entire year's GHG emissions from Brazil or Russia.

Companies that fail to understand and manage impacts related to these issues may face market, reputational, litigation and operational risks (see more at Ceres' Agricultural Supply Chains as a Driver of Financial Risks).
2. DESTRUCTION OF FORESTS HARMs LOCAL COMMUNITIES AND THREATENS ENDANGERED SPECIES

The natural forests destroyed for oil palm plantations provide many "ecosystem services," such as water, food and fuel to local indigenous communities, estimated at around 50-70 million people in Indonesia alone.37 Moreover, large swaths of key habitat area for highly threatened species, including orangutans, tigers, elephants and rhinos, are being destroyed at an alarming rate. For example, 43 percent of the area of Tesso Nilo National Park in Sumatra, established to provide habitat for the endangered Sumatran Tiger, has been overrun by illegal palm oil plantings.38 Companies that fail to understand and manage impacts related to these issues may face market, reputational and litigation risks (see more at Ceres' Agricultural Supply Chains as a Driver of Financial Risks).

3. EXPLOITATION OF WORKERS IS PROMPTING CONSUMER CONCERN AND LEGAL ACTION THAT COULD HARM BRANDS

Rapid plantation expansion is creating exploitative working conditions, including child labor, forced labor and trafficking of migrant workers - exposing companies to reputational, market and litigation risks (see more at Ceres' Agricultural Supply Chains as a Driver of Financial Risks).39

The U.S. Department of Labor identifies palm oil production in Indonesia as high risk for child labor and palm oil production in Malaysia as high risk for child and forced labor.40

For several years, NGOs have been putting the spotlight on human rights challenges and environmental degradation in emerging palm oil growing hotspots such as Guatemala.41 While Guatemala exports a small amount of palm oil to the U.S., U.S. traders and others operate in the region and therefore face business risks. In 2018, several companies (e.g., Cargill, Nestle) suspended business with a supplier accused of violations (Reforestadora de Palmas AC (REPSA)).42,43

4. SMALLHOLDERS’ LACK OF ACCESS TO RESOURCES AND MARKETS LIMITS THEIR PRODUCTIVITY AND THE SHIFT TO MORE SUSTAINABLE PRODUCTION44

Since smallholders play a key role in the labor-intensive palm oil industry, it is critical to get them involved in driving more sustainable changes in production. Smallholders need help gaining access to markets and may require additional technical and financial resources to support productivity improvements and shifts in cultivation practices. Lack of attention to the issues involved with smallholder production can lower both the quality and quantity of supply for agribusinesses.

- Globally, around three million smallholders are involved in oil palm cultivation.45

- In Indonesia, smallholders produce up to a third of the country's palm oil.46

- Since smallholders’ productivity is 35 percent lower than larger plantations, improvements such as Good Agriculture Practices (GAP) and Best Management Practices (BMP) could help meet increasing demand without further expansion of palm plantations.47,48
5. SOCIAL DISPUTES WITH LOCAL COMMUNITIES AND WORKERS CONTRIBUTE TO OPERATIONAL DISRUPTIONS

Social disputes with local communities and workers can disrupt operations through development delays, demonstrations or employee strikes, and other roadblocks. Though the palm oil sector provides employment for millions and significantly reduces poverty, the current work is often done during long, hard hours at low pay.\(^4\) The development of new large-scale oil palm plantations also leads to social conflict when development fails to consider the rights and livelihoods of local communities. These disputes can pose serious operational disruptions for businesses reliant on the work of smallholders.

