

Drafted as of: July 2021

SUMMARY OF LEGALITY RISKS

Risk Score: 62.1 (Higher Risk^a)¹

Conflict State: NO²

Log or Sawnwood Export Restriction in Effect: YES³

Import Regulation in Effect: NO

- Illegal logging is widespread and a high percentage of Brazil's timber has been reported to be illegal.
- Illegal logging and land grabbing are highly associated with violent conflicts in rural and indigenous communities, often driven by organized criminal networks.
- High-value species from natural forests are at an elevated risk for illegal harvest.
- Fraud and corruption are common and there is a risk that illegal timber is laundered into supply chains for all species.
- Despite several high-profile enforcement operations that revealed systemic fraud and illegal logging, enforcement is limited in capacity and has been weakened further under the current political administration.
- There have been widespread reports about the weakening of laws and requirements, some retroactively, applying to timber exported to international markets from Brazil.
- There is also a high-risk of tax evasion for timber products from Brazil.
- Interpol and the EU Member States have issued high alert warnings for illegal timber from Brazil.
- Illegalities related to ownership of land and land conversion are a risk for timber sourced from Brazil.

TRADE PROFILE OF FOREST PRODUCTS^{B,C,4}

Total Imports (2019): \$1.24 billion Total Exports (2019): \$12.94 billion. \$6.48 billion (50.1%) exported to "regulated markets" ^f

SUMMARY OF HIGHEST PRODUCT-LEVEL RISKS

Exports - Top Products Exported to the US by 2019 Value⁵

- Pulp (HS47)
- Flooring, Decking, Moulding & Strips (HS4409)
- Joinery Products (HS4418)
- Plywood (HS4412)

- Sawnwood (HS4407)
- Paper (HS48)
- Wood Furniture Bedroom (HS940350)
- Wood Furniture Other (HS940360)
- Fibreboard (HS4411)
- Frames (HS4414)

Export of logs (HS4403) have been banned in some form since at least 1996.⁶ Since 2005, Brazil has banned the export of logs (HS4403), sawnwood (HS4407), and firewood (HS4401 and HS4405) from natural forests, while allowing for the export of these products from plantations and sustainable management plans.⁷ All sawnwood of 250mm thickness or less cannot be exported.⁸

Furthermore, Brazil has restricted the trade of certain wood species, including banning the export of panara pine (*Araucaria angustifolia*) since 2001.⁹ Similarly, since 2003, Brazilian mahogany (*Swietenia macrophylla*) cannot be harvested or

Summary of Highest Product-Level Risks (continued)

exported in any form unless sourced from sustainable management plans,¹⁰ and since 2006, Brazil nut (*Bertholletia excelsa*) and rubberwood (*Hevea* spp.) cannot be harvested or exported if sourced from natural, primary or regenerated forests.^{11,12} Since 2008, the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) has also published an extensive list of "Species of Brazilian Flora Threatened with Extinction" that are subject to additional export restrictions,^{13,14} with the most recent iteration of the list appearing in October 2017.¹⁵

SUMMARY OF HIGHEST SPECIES-LEVEL RISKS

Illegal logging and trade affect many timber species, but highly valuable - often rare and endangered - species that are protected under harvest and/or trade regulations are a key target and at an elevated risk for illegality. The following species are either currently, or have recently, been protected in Brazil.

CITES-Listed Species:¹⁶

Appendix I:

• Brazilian Rosewood or Jacarandá (Dalbergia nigra)

Appendix II:

- Pau Rosa (Aniba rosaeodora)
- **Pao Santo** or **Verawood** (*Plectrocarpa sarmientoi*, synonym *Bulnesia sarmientoi*)
- Native Brazilwood or Pernambuco (Paubrasila echinata, synonym Caesalpinia echinata)
- Rosewood (Dalbergia spp.)
- Brazilian Mahogany (Swietenia macrophylla)

The following species cannot be exported in any form:¹⁷

• Panara Pine (Araucaria angustifolia)

The following species cannot be exported if sourced from natural, primary or regenerated forests:¹⁸

- **Brazil Nut** (Bertholletia excelsa)
- Rubberwood (Hevea spp.)

The following species cannot be exported unless sourced from sustainable forest plans: $^{19}\,$

- Brazilian Mahogany (Swietenia macrophylla)
- Argentina Cedar or Cedro Batata (Cedrela fissilis)
- Cedrela angustifolia (synonym Cedrela lilloi)
- Spanish Cedar (Cedrela odorata)"

Species with Reported Incidents of Illegal Logging:20

• **Ipê** (Handroanthus spp.), especially **Pink Ipê** (Handroanthus impetiginosus) and **Yellow Ipê** (Handroanthus serratifolius). These species are occasionally reported as Tabebuia impetiginosa and Tabebuia serratifolia.

- Brazilian Mahogany (Swietenia macrophylla)
- Bulletwood or Massaranduba (Manilkara bidentata)²¹
- Brazilian Cherry or Jatobá (Hymenaea courbaril)²²

The Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) publishes an extensive list of "Species of Brazilian Flora Threatened with Extinction" that cannot be exported unless sourced from plantations, or, in the case of species categorized as "Vulnerable", from sustainable forest plans as well.²³ The most recent iteration of this list was published in 2017.²⁴

All natural forest species in Brazil are higher-risk. These include:²⁵

- **Sande** (Brosimum utile)
- Spanish Cedar (Cedrela odorata)
- Freijo (Cordia goeldiana)
- Garupa (Dinizia excelsa)
- Cumaru (Dipteryx odorata)
- Cambara (Erisma uncinatum)
- Cupiuba (Goupia glabra)
- Brazilian Cherry or Jatobá (Hymenaea courbaril)
- Macarunduba (Manilkara huberi)
- Itauba (Mezilaurus itauba)
- Faveira (Parkia spp.)
- Yellow Ipê (Handroanthus serratifolius)
- **Pink Ipê** (Handroanthus impetiginosus)

The following are plantation species and are considered lower-risk:

- Acacia (Acacia spp.)^{26,27}
- Eucalyptus (Eucalyptus spp.)^{28,29}

- Rubberwood (Hevea brasiliensis)^{30,31}
- **Pine** (*Pinus spp.*)^{32,33}
- Brazilian Fern Tree (Schizolobium amazonicum)³⁴
- **Teak** (*Tectona* spp.)^{35,36}
- Paricá (Schizolobium parahyba)³⁷

FORESTRY SECTOR

Forested Area: 496.6 million ha³⁸ (30.4% protected)³⁹

Deforestation Rate: 0.3% annually 40

Forest Ownership (as of 2015):⁴¹

- 222.8 million ha privately-owned (44%)
- 281.1 million ha publicly-owned (56%)

Certified Forests:

- FSC Certification: 7.26 million ha (2019)⁴²
- PEFC Certification: 4.91 million ha (2020)⁴³
- FSC & PEFC Certification: 3.56 million ha (2019)⁴⁴

All tropical hardwood exports should be considered high-risk based on overall legality risk in Brazil. Robust third party certification can be considered as a tool to help mitigate this high-risk, but should not constitute sufficient due diligence for legality in and of itself.