6. ENVIRONMENTAL AND SOCIAL IMPACTS LEAD TO REPUTATIONAL RISKS

Various NGO groups such as Greenpeace, Rainforest Action Network, Mighty Earth and Oxfam have targeted consumer brands with deforestation campaigns. In 2010, Greenpeace's mock advertisement linking Nestle's palm oil sourcing for KitKats to orangutan deaths was viewed by over 300,000 during its first day online.\(^5\) Kellogg Company was accused in 2013 of rainforest destruction in over 30 prominent media outlets.\(^6\) In addition to these public campaigns, several organizations have begun to rank companies' commitments to addressing the impacts of palm oil production. For instance, the Union of Concerned Scientists in April 2015 published a scorecard entitled *Fires, Face Wash, Forests: Scoring America's Top Brands on Their Palm Oil Commitments*.\(^7\) In 2018 Greenpeace launched *Moment of Truth*, challenging 16 companies to disclose publicly the mills that produced their palm oil, and the names of the producer groups that controlled those mills (building on its ranking in 2016 of progress towards deforestation-free commitments in *Cutting Deforestation Out of the Palm Oil Supply Chain*).\(^8\)
COLLABORATIVE INITIATIVES

Many players, including buyers, producers, governments, NGOs and communities understand the issues and are collaborating to ensure the long-term sustainability of palm oil.

MULTI-STAKEHOLDER SUSTAINABILITY EFFORTS

Numerous multi-stakeholder efforts have been created to address the issues related to palm oil production. This includes collaborations between companies and local governments as well as regional and national efforts, such as the recently formed North American Sustainable Palm Oil Network (NASPON) and Sustainable Palm Oil Initiative (SPO), focused on production in Indonesia.

ADDRESSING DEFORESTATION ACROSS MULTIPLE COMMODITIES

Many of the business risks affecting palm oil production affect other commodities as well. Multi-stakeholder efforts that address deforestation related to palm oil as well as other commodities include:

• Tropical Forest Alliance 2020 (TFA)
  TFA is a global umbrella partnership that brings together governments, the private sector, and civil society organizations to remove deforestation from palm oil, beef, soybean and pulp and paper. It supports commitments by partners to reduce deforestation in tropical forest countries and was founded in 2012 after The Consumer Goods Forum (CGF)\(^4\) committed in 2010 to zero net deforestation by 2020.

• The “Soft Commodities” Compact
  The compact is a joint initiative of the Banking Environment Initiative (BEI) and CGF, mobilizing the global banking industry to help remove deforestation from soft commodity supply chains and achieve zero net deforestation by 2020.

• New York Declaration on Forests
  In 2014, world leaders (close to 200 governments, financial institutions, companies at all points of the supply chain, and influential civil society and indigenous organizations) committed to cut natural forest loss in half by 2020, and to strive to end it by 2030. Concrete commitments and partnerships were also announced and are being implemented.

• The Accountability Framework
  The framework is being developed by a coalition of environmental and social NGOs in consultation with private companies, governments and other stakeholders. It is developing a common harmonized set of norms and guidelines for companies and other stakeholders working to eliminate ecosystem destruction and human exploitation from commodity supply chains.
SUSTAINABILITY STANDARDS

Investors and companies that want to support more sustainable production face the challenge of tracing palm oil through the supply chain. Purchasing palm oil certified by third-party sustainability standards can help address this problem. The following provides detail on a few of the standards. A full listing of standards relevant to palm oil production is available online through the Sustainability Policy Transparency Toolkit (SPOTT).55

• The most well-established standard was developed by the Roundtable for Sustainable Palm Oil (RSPO). Created in 2004, RSPO has over 3,800 members, encompassing the entire supply chain, from oil palm producers to investors. Currently, nearly 20 percent of global palm oil production is RSPO certified.56 The International Finance Corporation, a growing number of Equator Banks (e.g., HSBC57), as well as investors include RSPO certification in their lending and investing policies.58 While the RSPO is critical to ensuring sustainable production practices and has unmatched infrastructure for evaluating compliance, concern exists among various stakeholders that the RSPO doesn’t represent the best science on forest conservation, carbon emissions, human and labor rights protections, and lacks robust enforcement standards. RSPO Principles & Criteria (P&C) guidance are being revised in 2018 as part of a review process that takes place every five years. This provides the opportunity for the public and capital market players - such as investors and companies - to push the RSPO further on ESG best practices. RSPO NEXT has also been developed to recognize the efforts of RSPO members who are exceeding the requirements of RSPO’s "Principles and Criteria."59