Domestic Production:45

- Logs: 158.08 million m³ (2019)
- Wood Fuel: 123.44 million m³ (2019)
- Pulp: 39.54 million tonnes (2019)
- Wood Chips: 30.9 million m³ (2019)
- Paper: 25.8 million tonnes (2019)
- Sawnwood: 10.24 million m³ (2019)
- Charcoal: 6.40 million tonnes (2019)
- Fibreboard: 4.85 million m³ (2019)
- Particleboard: 3.37 million m³ (2019)
- Wood Pellets: 2.91 million tonnes (2019)
- Veneer: 550 thousand m³ (2019)



BRAZIL'S TOP SOURCE MARKETS FOR FOREST PRODUCTS BY VALUE (2019) E,46









HIGH-RISK EXPORTS: SAWNWOOD EXPORTS IN YEARS IN WHICH BRAZIL HAD AN ACTIVE SAWNWOOD EXPORT RESTRICTION⁵² (2015–2020)⁵³



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TIMBER LEGALITY

Illegal logging has soared since 2012, particularly in natural forests. In 2020, deforestation in Brazil's Amazon rose to its highest level in more than a decade,⁵⁶ and recent reports indicate that forest clearances in Brazil's Amazon region rose 17 percent in the first six months of 2021.⁵⁷ While Brazil saw dramatic reductions in deforestation and illegal logging in the period between 2000 and 2012 as a result of strong political commitment, conservation measures and enforcement efforts,⁵⁸ there have been well publicized concerns about the scale of forest destruction (deforestation and forest degradation caused by logging) in the Amazon over the last few years.

• Illegal logging is widespread and a high percentage of Brazil's timber has been reported to be illegal.

Brazil has the second largest area of forest in the world at nearly 500 million hectares (59 percent of its territory) of both natural and planted forests.⁵⁹ Natural forests occupy around 485 million hectares in Brazil or 98 percent of the forest area.⁶⁰ The majority of this forest is in the Amazon biome with the two states of Pará and Mato Grosso supplying 70 percent of Brazil's tropical timber.⁶¹ Rondônia is reportedly growing in importance as a major source of Brazil's timber.⁶²

Brazil has around 11.2 million hectares of plantation forest as of 2020, mostly consisting of eucalyptus (75 percent of plantation extent).⁶³ Forest plantations amount to 2 percent of the total forest area.⁶⁴ Other plantation species include acacia, parica, rubber, teak and poplar.⁶⁵

In September 2019, the superintendent of the Federal Police in Amazonas declared that 90 percent of the timber from the Amazon was likely illegal.⁶⁶ A 2016 study estimated that close to half of the wood harvested in Brazil is reportedly illegal, with the majority sourced from natural forests.⁶⁷

While plantation timber from Brazil can generally be considered lower-risk than timber sourced from natural forests, Preferred by Nature reports that some timber plantations have been developed on illegally-obtained land and therefore illegal ownership remains a risk for both timber from natural forests and private plantations.⁶⁸

Timber Legality (continued)

• Illegal logging and land grabbing are highly associated with violent conflicts in rural and indigenous communities, often driven by organized criminal networks.

There were an average of 30 homicides per year related to land conflicts with a total of 723 homicides between 1994 and 2014.⁶⁹ Human Rights Watch has demonstrated the links between "ipê mafias" and 28 assassinations as well as 40 death threats since 2015, while the Pastoral Land Commission (Comissão Pastoral da Terra) has estimated that land conflicts in Brazil hit 1,576 cases in 2020, the highest number ever recorded since tracking began in 1985.⁷⁰ Many of these cases have involved indigenous people and rural activists in the Brazilian Amazon. At least 113 Indigenous people were murdered in Brazil in 2019, with 25 cases of attempted murder.⁷¹ Recent court cases further reveal direct links between illegal timber harvesting and violent crimes against members of communities using the forests for subsistence, aimed at driving them off the land or discourage them to invoke their rights.⁷²

Organized criminal networks with "the logistical capacity to coordinate large-scale extraction, processing, and sale of timber, while deploying armed men to protect their interests"⁷³ have been widely publicized.

• High-value species from natural forests are at an elevated risk for illegal harvest.

Ipê is among the most valuable tree species in the world,⁷⁴ and there have been extensive reports of illegal logging involving a number of ipê and other high-value species from Brazil, including pink ipê (*H. impetiginosus*) and yellow ipê (*H. serratifolius*) as well as big-leaf mahogany (*Swietenia macrophylla*).⁷⁵ Commercial exploitation of big-leaf mahogany was temporarily prohibited in 2001 to avoid the species' extinction.⁷⁶ Brazil has banned the export of Brazilian rosewood, and also restricts exports of unprocessed logs from natural forests.^{77,78} Other high-value species harvested from natural forests in Brazil include cumaru (*Dipteryx odorata*), jatoba (*Hymenaea courbaril*), massaranduba (*Manilkara bidentate*) and angelim vermelho (*Dinizia excelsa*).⁷⁹

In 2018, researchers published evidence that high-value species, particularly ipê, but also massuranduba and angelim vermelho were being illegally logged at higher rates than other less valuable species using fraudulently obtained logging permits across Pará state.⁸⁰

• Fraud and corruption are common and there is a risk that illegal timber is laundered into supply chains for all species.

Some companies are circumventing the law and laundering illegal timber into supply chains by fraudulently obtaining the necessary paperwork. Greenpeace's series of investigations in Pará, Mato Grosso and Rondônia since 2014 suggest that official documentation is not, in and of itself, sufficient to guarantee the legal origin of timber sourced from the Amazon.^{81,82,83}

Most illegal timber that has been fraudulently laundered into a supply chain has been harvested from protected areas, indigenous territories or natural forests.^{84,85,86} Reports suggest that the five most common ways in which companies achieve this is through:

- 1. Fraudulently obtaining approval for harvesting an area where timber has already been harvested or has otherwise been deforested.
- 2. Falsifying a forest inventory so that it overestimates the volume or density of valuable species thus allowing the company to log more than is permissible for the real volume/density or launder timber illegally logged elsewhere.
- 3. Obtaining approval to log an area without trees of commercial value, where no timber will be harvested, for the generation of credits and a transportation document that is then used for higher-value species illegally logged in another area.
- 4. Persuading a corrupt official to issue credits (the license to harvest timber) regardless of the authorized amount requested (even when impossibly large).
- 5. Persuading a corrupt official to issue fake credits to a non-existent company or registering fake tree inventories in the system to issue credits for timber companies that do not exist or do not have a forest to harvest legally.^{87,88,89,90}

While the federal government of Brazil developed an electronic traceability system in 2006, implementation was subsequently devolved to state level, with different systems used across states.⁹¹ At the same time, the "Declarations of Forest Origin" (DOF) document was introduced, a compulsory license containing information on the timber's origin, species, type of product, quantity, value and transportation route.⁹² All systems are intended to allow consignments in transit to be checked against declarations made by forest producers and sawmills but inspections reportedly do not happen during transit.⁹³ Fraud,

Timber Legality (continued)

corruption and tampering of the online system have since undermined confidence.⁹⁴ To date the official timber registry and monitoring systems are not able to control large-scale fraud and illegal logging, and therefore, timber production monitoring systems still need to be bolstered.⁹⁵

• Despite several high-profile enforcement operations that revealed systemic fraud and illegal logging, enforcement is limited in capacity and has been weakened further under the current political administration.

The Forest Code forms the legislative basis for the enforcement against illegal timber trade activities in Brazil.⁹⁶ State agencies are responsible for enforcing the Forest Code. Enforcement of the Forest Code has been described as "weak" in part due to inconsistencies at the federal and state levels and a lack of transparency and capacities across the states.⁹⁷

Fraud and illegal logging are generally detected in isolated operations carried out by the enforcement agencies, which can only cover a very small fraction of Brazil's forests.⁹⁸ For example, Operation Archimedes uncovered systemic fraud and illegal logging in 2019, while Operation Paper Forests identified the use of fraud to launder over 91,000 cubic meters of sawnwood between 2014 and 2017, centered in Roraima but involving other Amazon states.^{99,100} Reports also suggest failures of enforcement authorities to act on evidence from satellite analyses of deforestation and forest degradation.¹⁰¹ Government efforts to enforce a ban on fires in the Amazon, including through deploying the military, to prevent another major fire catastrophe in 2020, further highlight the weaknesses as INPE reported a significant increase in the number of fires raging in July 2020 compared to the year before.¹⁰² Moreover, INPE itself has suffered political pressure from the current Federal Administration questioning the validity of its findings, leading to the firing of INPE's President.¹⁰³

The probability that illegal logging will result in penalties has been estimated at less than 0.08 percent.¹⁰⁴ Reports also suggest a weakening of penalties over the last few years. In 2020, IBAMA issued 20 percent fewer fines compared with 2019, amounting to a 42 percent reduction in the fines issued for "flora" specific violations in the Amazon region .¹⁰⁵ There have been consistent reports that many fines are never paid (only 5 percent of fines imposed by the relevant authorities have been paid) or are eventually forgiven. Human Rights Watch suggest that fines for illegal logging in the Amazon have been effectively suspended since October 2019.¹⁰⁶

• There have been widespread reports about the weakening of environmental laws and requirements, some retroactively, which have led to ongoing cases involving high-profile politicians related to illegal logging and timber exports to international markets.

Since 2019, Brazil has approved 57 pieces of legislation that weaken environmental laws, from relaxing forest protections to declassifying the toxicity of dozens of pesticides. Almost half of the legislation, 27 bills, were passed during the height of Brazil's Covid-19 pandemic, from March to September 2020.¹⁰⁷

Reports suggest that, in 2019, Brazil exported "thousands of cargoes of wood (from Pará State)...without authorization from the federal environment agency [IBAMA], increasing the risk that they originated from illegally deforested land."¹⁰⁸ IBAMA Superintendent for Pará State issued a retroactive export license for five containers of timber that had subsequently been held by customs authorities in the U.S., Belgium and Denmark when the shipments did not include the IBAMA authorization to export. Many companies that had exported without the licenses had reportedly applied for the IBAMA authorizations but had exported "before the agency had time to respond."¹⁰⁹ Probably as a response to this, IBAMA revoked Normative Instruction 15/2011, which requires companies to apply for export authorization from IBAMA, removing a key oversight step.¹¹⁰ In May 2021, Ricardo Salles, Brazil's Minister of Environment, Eduardo Bim, the Director of IBAMA and at least eight other officials, were announced as the target of a Brazilian police operation investigating the extent to which corruption had been involved in the decisions that led to the export authorization requirement being revoked.¹¹¹ The investigation reportedly stems from "extremely atypical financial transactions" including a surge of 7.4 million reais (\$1.5 million) in Salles personal wealth since 2012 and an alert by the U.S. embassy about suspected irregularities in paperwork for timber shipped from the Amazon to the state of Georgia in 2020.¹¹² In June 2021, Brazil's Supreme Court authorized an additional investigation of Salles for obstruction of justice related to the largest ever seizure of illegal timber in March 2021.¹¹³ Salles resigned in June 2021 and was replaced by Joaquim Alvaro Pereira Leite, another Environment Ministry official who is also involved in an ongoing lawsuit concerning the allocation of indigenous land.¹¹⁴

In authorizing the investigations in this case, Brazil's Supreme Court also reversed the rule changes related to Normative Instruction 15/2011 in May 2021,¹¹⁵ which means that companies are required to apply for export authorization from IBAMA.¹¹⁶

Timber legality (continued)

These requirements allow IBAMA to check the paperwork and conduct physical inspections on some shipments, which can help agents to catch cargoes that contain prohibited wood species or shipments that do not match the information on the manifest, a common practice for hiding illegal timber shipments in Brazil.¹¹⁷

• There is also a high risk of tax evasion for timber products from Brazil.

Fraudulent techniques are also reportedly used to evade taxes for timber exported from Brazil. Preferred by Nature reports that the tax burden in Brazil is relatively high (42 percent of the final value of the product), and as much as 10 percent of Brazil's GDP is lost through tax evasion each year.¹¹⁸ Companies trying to evade the high taxes will sometimes sell timber without the provision of a fiscal bill of sale, or one which under-reports the actual volume and/or value of the sale and exported product.¹¹⁹

• Interpol and the EU Member States have issued high alert warnings for illegal timber from Brazil.