• Building even further on the RSPO standards and commitments, the Palm Oil Innovation Group (POIG) was created in 2013 to provide a forum for front-runners within RSPO’s membership interested in making improvements in palm oil production practices. POIG has developed an auditable framework to provide market recognition for companies operating in compliance with the POIG Charter and a set of verification indicators that outline leading standards for protecting forests, peatlands, biodiversity and carbon while also improving livelihoods and upholding the rights of local communities and workers.60

• Another relevant program is the High Carbon Stock (HCS) Approach. This approach identifies forest areas that should be conserved and distinguishes them from land that might be suitable for development (e.g., degraded lands with low carbon and biodiversity values). Companies hire trained practitioners to conduct an HCS assessment and submit it to a small panel of peer reviewers.61

Other third-party programs include: 62, 63

• The mandatory Indonesian Sustainable Palm Oil (ISPO) system and the voluntary Malaysian Sustainable Palm Oil (MSPO) certification scheme, which are national initiatives that sustainability advocates believe should be a floor - not a ceiling - for production standards;

• The Rainforest Alliance standard, which has certified 109 oil palm producers, primarily in Guatemala and Honduras;64

• The International Sustainability and Carbon Certification (ISCC) and the Roundtable on Sustainable Biomaterials (RSB), which certify sustainable production of biomass, biofuels and feedstock; and

• Organic standards (though production is limited).
SUPPORTING GOVERNMENT POLICIES

In producer countries, speaking out collectively to promote transparency and legislative reform is particularly critical. Companies and investors can support efforts by governments, such as Indonesia, to eliminate the illegal and uncertified conversion of forests.65 Another example would be addressing the current lack of transparency regarding land tenure in Indonesia and asking suppliers to publish concession maps covering their entire operations, which is a requirement for membership in the RSPO.66

Companies can also press for better labor protections and enforcement in palm oil production. They can also support policies in countries that import palm oil that take into account the greenhouse gas impact of palm oil-based biofuels and impose robust sustainability standards.67
In order to manage the supply chain risks associated with palm oil production, an increasing number of companies are developing relevant policies and codes of conduct. They are also recognizing that in order to ensure their supply meets such policies, commodity traceability is paramount. To combat deforestation in supply chains, many companies are committing to traceability not only with their direct suppliers but also in their extended supply chains.

As companies focus on traceability and implementation of their policies, they are increasingly collaborating with suppliers as well as other critical stakeholders. This includes finding ways to support suppliers as they take the steps needed to uphold the company’s policy.

Companies can offer supplier support by providing education and technical support, assisting with goal setting or creating financial incentives to meet new standards. To be effective in achieving their policies, companies are also increasingly establishing a monitoring and verification process to confirm that suppliers are following through on the company’s commitments.

Without verification, even the strongest policy leaves a company exposed to reputational and market risks. Verification can be conducted by the company or by a third-party certifier. Leading companies include a protocol for supplier non-compliance that facilitates time-bound action plans for suppliers to return to compliance.

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**REPORTING GUIDANCE FOR RESPONSIBLE PALM**

*Ceres works with companies and investors to encourage sustainable palm oil sourcing. In 2017 it convened more than 18 other organizations to develop a shared set of reporting guidelines and published "Reporting Guidance for Responsible Palm".*

As companies strive to implement responsible production practices, many are beginning to publicly communicate their progress. However, the persistence of significant environmental and social impacts in the palm oil sector underscores the need for improved transparency to:

- better understand practices at the plantation level,
- inform ongoing dialogues on company policy implementation efforts, and
- ultimately improve accountability and compliance.