Interpol issued a 'Purple Notice' in August 2016 (an international alert/request for cooperation) on illegal timber trading activities in Brazil's Pará State.¹²⁰ The companies listed in the Notice made approximately 28 million Brazilian Real (\$8 million) exporting illegal timber cut under false forest management plans in 2015, to Europe and the U.S.¹²¹

In September 2019, EU Member States developed a common enforcement position related to timber sourced from Brazil, publishing some specific risk assessment and mitigation guidelines which are up to date as of December 2020.¹²² This common enforcement position specifically concludes that under the EU Timber Regulation, species harvested in natural forests in the Brazilian Amazon Basin should generally be considered by operators to have a "non-negligible" risk of illegality and that Due Diligence needs to be assessed on a case-by-case basis.¹²³ The following factors are considered to increase the risk of illegal timber harvest when sourcing from Brazil:

- o High-value timber species, in particular Ipê; timber from the states of Rondônia, Pará, Mato Grosso or Amazonas and/or from areas bordering protected forest and/or indigenous territories;
- o Overestimation of certain species on government-issued documents;
- o Timber from any regions where land grabbing and violent crime have been linked to illegal timber harvesting,
- o The vicinity of protected areas;
- o Records of suppliers' illegal practices related to timber harvest;⁹
- o Records on the prevalence of forest fires in the region;
- o Inability to reconstitute the supply chain, particularly the links between the forest, the processing unit (normally the sawmill) and the exporting point;
- o Dealing with companies with a track record of criminal activities.^h

• Illegalities related to ownership of land and land conversion are a risk for timber sourced from Brazil.

While illegal conversion of forestland for agricultural production is a significant risk in Brazil, high value timber is usually extracted prior to deforestation, and given that land is often cleared through burning, it is likely that the wood from illegal conversion land is not primarily used to produce timber that is sold on international markets.

Brazil's legislation on land ownership and access rights is complex and continues to create uncertainty and conflict. Clearing land for crops or fields is considered an "effective use" of land in the Constitution and the first step to land ownership.¹²⁴ As such, organized land grabbers and squatters have cleared forest areas and then taken advantage of various government programs granting land titles after clearance to validate illegal seizures of public or indigenous lands.^{125,126} It is common that land is improperly recorded in the property registers or that documents are fraudulently obtained so that there may be more than one ownership document relating to the same area.¹²⁷ While the overall rate of land grabbing is not fully known, it was estimated that in 1999, 55 million of the 157 million hectares in the state of Amazonas were thought to be appropriated illegally. Although these numbers have likely declined, the practice of land grabbing persists.¹²⁸

Illegal land grabbing has been found highly correlated with conversion of forest land for agricultural commodities, particularly for cattle and soy, the largest drivers of deforestation in Brazil.^{129,130} At least 88 percent of deforestation is due to commercial agriculture, of which 95 percent is likely illegal, often in violation of the Legal Reserve (LR) forest conservation quotas established by Brazil's Forest Code.^{131,132,133}

REPORTS & ADDITIONAL RESOURCES

A list of relevant reports and additional online tools to complement this country report are also available at the IDAT Risk website: https://www.forest-trends.org/fptf-idat-home/

Key Reading:

- 1. Greenpeace. 2017. "Blood-Stained Timber." Greenpeace.
- 2. Preferred by Nature. 2017. "Timber Legality Risk Assessment Brazil." NEPCon.
- 3. Brito, Brenda and Barreto, Paulo. "Enforcement Against Illegal Logging in the Brazilian Amazon". IMAZON
- 4. Wellesley, Laura. 2014. "Illegal Logging and Related Trade The Response in Brazil. A Chatham House Assessment." Chatham House

METHODOLOGY & TERMINOLOGY NOTES

- ^a Risk scores reflect Preferred by Nature's Timber Risk Assessment which measures the risk of illegality occurring in 21 areas of law relevant to timber legality, as well as Forest Trends' national governance scores which provides an average relative governance and corruption risk score for 211 countries globally. Preferred by Nature's scores have been flipped to ensure compatibility with Forest Trends' national governance scores, where higher scores are associated with greater governance and corruption challenges. An average of both the Preferred by Nature and Forest Trends scores has been calculated for 66 countries where both are available as of 2021. For all other countries, the risk score reflects Forest Trends' national governance scores. Countries scoring less than 25 are considered "Lower-Risk," countries scoring between 25 and 50 are "Medium-Risk" and countries scoring above 50 are "Higher-Risk." It is important to note that it is possible to source illegal wood from a well-governed, "Lower-Risk" state and it is also possible to source legal wood from a "Higher-Risk" country. As such, the risk scores can only give an indication of the likely level of illegal logging in a country and ultimately speaks to the risk that corruption and poor governance undermines rule of law in the forest sector.
- ^b The term "forest products" is used to refer to timber products (including furniture) plus pulp and paper. It covers products classified in the Combined Nomenclature under Chapters 44, 47, 48 and furniture products under Chapter 94. While the term "forest products" is often used more broadly to cover non-timber and non-wood products such as mushrooms, botanicals, and wildlife, "forest products" is used to refer to timber products plus pulp and paper in this dashboard.
- ^c Except where otherwise specified, all trade statistics and chart data is sourced from UN Comtrade, compiled and analyzed by Forest Trends.
- ^d Regulated markets reflect countries and jurisdictions that have developed operational measures to restrict the import of illegal timber. As of 2021, this included the U.S., Member States of the European Union (as well as the United Kingdom, Iceland, Liechtenstein, Norway and Switzerland), Australia, Canada, Colombia, Indonesia, Japan, Malaysia, South Korea, and Vietnam. Some measures are more comprehensive in scope, implementation, and enforcement than others.
- ^e All references to "EU + EFTA" signify the 27 Member States of the European Union, as well as the United Kingdom, Iceland, Liechtenstein, Norway and Switzerland.
- ^f Information on land grabbing and violent crime is publicly available via reports of local social organisations, such as the Comissão Pastoral da Terra (CPT, available at the following link: https://www.cptnacional.org.br/) and the Comissão Indigenista Missionária (CIMI, available at the following link: https://cimi.org.br/).
- ⁹ Information related with denouncing slavery like labor conditions and rescue of victims of slave-labor can be found through the Ministério daEconomia – Secretaria doTrabalho (https://www.gov.br/economia/pt-br - Ministry of Economy – Secretariat for Labour). Last update on the Amazon Basin (24th July 2020) https://www.gov.br/economia/pt-br/assuntos/ noticias/2020/trabalho/julho/operacao-decombate-ao-trabalho-escravo-resgata-14-trabalhadores-no-amazonas
- ^h Link to the IBAMA website where information is provided on the companies that have been embargoed because of any trespass that has been identified: https://servicos.ibama.gov.br/ctf/publico/areasembargadas/ ConsultaPublicaAreasEmbargadas.php

WORKS CITED

- ¹ Forest Trends. 2020. "Global Illegal Deforestation and Associated Trade (IDAT) Risk Data Tool–Summary of Data and Methodology." Forest Trends. Accessed June 30, 2020. https://www.forest-trends.org/wp-content/uploads/2020/03/ Methodology-for-ILAT-Risk-Data-Tool-March-2020.pdf.
- ² World Bank Group's Fragile, Conflict and Violence Group. 2020. "Harmonized List of Fragile Situations." World Bank Group's Fragile, Conflict and Violence Group. Accessed June 30, 2020. https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations.
- ³ Forest Trends. 2020. "Known Forest Product Export Restrictions, FPER, as of June 2020." Forest Trends. Accessed June 30, 2020. https://www.forest-trends.org/known-log-export-bans/
- ⁴ United Nations Statistics Division. 2020. "UN Comtrade." United Nations Statistics Division. Accessed June 30, 2020. https://comtrade.un.org/data/.
- ⁵ UN Statistics Division, "UN Comtrade."
- ⁶ Forest Trends, "FPER."
- ⁷ Government of Brazil. 2005. Instrução Normativa IBAMA 77/2005. July 12, 2005. Accessed June 30, 2020. https://www. contabeis.com.br/legislacao/44122/instrucao-normativa-ibama-77-2005/.
- ⁸ Government of Brazil, "IBAMA 77/2005."
- ⁹ Forest Legality Initiative. 2020. "Panara Pine." Forest Legality Initiative. Accessed June 30, 2020. https://forestlegality. org/risk-tool/species/parana-pine.
- ¹⁰ Government of Brazil. 2003. Decreto No. 4722, de 5 de Junho de 2003. June 5, 2003. Accessed June 30, 2020. http://www.fao.org/faolex/results/details/en/c/LEX-FAOC112587/.
- ¹¹ United Nations Environment World Conservation Monitoring Centre. 2018. "Brazil Country Overview to Aid Implementation of the EUTR." United Nations Environment World Conservation Monitoring Centre. Accessed June 30, 2020. https://ec.europa.eu/environment/forests/pdf/Country_overview_Brazil_03_10_2018.pdf.
- ¹² Government of Brazil. 2006. Decreto No. 5975 de 30 de Novembro de 2006. November 30, 2006. Accessed June 30, 2020. http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/decreto/d5975.htm.
- ¹³ Government of Brazil. 2008. Instruçao Normativa No. 6, de 23 de Setembro de 2008. September 23, 2008. Accessed June 30, 2020. https://www.mma.gov.br/estruturas/179/_arquivos/179_05122008033615.pdf.
- ¹⁴ Government of Brazil, "Portaria MMA No. 443."
- ¹⁵ Government of Brazil, "Portaria MMA No. 443: Anexo I."
- ¹⁶ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ¹⁷ Forest Legality Initiative, "Panara Pine."
- ¹⁸ Government of Brazil, "Decreto No. 5975."
- ¹⁹ Government of Brazil, "Decreto No. 4722."
- ²⁰ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ²¹ Greenpeace. 2017. "Blood-Stained Timber." Greenpeace. Accessed July 31, 2020. https://www.greenpeace.org.br/hubfs/ Greenpeace_BloodStainedTimber_2017.pdf.
- ²² Greenpeace, "Blood-Stained Timber."
- ²³ Government of Brazil, "Portaria MMA No. 443."
- ²⁴ Government of Brazil, "Portaria MMA No. 443: Anexo I."
- ²⁵ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ²⁶ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ²⁷ Indústria Brasileira de Árvores. 2017. "Relatório 2017." Indústria Brasileira de Árvores. Accessed July 31, 2020. http://iba.org/images/shared/Biblioteca/IBA_RelatorioAnual2017.pdf.

- ²⁸ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ²⁹ Indústria Brasileira de Árvores, "Relatório 2017."
- ³⁰ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ³¹ Indústria Brasileira de Árvores, "Relatório 2017."
- ³² UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ³³ Indústria Brasileira de Árvores, "Relatório 2017."
- ³⁴ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ³⁵ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ³⁶ Indústria Brasileira de Árvores, "Relatório 2017."
- ³⁷ Indústria Brasileira de Árvores, "Relatório 2017."
- ³⁸ FAO. 2020. "Global Forest Resources Assessment 2020, Main Report." Food and Agriculture Organization of the United Nations. Accessed July 31, 2020. http://www.fao.org/3/ca9825en/CA9825EN.pdf.
- ³⁹ FAO. 2020. "Global Forest Resources Assessment 2020, Report Brazil." Food and Agriculture Organization of the United Nations. Accessed July 31, 2020. http://www.fao.org/3/ca9976en.pdf.
- ⁴⁰ FAO, "Global Forest Resources Assessment 2020."
- ⁴¹ FAO, "Global Forest Resources Assessment 2020, Brazil."
- ⁴² Forest Stewardship Council. 2019. "FSC Facts & Figures December 4, 2019." Forest Stewardship Council. Accessed June 30, 2020. https://www.fsc.org/sites/fsc.org/files/2019-12/Facts_and_Figures_2019-12-04.pdf.
- ⁴³ Programme for the Endorsement of Forest Certification. 2020. "PEFC Global Statistics. Data: June 2020." Programme for the Endorsement of Forest Certification. Accessed July 31, 2020. https://cdn.pefc.org/pefc.org/media/2020-08/ d48bcf2b-562f-4feb-bde6-e5a6316ec7c1/5948cc30-e0ea-59bd-b3bc-6dabbb108685.pdf.
- ⁴⁴ Forest Stewardship Council, and the Programme for the Endorsement of Forest Certification. 2020. "Double Certification FSC and PEFC – 2019 Estimation." Forest Stewardship Council, and the Programme for the Endorsement of Forest Certification. Accessed June 30, 2020. https://cdn.pefc.org/pefc.org/media/2020-01/de73c4e1-7a28-46d2-b71db86100497b9d/f995b54a-aab1-52af-a47e-83ddc9825712.pdf.
- ⁴⁵ FAO. 2019. "FAOSTAT." Food and Agriculture Organization of the United Nations. Accessed August 30, 2020. http://www.fao.org/faostat/en/#data.
- ⁴⁶ UN Statistics Division, "UN Comtrade."
- ⁴⁷ UN Statistics Division, "UN Comtrade."
- ⁴⁸ UN Statistics Division, "UN Comtrade."
- ⁴⁹ UN Statistics Division, "UN Comtrade."
- ⁵⁰ Forest Trends, "FPER."
- ⁵¹ UN Statistics Division, "UN Comtrade."
- ⁵² Forest Trends, "FPER."
- ⁵³ UN Statistics Division, "UN Comtrade."
- ⁵⁴ UN Statistics Division, "UN Comtrade."
- ⁵⁵ Government of the People's Republic of China. "Customs Statistics." General Administration of Customs. Accessed July 31, 2020. http://43.248.49.97/indexEn.
- ⁵⁶ Al Jazeera. 2021. "Brazil issues fire ban, redeploys military to fight Amazon blazes." Al Jazeera, Jun 29. Accessed August 3, 2021. https://www.aljazeera.com/news/2021/6/29/brazil-issues-fire-ban-redeploys-military-to-fight-amazon-blazes
- ⁵⁷ Reuters. 2021. "Deforestation in Brazil's Amazon rainforest rises for fourth straight month." Reuters, July 9. Accessed July 22 2021. https://www.reuters.com/business/environment/deforestation-brazils-amazon-rainforest-rises-fourth-straight-month-2021-07-09/