*The Reporting Guidance for Responsible Palm provides a shared set of reporting guidance for companies across the supply chain. Its primary purpose is to inform the content of public corporate communications and transparency on responsible production and sourcing activities including and beyond certification. It can also be used as a resource to guide dialogues and due diligence processes between companies, their suppliers, civil society stakeholders and investors.*
Though U.S. companies do not purchase a large percentage of the palm oil produced globally, many are taking action to promote more sustainable palm oil production, given their global role and reputation in the food and personal care sectors.

Over 250 major companies have adopted sustainable palm oil sourcing policies, including Yum! Brands, Hershey, Mars, Nestlé, PepsiCo, Unilever, Procter & Gamble, Wilmar International and Cargill. Among refiners and traders in particular, palm oil policies often refer explicitly to "No Deforestation, No Peat, No Exploitation" (NDPE).

• **Kellogg Company** sources 99.6 percent of its palm oil from RSPO members (16 percent is Certified Segregated, 58 percent RSPO Mass Balance, 25 percent Green Palm certificates). Ninety-one percent of the company’s global palm oil volume is traceable to mills, and 34 percent is traceable to the plantation (as of June 2017). In order to demonstrate transparency, Kellogg lists all its suppliers and expects suppliers to report publicly on traceability to mill and plantation and to identify all grievances, including action plans and outcomes. Kellogg includes in its public reports an overview of progress by its top five palm oil suppliers.

• **Mondelēz International** met its pledge to make all of its palm oil 100 percent RSPO certified in 2013. At the end of 2016, almost all of the palm oil sourced by the company was traceable back to the mill (96 percent) and 99 percent was from suppliers with policies aligned to that of Mondelēz. The company has acted against suppliers that did not comply, confirming plans to exit 11 suppliers at the end of 2015. Importantly, the company is leveraging mapping technology (see the “Additional Resources” section) to prioritize traceability and remediation in partnership with World Resources Institute’s (WRI’s) Global Forest Watch platform. Finally, the company is requiring palm oil suppliers to adopt forest protection and sustainability policies for their entire supply base - not just palm oil supplied to Mondelēz.
Additional Resources

General

- *Reporting Guidance for Responsible Palm* (2017) by a diverse group of more than 18 nonprofit organizations and investor groups (convened by Ceres) provides common reporting guidance for companies across the supply chain.

- *Sustainable Palm Oil and Responsible Investment* (2018) by Aviva Investors and the Zoological Society of London’s (ZSL) SPOTT team focuses on the case for investment in palm oil and lays out key questions for institutional investors to ask when engaging with oil palm growers, traders and buyers.

- The U.S. Department of Agriculture conducts research on multiple commodities, including palm oil. This includes data on production and consumption, prices and trade and is published through the Economic Research Service, Foreign Agricultural Service, and National Agricultural Statistics Service.

- Both The Sustainability Consortium and World Wildlife Fund offer high-level insights and analysis about potential risks and opportunities across a number of commodities, including palm oil. In addition, WWF has evaluated the steps retailers, manufacturers and food service companies from around the world have taken in its Palm Oil Buyers Scorecard and also provides a set of recommended actions.

Mapping and Evaluation Tools

- SPOTT provides information about the sustainability of 50 of the largest palm oil producers and traders using publicly available information. It was developed by The Zoological Society of London (ZSL). It provides an interactive mapping tool of concession sites and published an assessment of the varying levels of commitments made in *The use of the High Conservation Value (HCV) and High Carbon Stock (HCS) approaches by palm oil companies assessed on SPOTT* (2018).

- SCRIPT (the Soft Commodity Risk Platform) provides tools and guidance to help financial institutions screen their portfolios to determine the companies and issues that pose the greatest risk to their institutions, while recommending engagement priorities. It was launched by Global Canopy in partnership with WWF and Ceres, with the support of CDP and SPOTT as data partners.