- ⁵⁸ Wellesley, Laura. 2014. "Illegal Logging and Related Trade The Response in Brazil. A Chatham House Assessment." Chatham House. Accessed July 31, 2020. https://www.chathamhouse.org/sites/default/files/publications/ research/20141029IllegalLoggingBrazilWellesleyFinal.pdf
- ⁵⁹ Government of Brazil, Ministry of Agriculture, Livestock and Food Supply. 2019. "Brazilian Forests at a Glance, 2019." Government of Brazil, Ministry of Agriculture, Livestock and Food Supply, and Brazilian Forest Service. Accessed June 30, 2020. http://www.florestal.gov.br/documentos/publicacoes/4262-brazilian-forests-at-a-glance-2019/file
- ⁶⁰ Government of Brazil, "Brazilian Forests at a Glance, 2019."
- ⁶¹ Costa, Pedro Moura, Mauricio Moura Costa, and James Parker. 2017. "Practical guide to conducting due diligence of tropical timber products." BVRio Responsible Timber Exchange. Accessed July 31, 2020. https://bvrio.org/wp-content/ uploads/2017/11/BVRio_Practical-guide-Due-Diligence_EN-Web_1.5MB.pdf
- ⁶² Cowie, Sam. 2017. "In the Brazilian Amazon, Indigenous people deal with a violent new world." Greenpeace Unearthed. Accessed September 23, 2020. https://unearthed.greenpeace.org/2017/12/01/brazil-amazon-indigenous-violencerondonia/
- ⁶³ FAO FRA, "Global Forest Resources Assessment 2020, Brazil.".
- ⁶⁴ Government of Brazil, "Brazilian Forests at a Glance, 2019."
- ⁶⁵ Indústria Brasileira de Árvores, "Relatório 2017."
- ⁶⁶ Farias, Elaíze. 2019. "Amazônia em Chamas: 90% da madeira exportada são ilegais, diz Polícia Federal." Amazônia Real, September 13. Accessed July 31, 2020. https://amazoniareal.com.br/amazonia-em-chamas-90-da-madeira-exportadasao-ilegais-diz-policia-federal/
- ⁶⁷ Van Solinge, Tim Boekhout. 2016. Illegal Logging and Related Timber Trade Dimensions, Drivers, Impacts and Responses. A Global Scientific Rapid Response Assessment Report. Edited by Daniela Kleinschmit, Stephanie Mansourian, Christoph Wildburger, and Andre Purret. International Union of Forest Research Organizations (IUFRO) World Series Vol. 35.
- ⁶⁸ Preferred by Nature. 2017. "Timber Legality Risk Assessment Brazil." Preferred by Nature. Accessed July 31, 2020. NEPCon-TIMBER-Brazil-Risk-Assessment-EN-V1.pdf (preferredbynature.org)
- ⁶⁹ Moura Costa, Pedro, Mauricio Moura Costa, and Marcio Barros. 2016. "Using Big Data to Detect Illegality in the Tropical Timber Sector." BVRio institute. Accessed September 23, 2020. https://www.bvrio.org/publicacao/160/using-big-datato-detect-illegality-int-the-tropical-timber-sector.pdf
- ⁷⁰ Sindicato Nacional dos Auditores Fiscais do Trabalho. 2021. "Relatório da CPT aponta realidade da questão fundiária no País." SINAIT, June 2. Accessed August 3, 2021. https://www.sinait.org.br/site/noticia-view?id=19064%20%20%20/
- ⁷¹ Conselho Indigenista Missionário.2019. "Report on Violence Against Indigenous Peoples in Brazil, 2019 Data." CIMI. Accessed August 3, 2021. - Relatório Violência INGLÊS - dados 2019 - Final.indb (cimi.org.br)
- ⁷² Government of Brazil. 2017. Ministério Público do Estado de Mato Grosso, Case No. 1629-12.2017.811.0105, Code 78767. Ministério Público do Estado de Mato Grosso. Accessed July 31, 2020. http://servicos.tjmt.jus.br/Processos/Comarcas/ consulta.aspx
- ⁷³ Human Rights Watch. 2019. "Rainforest Mafias: How Violence and Impunity Fuel Deforestation in Brazil's Amazon." Human Rights Watch. Accessed July 31, 2020. https://www.hrw.org/sites/default/files/report_pdf/brazil0919_web.pdf
- ⁷⁴ Gonzales, Jenny. 2018. "Illegal loggers 'cook the books' to harvest Amazon's most valuable tree." *Mongabay*, May 24. Accessed July 31, 2020. https://news.mongabay.com/2018/05/illegal-loggers-cook-the-books-to-harvest-amazonsmost-valuable-tree/#:~:text=Brazil's%20Ip%C3%AA%20tree%20is%20one,in%20the%20U.S.%20and%20Europe.
- ⁷⁵ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ⁷⁶ Brancalion, Pedro H.S., *et al.* 2018. "Fake legal logging in the Brazilian Amazon." *Science Advances* 4(8). Accessed July 31, 2020. https://advances.sciencemag.org/content/advances/4/8/eaat1192.full.pdf
- ⁷⁷ Forest Legality Initiative. N.d. "Logging and Export Bans." Forest Legality Initiative. Accessed September 2, 2021. https:// forestlegality.org/content/logging-and-export-bans
- ⁷⁸ Clowes, Austin. 2016. "Building a Sustainable Guitar: Rosewood." Forest Legality Initiative, December 13. https:// forestlegality.org/blog/building-sustainable-guitar-rosewood
- ⁷⁹ Greenpeace, "Blood-Stained Timber."