- World Resources Institute’s (WRI) Global Forest Watch (and the forthcoming Global Forest Watch Pro) provides insights for analyzing forest trends, receiving supply-chain alerts, creating custom maps, and downloading real-time data on forest loss. Other resources specific to palm oil include the "Suitability Mapper" which was developed to identify potentially suitable sites for sustainable palm oil production in Indonesia, a companion publication: *How to Identify Degraded Land for Sustainable Palm Oil in Indonesia*, and a related map through the Forest Cover Analyzer, which enables users to assess forest cover change and risks related to sustainable palm oil production in areas of their choice in Kalimantan, Indonesia.
SOCIAL IMPACTS

- **KnowTheChain** is a resource for businesses and investors who need to understand and address forced labor risks within their supply chains.

- Verite's **Forced Labor Commodity Atlas** provides information about various commodities and their relationship to forced labor and other forms of exploitation. It has assessed labor conditions related to palm oil production in multiple countries across Southeast Asia and Latin America and produced several publications focused on the risks of labor abuse.

- **The Great Palm Oil Scandal: Labor Abuses Behind Big Brand Names** (2016) by Amnesty International investigated conditions at palm oil plantations in Indonesia run by palm oil grower, Wilmar, and traced to nine global brands. Wilmar has since responded with a range of initiatives to strengthen labor practices and address the issues raised by the report. In 2018 Wilmar also joined with other companies to form the *Decent Rural Living Initiative* to help rural workers associated with the agricultural sector secure their long-term ability to thrive.

- **Free and Fair Labor in Palm Oil Production: Principles and Implementation Guidance** (2015) by Humanity United provides the normative standard for labor and working conditions on palm oil plantations and in palm oil mills along with guidance on a set of practices to operationalize these principles. It is focused on the hired labor workforce on palm oil plantations and mills, where the risk of worker exploitation is greatest.

- **Respecting Land and Forest Rights: A Guide for Companies** (2015) by The Interlaken Group and the Rights and Resources Initiative (RRI) was developed through a multi-stakeholder forum to support companies in respecting land rights by aligning operations with the United Nations Food and Agriculture Organization's Voluntary Guidelines on the Responsible Governance of Tenure (VGGT).

- **International Labor Rights Foundation** analyzed with partner **Sawit Watch** in 2013 the on-the-ground realities at three RSPO certified palm oil plantations in Indonesia.

- **Bloomberg’s** examination of human rights challenges in Indonesia.

- **Modern Slavery in the Palm Oil Industry** (2012) produced by Accenture for Humanity United, provides an overview of the global palm oil production market and supply chain, describes various examples of labor exploitation in Malaysia and Indonesia, the work of the RSPO, and recommended interventions for governments and companies to address the conditions under which the palm oil industry recruits and employs workers.

- **Hidden in Plain Sight: Forced Labor in Supply Chains** (2010) by Ceres and Sustainalytics evaluates the human rights and supply chain practices of 613 of the largest, publicly traded U.S. companies included in the Gaining Ground: Corporate Progress on the Ceres Roadmap for Sustainability report and provides steps companies and investors can take to address child labor and forced labor.

SUSTAINABLE SOURCING GUIDANCE

• **Financial Institution Guidance: Soft Commodity Company Strategy** (2017) by Global Canopy and CDP, lays out the scientific and business case for how and why companies should address the risks and opportunities associated with deforestation driven by the production of soft commodities (including palm oil, timber products, cattle products, and soy).

• **No One Is Safe: Illegal Indonesian Palm Oil Spreads Through Global Supply Chains Despite Global Sustainability Commitments and Certification** (2016) by Eyes on the Forest, reports on how Crude Palm Oil (CPO) tainted by illegally grown Fresh Fruit Bunch (FFB) from government protected areas deep inside Sumatra entered the supply chains of palm oil suppliers.

• **Sustainable Palm Sourcing Guidelines** (2015) by The Consumer Goods Forum, assists companies in the development of their own policies for effectively sourcing palm oil. It was developed by a large set of retailers and manufacturers from across the CGF membership, with input from a number of external stakeholders.

• **Sustainable Sourcing Guide for Palm Oil Users: A practical handbook for US consumer goods and retail companies** (2015) by World Wildlife Fund and Conservation International, helps companies take steps to understand their palm oil footprint and the various issues related to sourcing certified sustainable palm oil.

• **How Investors are Changing the Supply Chain for Palm Oil** (2014) by Green Century Capital Management, reviews how investors can and have driven change.

• **Palm Oil Investor Review: Investor Guidance on Palm Oil: The Role of Investors in Supporting the Development of a Sustainable Palm Oil Industry** (2012) by World Wildlife Fund, is based on a 2012 review of 35 palm oil investors with significant exposure to the 68 largest listed entities in the palm oil sector. The report includes results of the survey, as well as company and market research and a set of recommendations for investors and RSPO.

*Engage the Chain* offers briefs on seven other key commodities, a compelling case for sustainable agriculture and opportunities for action that cut across all types of agricultural commodities.
ENDNOTES


7. Chris Malins, Cerulogy and Rainforest Foundation Norway, “Driving deforestation: The impact of expanding palm oil demand through biofuel policy”, January 2018


9. Figure from: https://www.rainforest-rescue.org/topics/palm-oil, Original source: Arbeitsgemeinschaft Energiebilanz (AGEB)


17 WWF, Palm oil: Productive and versatile, [http://wwf.panda.org/what_we_do/footprint/agriculture/palm_oil/about/](http://wwf.panda.org/what_we_do/footprint/agriculture/palm_oil/about/)


22 Ranked by "market capitalization" at [https://www.spott.org/palm-oil/](https://www.spott.org/palm-oil/), June 2018


28 Note: Ranking is based on sales, as reported in Progressive Grocer, May 2018, [https://progressivegrocer.com/top-50-grocers-amazon-7th-place-rest-industry-restrategizes-reshuffles](https://progressivegrocer.com/top-50-grocers-amazon-7th-place-rest-industry-restrategizes-reshuffles)

29 Note: The Union of Concerned Scientists in Fries, Face Wash, Forests notes that "while oil palm plantations sequester some carbon, it is far less than the amount stored in intact forests and peatlands, so the result is a net increase in global warming."


31 Chris Malins, Cerulogy and Rainforest Foundation Norway, "Driving deforestation: The impact of expanding palm oil demand through biofuel policy", January 2018


35 Chris Malins, Cerulogy and Rainforest Foundation Norway, "Driving deforestation: The impact of expanding palm oil demand through biofuel policy", January 2018


38 WWF, Sustainable Agriculture, Palm Oil, http://www.worldwildlife.org/industries/palm-oil

39 Note: The following definitions are drawn from the International Labor Organization (ILO). Forced labor refers to egregious forms of mistreatment that result in workers being trapped in jobs they did not enter voluntarily and cannot leave without threat or penalty. Human trafficking is a common form of forced labor that affects migrant workers. The term refers to the movement of workers across internal or international borders for the purpose of exploitation.


44 Note: Most sources, including the Roundtable on Sustainable Palm Oil (RSPO), define smallholders as growers with a planted area of less than 50 hectares (just under 125 acres), where the farm provides the majority of income to the family and, in turn, the family provides the majority of labor on the farm. https://rspo.org/smallholders/rspo-smallholders-definition


54 Note: CGF is a global network that brings together the CEOs and senior management of some 400 retailers, manufacturers, service providers, and other stakeholders across 70 countries. Its member companies have combined sales of EUR3.5 trillion.


56 RSPO, https://rsopo.org/about


60 Palm Oil Innovation Group, POIG Innovation Group, http://poig.org/poig-verification-indicators/


69 SupplyChange, http://supply-change.org


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Ceres is a sustainability nonprofit organization working with the most influential investors and companies to build leadership and drive solutions throughout the economy. Through our powerful networks and advocacy, we tackle the world's biggest sustainability challenges, including climate change, water scarcity and pollution, and human rights abuses.

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