- ⁸⁰ Brancalion, *et al.*, "Fake legal logging in the Brazilian Amazon."
- ⁸¹ Greenpeace. 2014. "The Amazon's Silent Crisis: Night Terrors." Greenpeace. Accessed July 31, 2020. https://www.greenpeace.de/sites/www.greenpeace.de/files/publications/gp_amz_silent_crimefile_v6.5.pdf
- ⁸² Greenpeace, "Blood-Stained Timber."
- ⁸³ Greenpeace. 2018. "Imaginary Trees, Real Destruction." Greenpeace. Accessed July 31, 2020. https://storage.googleapis. com/planet4-international-stateless/2018/03/b91d03c3-greenpeace-report_imaginary-trees-real-destruction_march-2018.pdf
- ⁸⁴ Greenpeace. 2014. "The Amazon's silent crisis. Logging Regulation & 5 Ways to Launder." Greenpeace. Accessed July 31, 2020. http://www.greenpeace.org/usa/wp-content/uploads/legacy/Global/usa/planet3/PDFs/Amazon5Ways.pdf.
- ⁸⁵ Araújo, Elis, *et al.* 2016. "Quais os planos para proteger as Unidades de Conservação vulneráveis da Amazônia?" Imazon. Accessed July 31, 2020. https://imazon.org.br/PDFimazon/Portugues/livros/Planos_para_proteger_UCs_vulneraveis_ Amazonia.pdf
- ⁸⁶ Preferred by Nature, "Timber Legality Risk Assessment Brazil."
- ⁸⁷ Greenpeace, "5 Ways to Launder.".
- ⁸⁸ Brancalion *et al.*, "Fake legal logging in the Brazilian Amazon."
- ⁸⁹ Pontes, Fabio. 2019. "PF prende servidores públicos e madeireiros por fraude e desmatamento na Amazônia." Amazônia Real, April 26. Accessed July 31, 2020. https://amazoniareal.com.br/pf-prende-servidores-publicos-e-madeireiros-porfraude-e-desmatamento-na-amazonia/
- ⁹⁰ Costa, *et al.*, "Using Big Data to Detect Illegality in the Tropical Timber Sector."
- ⁹¹ Wellesley, "Illegal Logging and Related Trade The Response in Brazil.".
- ⁹² The Forest Trust. 2013. "Country Guide to Timber Legality: Brazil." The Forest Trust. Accessed July 31, 2020. http:// docplayer.net/27893957-Country-guide-to-timber-legality-brazil.html
- ⁹³ Greenpeace, "The Amazon's silent crisis: Night Terrors".
- ⁹⁴ Lujan, Breanna. 2019. "A comparison of Supply Chain Tracking Tools for Tropical Forest Commodities in Brazil." Environmental Defense Fund. Accessed July 31, 2020. https://www.edf.org/sites/default/files/documents/Supply_ Chain_Tracking_Tools.pdf
- ⁹⁵ Lujan, "A comparison of Supply Chain Tracking Tools."
- ⁹⁶ Wellesley, "Illegal Logging and Related Trade The Response in Brazil.".
- ⁹⁷ UNEP-WCMC, "Brazil Country Overview to Aid Implementation of the EUTR."
- ⁹⁸ Brancalion *et al.*, "Fake legal logging in the Brazilian Amazon."
- ⁹⁹ Ministério Público Federal. 2019. "MPF e PF participam de missão institucional nos EUA para tratar da Cooperação Internacional na Operação Arquimedes." Jusbrasil. Accessed September 23, 2020. http://www.mpf.mp.br/am/sala-deimprensa/noticias-am/mpf-e-pf-participam-de-missao-institucional-nos-eua-para-tratar-da-cooperacaointernacional-na-operacao-arquimedes
- ¹⁰⁰ Policia Federal. 2020. "Operação Florestas de Papel combate exploração ilícita de madeiras na Amazônia." Policia Federal. Accessed September 23, 2020. https://www.gov.br/pf/pt-br/assuntos/noticias/2019/07/operacao-florestasde-papel-combate-exploracao-ilicita-de-madeiras-na-amazonia.
- ¹⁰¹ Londoño, Ernesto, and Letícia Casado. 2019. "Amazon Deforestation in Brazil Rose Sharply on Bolsonaro's Watch." The New York Times, November 18. Accessed July 31, 2020. https://www.nytimes.com/2019/11/18/world/americas/brazilamazon-deforestation.html
- ¹⁰² Boadle, Anthony. 2020. "Bolsonaro extends deployment of troops to curb Amazon deforestation." Reuters, June 11. Accessed July 31, 2020. https://www.reuters.com/article/us-brazil-environment/bolsonaro-extends-deployment-oftroops-to-curb-amazon-deforestation-idUSKBN23I25C
- ¹⁰³ Escobar, Herton. 2019. "Brazilian institute head fired after clashing with nation's president over deforestation data". Science, Aug 4. Accessed August 3, 2021. https://www.sciencemag.org/news/2019/08/brazilian-institute-head-firedafter-clashing-nation-s-president-over-deforestation

- ¹⁰⁴ Preferred by Nature, "Timber Legality Risk Assessment Brazil."
- ¹⁰⁵ Spring, Jake. 2021. "Brazil environmental fines fall 20% as deforestation soars." Reuters, January 12. Accessed August 3, 2021. Brazil environmental fines fall 20% as deforestation soars | Reuters
- ¹⁰⁶ Human Rights Watch. 2020. "Brazil's Own Data Shows Amazon Fines Unenforced." Human Rights Watch, May 22. Accessed July 31, 2020. https://www.hrw.org/news/2020/05/22/brazils-own-data-shows-amazon-fines-unenforced
- ¹⁰⁷ Vale Mariana M., Erika Berenguer, Marcio Argollo de Menezes, Ernesto B Viveiros de Castro, Ludmila Pugliese de Siqueira, and Rita de Cassia Q. Portela. 2021. "The COVID-19 pandemic as an opportunity to weaken environmental protection in Brazil" Biological Conservation. Volume 255. https://doi.org/10.1016/j.biocon.2021.108994
- ¹⁰⁸ Spring, Jake. 2020. "Exclusive: Brazil exported thousands of shipments of unauthorized wood from Amazon port." Reuters, March 4. Accessed July 31, 2020. https://www.reuters.com/article/us-brazil-environment-lumber-exclusive/exclusivebrazil-exported-thousands-of-shipments-of-unauthorized-wood-from-amazon-port-idUSKBN20R15X
- ¹⁰⁹ Spring, "Exclusive: Brazil exported unauthorized Wood from Amazon Port"
- ¹¹⁰ Maisonnave, Fabiano. 2021. "Ibama Dispatch that Facilitates Timber Exports Motivated PF Investigation." Folha de S.Paulo, May 20. Accessed Aug, 3, 2021. https://www1.folha.uol.com.br/internacional/en/scienceandhealth/2021/05/ ibama-dispatch-that-facilitates-timber-exports-motivated-pf-investigation.shtml
- ¹¹¹ Forest Trends. 2021. "How did the EUTR and Lacey Act help instigate investigations into potential corruption in the Brazilian forest sector?." Forest Trends, May 24. Accessed Aug 3, 2021. https://www.forest-trends.org/blog/how-didthe-eutr-and-lacey-act-help-instigate-investigations-into-potential-corruption-in-the-brazilian-forest-sector/
- ¹¹² Mendes Karla. 2021. Brazil's environment minister investigated for alleged illegal timber sales. Mongabay 19 May. Accessed August 3, 2021. https://news.mongabay.com/2021/05/brazils-environment-minister-investigated-foralleged-illegal-timber-sales/
- ¹¹³ Williams Kirsten. 2021. "Brazil Supreme Court revokes passport of ex-Environmental Minister amid illegal timber sale investigations." Jurist, June 29. Accessed Aug 3, 2021. Brazil Supremehttps://www.jurist.org/news/2021/06/brazilsupreme-court-revokes-passport-of-ex-environmental-minister-amid-illegal-timber-sale-investigations/ Court revokes passport of ex-Environmental Minister amid illegal timber sale investigations - JURIST - News - Legal News & Commentary
- ¹¹⁴ Fellet, John. 2021. "Family of new Minister of the Environment dispute ownership in indigenous land in SP." Folha de S. Paulo, Jun 23. Accessed Aug 3, 2021. https://www1.folha.uol.com.br/ambiente/2021/06/familia-de-novo-ministro-domeio-ambiente-disputa-posse-em-terra-indigena-em-sp.shtml
- ¹¹⁵ Paraguassu, Lissandra, Ricardo Brito and Jake Spring. 2021. Brazil environment minister targeted in wood-smuggling probe. Reuters, May 19. Accessed Aug 3, 2021. https://www.reuters.com/business/environment/brazil-policeinvestigate-potential-crimes-related-wood-exports-2021-05-19/
- ¹¹⁶ Maisonnave, Fabiano. 2021. "Ibama Dispatch that Facilitates Timber Exports Motivated PF Investigation." Folha de S.Paulo, May 20. Accessed Aug, 3, 2021. https://www1.folha.uol.com.br/internacional/en/scienceandhealth/2021/05/ ibama-dispatch-that-facilitates-timber-exports-motivated-pf-investigation.shtml
- ¹¹⁷ Spring, "Exclusive: Brazil exported unauthorized Wood from Amazon Port"
- ¹¹⁸ Sindicato Nacional dos Procuradores da Fazenda Nacional. 2016. "Sonegação no Brasil Uma Estimativa do Desvio da Arrecadação do Exercício de 2015." Sindicato Nacional dos Procuradores da Fazenda Nacional. Accessed July 31, 2020. http://www.quantocustaobrasil.com.br/artigos-pdf/sinprofaz_indicador_sonegacao-28-06-2016.pdf
- ¹¹⁹ Preferred by Nature, "Timber Legality Risk Assessment Brazil."
- ¹²⁰ ClientEarth. 2016. "EUTR News, July-September 2016". ClientEarth. Accessed August 3, 2021. 2016-10-19-eutrnewsletter-july-september-2016-ce-en.pdf (clientearth.org)
- ¹²¹ Global Wood Markets Info. 2016. "Illegal timber trade operations in Brazil uncovered by Interpol." GWMI, September 19. Accessed August 3, 2021. https://www.globalwoodmarketsinfo.com/illegal-timber-trade-operations-in-braziluncovered-by-interpol/
- ¹²² European Commission. 2020. "Conclusions1 of the Competent Authorities for the implementation of the European Timber Regulation (EUTR) on the application of Articles 4(2) and 6 of the EUTR to timber imports from Brazil." Annex to summary record of 2nd Commission Expert Group/Multistakeholder Platform on Protecting and RESTORING THE World's Forests.

December 9, 2020. Accessed August 3, 2021. https://ec.europa.eu/environment/forests/pdf/201209%20EUTR%20 EG%20Country%20conclusions_Brazil_final.pdf

- ¹²³ European Commission, Directorate-General Environment. 2019. "Summary Record 24th FLEGT/EUTR Expert Group Meeting, 21 June 2019." European Commission, Directorate-General Environment. Accessed July 31, 2020. https://ec. europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=39219&no=13
- ¹²⁴ Araujo, Claudio, *et al.* 2006. "Land tenure insecurity and deforestation in the Brazilian Amazonia." RePEc. Accessed July 31, 2020. https://www.researchgate.net/publication/4802129_Land_tenure_insecurity_and_deforestation_in_the_Brazilian_ Amazonia
- ¹²⁵ Forest Trends. 2021. "Illicit Harvest, Complicit Goods: The State of Illegal Deforestation for Agriculture." Forest Trends. Accessed August 3, 2021. https://www.forest-trends.org/wp-content/uploads/2021/05/Illicit-Harvest-Complicit-Goods_rev.pdf
- ¹²⁶ Preferred by Nature, "Timber Legality Risk Assessment Brazil."
- ¹²⁷ Costa, et al., "Using Big Data to Detect Illegality in the Tropical Timber Sector."
- ¹²⁸ Costa, *et al.*, "Using Big Data to Detect Illegality in the Tropical Timber Sector."
- ¹²⁹ Forest Trends, "Illicit Harvest, Complicit Goods."
- ¹³⁰ Margulis, Sergio. 2004. "Causes of Deforestation of the Brazilian Amazon." World Bank Working Paper No. 22. Accessed July 31, 2020. https://elibrary.worldbank.org/doi/abs/10.1596/0-8213-5691-7
- ¹³¹ Forest Trends, "Illicit Harvest, Complicit Goods."
- ¹³² Lujan, "A comparison of Supply Chain Tracking Tools."
- ¹³³ Azevedo, Tasso Rezende de *et al.* 2019. "annual Deforestation Report of Brazil." MapBiomas. Accessed September 23, 2020. https://s3.amazonaws.com/alerta.mapbiomas.org/relatrios/MBI-deforestation-report-2019-en-final5.pdf

The Dashboards have been compiled from publicly available information sources to support risk assessments on the legality of timber products entering international supply chains. The Dashboards are for educational and informational purposes only. The Dashboards have been drafted with input from the Environmental Investigation Agency (EIA) and are subject to external peer review. The Dashboards will be updated periodically based on newly available information.

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